# ANNUAL REPORT 2020-21

# वार्षिक प्रतिवेदन 2020-21





Rajasthan University of Veterinary and Animal Sciences
Bikaner-334 001



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### Foreword

It is a matter of great pride that during RAJUVAS Decade celebration year, Hon'ble Governor appreciated team RAJUVAS for remarkable progress and for having converted the COVID-19 Pandemic challenge into opportunity and moved forward with its academic persuits without any impediment. Teaching of students continued in online mode through Virtual Classrooms. Regional Animal Husbandry Extension Technology Forum provided an opportunity to RAJUVAS to co-ordinate with line departments of Govt. like animal husbandry, dairy, gopalan, fisheries and others for farmer's welfare and quick resolution of their issues and problems. RAJUVAS also got an opportunity to be a part of the National Agriculture Higher Education Project (NAHEP) Component -2 of ICAR.

RAJUVAS has been recognized by University Grants Commission under section 12 B of UGC Act and we envisage to get some grants from UGC as well for strengthening our teaching and research programmes as well as student's amenities in near future. Efforts of RAJUVAS to save environment through establishment of rain water harvesting systems, solar power station and bio gas systems etc. have become model in the state. RAJUVAS takes pride in sharing that it implemented digital technology and e-governance in teaching, research and extension works. With the financial assistance from ICAR under NAHEP, RAJUVAS has established Livestock Innovation, Knowledge and Entrepreneurship Skill (LIKES) centers in two of the constituent colleges of University. Approval and implementation of RAJUVAS Statutes, Ordinances & Regulations for effective governance, transforming mono-faculty into multi-faculty University and Organic Animal Production initiative are other feathers in the cap of University. University has setup the Directorate of Human Resource Development for improving professional skills of students competence and knowledge of employees, teachers and other stake holders.

The University has 28 different institutions in the state which include three constituent Veterinary colleges, nine Livestock Research Stations and fifteen Pashu Vigyan Kendras (PVKs) and one KVK. Two new constituent Veterinary colleges have also been sanctioned by Government at Jodhpur (2020) and Nawa, Nagaur (2021). University is working on 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 different Livestock Research Stations. University is also providing superior germplasm and technology to Gaushalas in the state.

To expand our extension activities related to animal husbandry at village and farmer door step level, fifteen PVKs have been established in different districts of Rajasthan. During COVID – 19 pandemic, RAJUVAS had organized several e-learning certificate courses, national and international webinars, online pashupalak choupal and online training programmes for different stake holders. All Pashu Vigyan Kendras (PVKs) through "WhatsApp" groups of farmers have been providing scientific training, advisory services, guidance and veterinary diagnosis and consultancy. Hon'ble Governor and Chancellor of RAJUVAS, Sh. Kalraj Mishra, had laid down the foundation stone of Constitutional Park and Skill development Centre at RAJUVAS through online mode.

The University has widened its horizon for quality research and effective teaching through signing of several memorandums of understanding (MoUs) both at national and international level. During the year under report, MoUs have been signed with Maharana Pratap University of Agriculture and Technology (MPUAT), National Research Center on Equine (NRCE) Hisar, International Brook India Association, Dr Sarvepalli Radhakrishanan Rajasthan Ayurved University, University of Trans-Disciplinary Health Sciences and Technology (TDU), Bengaluru, Kamdhenu University, Gujarat, Rahuri Semen station NDDB, U.P. Pt. Deen Dayal Upadhyay Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan, Mathura (DUVASU), National Bureau of Animal Genetic Resources Karnal and Nanaji Deshmukh Veterinary Science University, Jabalpur.

Annual Report reflects the sincere commitment and unremitting endeavors of Prof. (Dr.) Anju Chahar, Directorate of Prioritization, Monitoring and Evaluation and her team. I am sure this report will be helpful to planners, scientists, students and other stakeholders in knowing how University has been progressing on different fronts. It will also help the University in assessing its comparative performance over the years. I thank the Hon'ble Chancellor and Governor of Rajasthan, Govt. of Rajasthan and Indian Council of Agriculture Research, New Delhi for all the support including financial assistance to RAJUVAS.

(Satish K. Garg)





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Rajasthan University of Veterinary and Animal Sciences, Bikaner





### **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 13th 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, Vallabhnagar (Udaipur), PGIVER, Jaipur and four private veterinary colleges affiliated to RAJUVAS, are being operated in Jaipur, Chomu, Sikar and Dungarpur. Two new constituent veterinary colleges are also sanctioned by Government of Rajasthan at Jodhpur (2020) and Nawa, Nagaur (2021). 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. Two years Animal husbandry Diploma are being conducted in 7 constituents AHDP institutes and 73 institutes affiliated to University, which have the capacity to train about 4500 para-veterinarian per year. University also has one KVK and 14 PVK and 9 Livestock Research Station.

#### 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 305 students graduated in B.V.Sc. & AH degree. During the period under report, 75 students were awarded M.V.Sc. degree and 16 students obtained Ph.D. degree. During the year total 3713 students passed AHDP course. 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 2020-21 was 19326. In Veterinary diagnostic laboratory total number of sample examined 1521 for diagnosis of various ailments. During this year emergency cases treated in odd hour is 3475. Total strength of the students was 597. During the period under report, 91 students awarded B.V.Sc. & AH degree, 52 students were awarded M.V.Sc. degree and 12 students obtained Ph.D. degree. Nineteen faculty members were awarded at national level and 96 research papers have been published by faculty member. Faculty members attended 58 various online 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 2020-21 was 6464. In Veterinary diagnostic laboratory total number of sample examined 253 for diagnosis of various ailments. Three health camps and four training were organized for farmer. Total strength of the students was 500. 85 students awarded B.V.Sc. & AH degree, 19 students were awarded M.V.Sc. degree and 4 students obtained Ph.D. degree. Thirteen faculty members were awarded at national level and 94 research papers have been published by faculty member. Faculty members attended 23 various online conference/ symposia/ workshop/ seminar.

# Post Graduate Institute of Veterinary Education & Research, 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 500. During the period under report, 55 students awarded B.V.Sc. & AH degree, 11students were awarded M.V.Sc. degree and 2 students obtained Ph.D. degree. Total number of cases attended during 2020-21 was 7348. Twenty one faculty members were

awarded at national level and 23 research papers have been published by faculty member. Faculty members attended 26 various online conference/ symposia/ workshop/ seminar.

#### Research

Under the canopy of the Directorate of Research, nine livestock Research Station located at Chandan (Jaisalmer), Nohar (Hanumangarh), Beechwal (Bikaner), Navania (Vallabhnagar), Kodamdesar (Bikaner), CVAS, Bikaner, Bojunda (Chittorgarh), Dug (Jhalawar), and Dholpur 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 2020-21 total of 34 research schemes were operational including 5 ICAR project, 10 State plan projects, 8 RKVY project, 10 Revolving fund projects and 1 other project.
- 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 185 female and 58 male. Total revenue generated is 46,23,808 through sale of milk, animals, manure and vermicompost. A total 16 male and 14 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, Shri khand, 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 138 female and 61 male and revenue generated from this project is 10118816. A total 6 bull calves and 2 female calves/heifers were distributed and sold to different gaushals/farmers/ development agencies.
- The herd strength of Sahiwal cattle was 233 female and 79 male and revenue generated from this project is 4259043. A total 25 bull calves were distributed and sold to different gaushals/farmers/ development agencies.
- Magra sheep unit with a strength of 269 (99 male and 170 female) are also maintained on farm. Under technology transfer mandate during this financial year a total of 20 male animals were sold to different farmers /institute/NGOs.

#### Livestock Research Station, Beechwal

Three Projects are running at this station namely "Conservation, Evaluation and Improvement Tharparkar Cattle Farm", "Sirohi Goat Breeding Project" and Green Fodder and Seed Production. The herd strength of Tharparker cattle was 105 female and 33 male. Total milk production during the year was 111068.5 lit. The wet average and herd average was 7.96 and 5.31 respectively. Under technology transfer mandate, total of 68 Tharparkar animals including 29 male and 68 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 this year 94.38 Qtl. RAJUVAS mineral mixture was manufactured and sale to various LRS of RAJUVAS and progressive farmers. During the

year 3421.10 Qtl of green fodder was produced of which 2733.50 Qtl was used for the farm animals and remaining 687.60 Qtl was sold to other units of RAJUVAS. During this financial year 478.09 Qtl seed/grain was produced. Total revenue generated during 2020-21 was 9805425.00.

#### Livestock Research Station, Nohar

Research project undertaken is "Conservation, Evaluation and Improvement of Rathi Cattle through Breeding". Total herd strength of Rathi cattle was 185 female and 65 male. A total 41 bull calves, 9 female heifers and cow were distributed and sold to different gaushals/farmers/ development agencies. Total revenue generated is 93.201 lakh.

# 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 236 female and 51 male. Further, Marwari Goat breeding unit with strength of 345 (90 male and 255 female) are also maintained under research project. During the year 195 kidding took place. Total 650 Qt. green fodders and 55 Q dry fodders produced during this year. One Lac Fifty Six Thousand Three Hundred Ninety One 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 111 female and 35 male. Sirohi Goat breeding unit are also maintained at this center. Total 62 breeding bucks were distributed to registered farmers for further genetic improvement in the field. Total herd strength of Surti buffalo was 105 female and 62 male. This center supplied high pedigreed test bulls as well as semen of Surti buffalo to dairy farmers.

#### Livestock Research Station Bojunda Chittorgarh

Total strength of Sirohi goat was 273 female and 51 male. Total 68 breeding buck were distributed to NGO, govt. and farmers. Total 1085.53 Qtl. Green fodder, 823.0 Qtl. Dry fodder and 856.94 Grain were produced during the reporting year.

#### Livestock Research Station Dag Jhalawar

❖ Total herd strength of Malvi cattle was 364 female and 124 male. Total 58 male Calves and Bull were supplied to the different animal breeders and farmers during this year. Total green fodder production was 1710 Qtl.

#### Livestock Research Station Dholpur

- Establishment of Goat Breeding Farm for Demonstration and Dissemination of Remunerative Goat Farming System as Multipurpose Goat Development Centre (MGDC).
- 25 Hectare land has been allotted by the Govt. of Rajasthan at Angai, Sarmathura, Dholpur.
- Organic Certification of Farm Livestock, Livestock Products and Farm vegetation Agricultural Products) done by Authority of Organic Certification, Rajasthan State Organic Certification Agency (RSOCA), Pant Krishi Bhawan, Jaipur.

#### State Plan Project:-

# Apex Centre for Animal Disease Investigation, Monitoring and Surveillance

- Six disease outbreaks were attended by Apex centre, which were diagnosed to be due to Avian, Marek's disease and Newcastle Disease in Poultry and Hemorrhagic Septicemia, Acidosis, botulism in cattle.
- District-wise data were collected and analysed for pneumonic pasteurellosis and Glanders and epidemiological maps were prepared.
- Total of 169 samples were screened for different test bacterial infections including culture and antibiotic sensitivity 98, Urine microscopy and biochemical examination 15, Brucellosis testing 56 and 6 Post-mortem examination was conducted.

# Centre for Ethno-Veterinary Practices and Alternative Medicines

 CEVPAM has developed research based herbal products like herbal soap, hand wash, hand

- sanitizer, liquid supplement beneficial in improving digestion, herbal powder against impaction, herbal powder helpful in mastitis, herbal anti-diarrheal bolus.
- The centre has extended technical/ laboratory support and help for the 1 masters and 1 doctoral research work entitled Therapeutic studies on Holarrhena antidysenterica in colibacillosis affected calves, Studies on therapeutic efficacy of Holarrhena antidysenterica in neonatal calf diarrhoea with special reference to E. coli and Salmonella.

# Animal Bio-Medical Waste Disposal Technology Centre

- Prepared a Lab manual on "Bio Medical Waste Management" in Hindi language.
- One hand on training, 3 E-Certificate Courses on "Management and Disposal of Animal Biomedical Waste" and one webinar were organized by centre and total 92 personals were trained.

#### 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 Ratnisarand Nathwana (Total 53 farmers/pashupalak and 526 animals were benefited in these camp.)

# Centre for Disaster Management Technology for Animals

- Total 3 trainings organised by centre in which about 120 farmers were benefitted.
- The centre preparing module on Drought and famine module.
- The centre attended an emergency at Dholerafanta, Jamsar village, Bikaner on 30th March 2021 where a fire incident took place.

# 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.
- The centre organized two days on-campus training on "भारतीय कृषि अनुसंघान परिषद, नई दिल्ली अनुसूचित जाति उपयोजना के अन्तर्गत जैविक पशुपालन प्रशिक्षण" in which 28 farmers were participated.

# Engineering and Technology Centre for Animal Sciences

- Developed a new prototype of steel made phantom box which is being used in the Gynecology department.
- Developed snake catcher and snake hook.
- Developed a new prototype of external skeletal fixation for cattle to be used when its legs and joints are facture.
- Developed a prototype of dog wheel chair which is useful for handicap dogs or small animals.

# Centre for Excellence for Use of Spacebased Technology in Animal Science

- This centre has become a Network Centre of IIRS-ISRO. The live and interactive courses are available through internet without any cost to the users.
- Four Online Certificate course are conducted by experts from IIRS-ISRO and coordinated by this centre.
- One online workshop on Space Technology and its Applications.

# Centre for Studies on Wildlife Management and Health

- This centre organised Five Days Online Training for Veterinary Officers.
- Three-day RAJUVAS E-certificate course was organized in which total 123 participants attended the course.
- The centre has actively participated in the animal treatment camp organized by forest department. 61

animals and wild birds were treated in collaboration with the Bikaner Zoo.

# Livestock Feed Resource Management and Technology Centre

- Establishment of a "Golden Jubilee Forage Garden". More than fifty improved fodder crop varieties were sown in Kharif and Rabi season and seeds of these varieties were also collected.
- A total of 109 Feed & fodder samples were analysed. Azola culture was provided to 117 livestock owners.
- The centre released a quarterly Hindi bulletin "Pashu Aahar Evam Chara Bulletin" for farmers' community.
- The centre conducted seven on Campus farmer's training in which total 210 persons were benefited.

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

- Orthopaedic affections in 132 small animals and 202 large animals were treated by internal fixation technique.
- Orthopaedic affections in 15 wild animals and birds were treated by internal fixation technique and external fixation techniques.
- Cases of spinal injury in 12 canines were managed by rehabilitation by Dog Cart and 49 downer large animals by orthopaedic rehabilitation with slings and "Downer Animal Bay"
- Minimum invasive surgery (Ovariectomy) using Laparoscopy was done in 12 canines.
- Minimum invasive soft tissue surgery by diode LASER in canines was done for various surgical affections in 59 cases.
- Minimum invasive soft tissue surgery by CO<sub>2</sub> LASER in canines was done for various surgical affections in 55 cases.
- Computed Tomography (CT scan) examination was performed in 24 clinical cases in dogs and cats affected with various disorders.
- Ophthalmic affections were recorded and treated in 47 small and large animals for various ailments of eye.



- Cataract surgery was performed in 7 cases using Phacoemulsification and extra capsular lens extraction technique.
- Electroretinography (ERG) was done in 10 canine cases of cataract, corneal ulcers, and opacities.
- Five days Online e-certificate course on "Diagnostic Imaging" was organised in which total 121 participants were registered.
- Five days Online e-certificate course on, "Veterinary Orthopaedics" was organised in which total 81 participants were registered. Five days Online e-certificate course on, "Fundamentals of Veterinary Ophthalmology" was organised in which total 100 participants were registered.

#### **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 Vigyan Kendra (KVK), Pashu Vigyan Kendras (PVKs) 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 PVKs (Pashu Vigyan Kendras) at Churu, Kumher (Bharatpur), Malpura (Tonk), Bakalia (Nagaur), Dungarpur, Kota, Suratgarh (Sriganganagar), Bojunda (Chittorgarh), Sirohi, Jobner, Loonkarnsar (Bikaner), Dholpur, Jodhpur, Jhunjhunu. The mandate of PVKs is to impart service of training 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 2020-21 KVK organized total training 54,
 Vichar gosthi 10, and demonstration/transfer of technology 274, field day 12, success stories 3 and 12 Animal Health Camp. In these activities total 1737 farmers and livestock owners were benefitted.

#### **PVK** Activities

- During this year PVKs organized 599 online farmer training, 53 ATMA sponsored and 62 trainings of SC-SP scheme of ICAR, New Dehli and 15566 farmers were participated and benefited.
- In laboratory diagnosis total 896 samples were examined. Among these 137 blood sample, 341 faecal samples, 44 urine samples, 306 milk sample and 68 skin scrapping were examined against various ailments.

#### **Other Centers Activities**

 Training programmes organized by other Centers of RAJUVAS in 2020-21 were 45. Total 1281 participant were benefited among them 484 male and 232 female.

#### **Publication**

- The University is regularly bringing out publication like monthly "Pashu Palan Naye Aayaam" and quarterly "Pashu Aahar Evam Chara Bulletin". one thousand copies disseminated to the farmers by post and during trainings.
- Two training manuals were also published by DEE, RAJUVAS, Biakner on Unnat pashupalan-Javaik pashupalan and scientific animal husbandary and management.

#### **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 Thursday of every month. In 2020-21, total 10 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

 Two exhibitions were organized by Pashu Vighyan Kendra, Kota at Veterinary Poyclinic, Kota and Village-Arjunpura during Pashu Kalyan Pakhwara 14-31 January, 2021 and Progressive Farmers'



Training Programme (in collaboration with AHD and Reliance Foundation) on 12 March 2021.

#### RAJUVAS e-Pashupalak Choupal

RAJUVAS e-Pashupalak Choupal for the livestock owners was initiated on the occasion of 151 Birth Anniversary of Mahatma Gandhi. Total 11 e-Pashupal Choupals for the livestock owners of the state was organized. These e-Pashupalak Choupal was telecasted II<sup>nd</sup> and IV<sup>th</sup> Wednesday of every month on official facebook page of RAJUVAS & DEE and more than 45000 people viewed the programme.

#### Whatsapp Groups for Farmers

Pashu Vigyan Kendras (PVKs) initiated a unique programme by creation of Whatsapp Groups for providing livestock advisory to the farmers in Corona pandemic. Pashu Vigyan Kendra, created 84 Whatsapp groups and provided advisory among the farmers related to animal husbandry. More than 16000 farmers were got added in these groups and benefitted.

#### University Social Responsibilty Activities

The Hon'ble Governor of Rajasthan has taken up the initiative of adoption of a village by every State University in Rajasthan for developing Smart Village. In this regard, RAJUVAS, Bikaner has adopted three villages of Bikaner district i.e. Diayan, Jaimalsar, Garhwala.

#### Diayan Village:

Establishment of Information centre and village library, installation of solar panels, construction of water tank and hall in school and electrification of school. Establishment of Sub Centre of Animal Husbandry were major infrastructural developments. 32 gosthies, 19 medical health camps, 10 training programmes, 4 animal health camps, 03 ayurvedic medical camps, 05 cleanliness awareness programmes and 03 plantation drives were organised.

#### Jaimalsar Village:

Establishment of computer literacy centre, renovation of old pond, sewan grass plantation, skill development programmes, animal health camps, plantation, ayurvedic medical camps, mask & sanitizer distribution were major activities.

#### Garhwala Village:

A meeting of the Coordination Committee was held on 16 March, 2021. All the Government departments have

to contribute their specific role for overall development of Garhwala village. Ayurvedic medical camps, mask & sanitizer distribution, swachhta rally, de-addiction camp were major activities.

#### Mera Gaon Mera Gaurav Programme:

RAJUVAS constituted 41 teams of multidisciplinary scientists. These teams have adopted 142 villages. Teams have conducted 56 visit to village, 32 interface meetings, 4 demonstrations related to animal husbandry and 71 training programmes covering animal nutrition, breeding, health care and reproduction, 3425 Mobile based advisories, 898 Literature support provided and 896 General Awareness created aspects in adopted villages. In these activities total 26127 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.

#### What's New

# Permission of Recruitment by Govt. of Rajasthan

The state government has granted permission for recruitment of 159 teaching and 155 non teaching posts of the university, including vacancies of constituent colleges, PVKs, and KVK, Nohar. It is worth mentioning that the state government had already issued approval for the recruitment of 29 teaching and 12 non-teaching posts for Jodhpur Veterinary College also.

# Creation of Regional Animal Husbandry Extension Technology Forum (RAHET)

Government of Rajasthan has approved the formation of the Regional Animal Husbandry Extension Technology Forum (RAHET) by the RAJUVAS with the objective of coordinating with the concerned line departments of animal husbandry, interactions with scientists, farmers and prompt redressal the problems of livestock owners.

#### Stone Laying Ceremony of Constitution Park

Foundation Stone laying ceremony of Constitution Park and Skill Development Centre was held via online



mode on 28.10.2020 by Hon'ble Governor Rajasthan and Chancellor, RAJUVAS Sh. Kalraj Mishra. Assistant Director General, Education Division, ICAR, New Delhi was special guest of the function.

#### Inclusion of RAJUVAS in NAHEP Component-2 of ICAR

RAJUVAS, Bikaner has been included in National Agricultural Higher Education Project (NAHEP) Component-2 project by ICAR, New Delhi. One Virtual Classroom has been setup at Bikaner campus under this project through which students can connect anywhere anytime with the faculty members through online mode. These lectures will be recorded also on ICAR server and will be available for veterinary students spread over the country in different universities.

#### RAJUVAS e-Pashupalak Choupal

RAJUVAS e-Pashupalak Choupal was initiated by the Directorate of Extension Education on the occasion of 151 Birth Anniversary of Mahatma Gandhi. Total eleven e-Pashupalak Choupal was organized by the Directorate of Extension Education on different topics like FMD, Mastitis in animal, artificial insemination, poultry farming as a profitable business, pica disease in animals and clean milk production. These e-Pashupalak Choupal were telecasted on second and fourth Wednesday of every month on official face book page of RAJUVAS and DEE.

#### VUTRC now known as Pashu Vigyan Kendra

Hon'ble Minister of Agriculture and Animal Husbandry, Shri Lalchand Kataria informed that The Veterinary University Training and Research Center (VUTRC), will now be known as Pashu Vigyan Kendra. He said that the name VUTRC has not been able to raise the voice of common farmers and livestock owners due to some difficulty in their speech. Therefore, there was a need to name it short and simple. Keeping this in view, they have been named "Pashu Vigyan Kendra" on the lines of Krishi Vigyan Kendra.

# RAJUVAS act as Establishment of support centre of NBAGR

National Animal Genetic Bureau of ICAR, Karnal has set up a Joint Support Centre at RAJUVAS, Bikaner. This national indigenous bovine genome centre will work under NBGC-IB the project. Vice Chancellor Prof.

Vishnu Sharma told that RAJUVAS will act as a partner centre for national bovine genome centre. The gene type data of these animals will be available at the RAJUVAS.

#### Convocation of RAJUVAS

Fourth Convocation of RAJUVAS was held on 25.02.2021 via online mode. Chief Guest was Hon'ble Governor Rajasthan and Chancellor of University Sh. Kalraj Mishra. Convocation address was delivered by Director General ICAR and Secretary DARE Dr. Trilochan Mahapatra. Special Guest was Sh. Lalchand Kataria, Hon'ble Cabinet Minister, Department of Animal Husbandry, Govt. of Rajasthan. Total 756 degrees were distributed online. 25 gold medals were distributed along with two Chancellor Gold Medals.

#### **Moments of Pride**

# Inclusion of PGIVER Jaipur in the First Schedule of VCI

PGIVER, Jaipur, constituent institute of RAJUVAS has been included in the first schedule of Veterinary Council of India on 22<sup>nd</sup> April, 2020 according to Gazette notification of India. This notification has been issued by the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, after the recommendation of the Advisory Committee of the Veterinary Council of India.

#### Vice-Chancellor Prof. Vishnu Sharma Nominated as Member of VCI

Vice-Chancellor Prof. Vishnu Sharma has been nominated as member of the Veterinary Council of India according to notification published in the Gazette of the Ministry of Animal Husbandry, Fisheries and Dairying, GOI on 20<sup>th</sup> December, 2020. It is pride moment for RAJUVAS as University have representative in the VCI.

#### Vice Chancellor Awarded the rank of colonel

Vice Chancellor of RAJUVAS, Bikaner, Prof. Vishnu Sharma has been awarded the rank of Colonel Commandant in the National Cadet Corps by the Ministry of Defense. In the notification issued by the Ministry of Defence, Government of India, It is noteworthy that only Vice-Chancellors of the four universities of the country have been selected for the rank of Colonel Commandant by the National Cadet Corps, Directorate General, Government of India, in

which Prof. Vishnu Sharma, Vice Chancellor Veterinary University is also included.

#### Fellow Award of Association

Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS, was conferred with prestigious award of Fellow by the Animal Nutrition Association during centennial symposium organized by the Animal Nutrition Association at IVRI, Bareilly on 11-12 March, 2021. Prof. Vishnu Sharma was given this honor in view of their specific research and contribution in the field of animal nutrition.

#### Capacity Building by collaborations

The university has continued efforts to increase collaborations with other institutions in 2020-21 and signed 10 MoU (Memorandum of Understanding) for meaningful collaboration in the area of mutual interest with following institute

- MoU with Maharana Pratap University of Agriculture and Technology (MPUAT)
- MoU with National Research Center on Equine (NRCE) Hisar
- MoU with International Brook India Association
- MoU with Dr Sarvepalli Radhakrishanan Rajasthan Ayurved University
- MoU with University of Trans-Disciplinary Health Sciences and Technology (TDU), Bengaluru
- MoU with Kamdhenu University, Gujarat
- MoU with Rahuri Semen station NDDB
- MoU with U.P. Pt. Deen Dayal Upadhyay Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan. Mathura
- MoU with National Bureau of Animal Genetic Resources Karnal
- MoU with Nanaji Deshmukh Veterinary Science University Jabalpur

#### Celebration of Decade Year

Decade Year of establishment was celebrated on 18.05.20 through online mode. Hon'ble Governor and Chancellor Sh. Kalraj Mishra was the Chief Guest of the function and Hon'ble Vice Chancellor Prof. Vishnu Sharma presided over the function. Hon'ble Governor and Chancellor sir addressed the function. The Vice-Chancellor shared information about the smart

class-rooms, virtual classes, self-service portals, conservation and preservation of indigenous cattle, organic milk and milk products, self-sufficiency in animal feed, livestock innovation, knowledge entrepreneurship skills development, university research patents and different works being done in the interest of livestock and livestock owners of the state even under the adverse circumstances of COVID-19. Hon'ble Governor has released the "RAJUVAS Golden Decade" souvenir. This programme was webcasted live on university website as well as Facebook page of the university. A large number of people (14 thousand) viewed this programme.

#### **Initiatives in Decade Year**

### Indigenous Cow's Milk and Milk Products Parlour

In order to develop awareness about importance of Indigenous cow's milk and milk products in the society and to promote the processing skills of students, indigenous cow's milk and milk products parlour have been started in every constituent colleges of the University.

#### **MOU** with International Organizations

The university has MOU with several national institutions in the last ten years, but there is a need to take concrete steps in this direction from international institutions. Under this initiative, the work has been started in this decade year and MOU with two international organization Nicolaus Copernicus University, Poland and International Livestock Research institute (ILRI), Kenya is in progress.

#### **Patenting of University Research**

Four patents have been filed for acceptance with the formation of University Patent Cell.

#### **Self-Reliant Livestock Research Stations**

A project has also been sanctioned under the RKVY (RAFTAR) worth of Rs. 180 lacs. In this project, feed plants will be established at various Livestock Research Stations of the University.

#### Organic Animal Production and Certification

At present, LRS, Beechwal with 100 goats and 50 hectare and is under the process of organic certification by the One Cert International Certification Agency and one year certificate has already been granted. Apart

from this 65 hectare land of LRS, Kodamdesar is also under organic certification.

#### Gaushala Strengthening Campaign

RAJUVAS has undertaken the adoption of thirteen Gaushala in different districts by PVKs of the University to provide technical guidance to each gaushala as a pilot project and convert it into model gaushala for others.

#### NABL Accreditation of Laboratories

Several high-end and state-of-the-art laboratories have been established at the RAJUVAS, NABL accreditation of these state-of-the-art laboratories has been initiated to develop the capacity, quality and authenticity results. Initially, accreditation of Advance Milk Testing laboratory of PGIVER, Jaipur has been obtained successfully.

#### LIKES Cell in Constituents Colleges

Livestock Innovation, Knowledge and Entrepreneurship Skill (LIKES) centers are established in all colleges to promote the culture of skill entrepreneurship and business.

# Add-on Certificate Course for Veterinary Students

Add-on Certificate Course has been started on specific topics for all round personality and skill development of veterinary students.

#### **Veterinary Education Awareness Programme**

Under this initiative, the university is organizing awareness programmes on the topics of how to become veterinarians and dimensions of veterinary education for schools students.

#### **Creation of Scientific Forum RAHET**

Regional Animal Husbandry Extension Technology Forum has an opportunity to RAJUVAS to co-ordinate with line departments of Govt. like animal husbandry, dairy, gopalan, fisheries and others for farmer's welfare work and quick resolution of their issues and problems.

# Disease Diagnosis and Milk Quality Testing facilities at PVKs

The services of disease diagnosis and milk quality testing facilities at the PVKs of the university established in different districts of the Rajasthan.

#### **Faculty Accomplishment**

- Faculty members and Students of University attained 104 various online seminar/conference/ workshop at national and international level.
- The faculty published 213 research publications, 3 book chapter, 23 Practical and training manual.
- Faculty member of RAJUVAS were honored with 53 awards at national level.







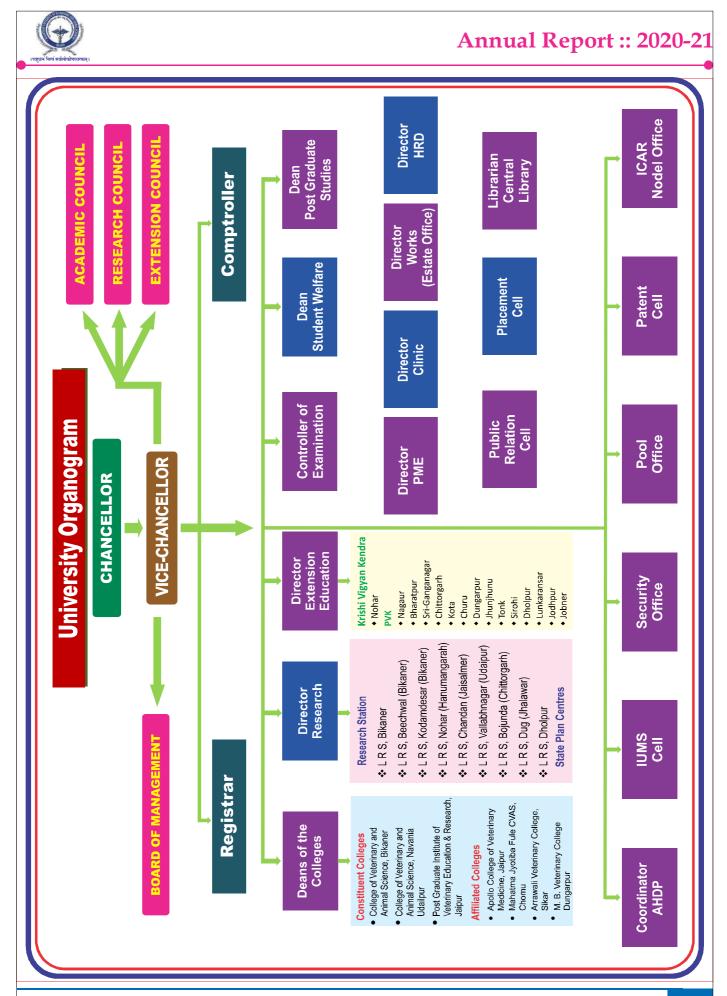


### University organized three international webinar

S.No.	Topic	Date	Participant
1.	Camel Reproduction	12 July 2020	1324
2.	Equine Reproduction	19 July 2020	946
3.	One Health Approach for emerging zoonosis and Rabies in India	28 Sept 2020	1010

#### **National Webinar**

S.No.	Topic	Date	
1.	Start up Entrepreneurship Incubation Ecosystem to Promote and Nurture organized by CVAS, Navania	17 July 2021	
2.	Animal Production Medicine in Anthropocene Epoch organized by CVAS, Bikaner	13 August 2021	
3.	Entrepreneurship Opportunities in Poultry Sector in India organized by CVAS, Navania	27 August 2021	
4.	Metabolic Diseases of Importance in Dairy Animals organized by PGIVER, Jaipur	27 August 2021	
5.	Blending Local and Global Knowledge and Innovation System organized by PGIVER, Jaipur	29 August 2021	
6.	Paediatrics Health Management of Dogs and Cats organized by PGIVER, Jaipur  15 September		
7.	How to Develop Yourself for Carrere (not job) in Veterinary organized by PGIVER, Jaipur	26 September 2021	
8.	Entrepreneurship Opportunities in Bio Energy Generation organized by CVAS, Navania	10 October 2021	
9.	Advancement in Diagnostics organized by CVAS, Bikaner	14 October 2021	
10.	Embryo Transfer Technology organized by PGIVER, Jaipur	23 October 2021	
11.	Entrepreneurial and Market Led Extension for Livestock Development organized by CVAS, Bikaner	3 November 2021	
12.	Entrepreneurial Thinking Related Paradoxes organized by CVAS, Navania	6-8 November 2021	
13.	Gender in Livestock Sector organized by PGIVER, Jaipur	12 January 2021	
14.	Self Management and Professionalism organized by PGIVER, Jaipur	17 February 2021	







# 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.



- 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 orgnizations 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
  - 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
  - To enable the professionals to generate selfemployment 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 Sh. Govind Ram MLA, Sh. Purkha Ram, Sh. Ashok Modi, Smt Krishna Solanki, Prof. P.K. Shukla, Sh. Ranjeet Singh, Dr. Amit Nain Dr. R.K. Singh, Dr. Hemant Dadhich and 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 2020-21

4	Dref (Dr.) Vichou Charma Vica Chancellar DA HIVAC	Chairnaraan
1.	Prof. (Dr.) Vishnu Sharma, Vice-Chancellor, RAJUVAS	Chairperson
2.	Sh. Govind Ram, M.L.A., Khajuwala	Member
3.	Sh. Ashok Modi, MD, Modi Dairy, Bikaner	Member
4.	Sh. Purkha Ram, Livestock Farmer	Member
5.	Smt. Krishna Solanki, Women SocialWorker	Member
6.	Prof. P.K. Shukla, Dean, Post Graduate Studies and Registrar, U.P.	Member
7.	Sh. Ranjeet Singh, Honb'le Governor's Nominee	Member
8.	Dr. Amit Nain, VCI Nominee	Member
9.	Dr R.K.Singh, Dean & ChairmanFaculty, CVAS, Bikaner	Member
10.	Dr. Hemant Dadhich, Director Research, RAJUVAS, Bikaner	Member
11.	Dr. S.N. Purohit, MD, Urmul, Representative of MD, RCDF	Representative
12.	Dr. Renu Goyal, Addintional Director, AH, Representative to Secretary, Animal Husbandry GOR	Representative
13.	Dr. Virendra Netra, Dy. Director, Representative to Director, Animal Husbandry GOR	Representative
<b>1</b> 4.	Sh. Arivnd Bishnoi, Comptroller, RAJUVAS, Bikaner	Invitee
15.	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 13th 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. R. K. Singh has been appointed as the Dean and Faculty Chairman of the Faculty of Veterinary and Animal Science from 01-05-2020 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 13th 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 13th 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 (s) (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, URMULTrust, 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 exofficio 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 13th 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, Vallabhnagar, 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. Dean Students' Welfare coordinating the sports, cultural activities initiated by the State Government and Indian Council of Agricultural Research and Veterinary Council of India, National Service Scheme, National Cadet Corps. DSW coordinating literary, fine arts competitions and personality development programmes in the constituent colleges. It also acts as a nodal centre to promote cooperation and fellowship among students on campuses. DSW encourage students to give expression to their talents to enrich our social fabric and improve campus life besides pursuing their academic targets. The election of the student's union of University was not conducted due to COVID-19 pandemic.

# 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 userfriendly 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, PGIVER, 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 Directorate of Human Resource Development

Human resource is the most crucial, vital and dynamic resource to achieve the objectives and goals of the University. There is always need to have a systematic approach to develop and improve competency of the human resource in terms of Skills, Knowledge and Attitude, Behaviour through appropriate training and development programmes from time to time.

In order to strengthen and facilitate training and capacity building of all categories of the stakeholders, the Directorate of HRM shall be created to carry out activities with the purpose to ensure the growth and management of the faculty/staff/students/entrepreneurs/ farmers etc. in pursuance of the mandate of the university. Directorate of Human Resource Development is responsible to overall monitoring, implementation, evaluation and management of HR needs and requirements of the University.

#### 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.

S.No.	Name of Post	Sanctioned	Filled	Vacant
1. Professor		59	20 C <b>A</b> S	39
2.	Associate Professor	111	1 CAS	110
Assistant Professor		252	100	152
	Total	422	121	301

### Officers of the University

Vice-Chancellor	Dr. Satish Kumar Garg
Chairperson of the Faculty and Dean, CVAS, Bikaner	Dr. R.K. Singh
Dean, College of Veterinary and Animal Science, Nanvania, Vallabhnagar, Udaipur	Dr. R.K. Joshi
Dean, P.G.I.V.E.R., Jaipur	Dr. Sanjita Sharma
Dean, Post Graduate Studies	Sr. Sunita Rani
Dean, Student Welfare	Dr. S.C. Goswami
Convener PRC	Dr. R.K. Dhuria
Director, Research	Dr. Hemant Dadheech
Director, Clincis	Dr. A.P. Singh
Director, Extension Education	Dr. R.K. Dhuria
Director, PME	Dr. Anju Chahar
Director, Works (Estate Office)	Er. P.M. Mittal
Director, Human Resource Department	Dr. B.N. Shringi
Controller of Examination	Dr. Urmila Pannu
Comptroller	Sh. Pratap Singh Poonia
Registrar	Sh. Ajeet Singh Rajawat (R.A.S.)
University Students Placement Cell	Dr. S.C. Goswami









### **University Heads of the Departments**

Department	Name of the Head/Incharge
Anatomy and Histology	D. Sanjeev Joshi, HOD
Animal Breeding & Genetics	Dr. Urmila Pannu, HOD
Animal Nutrition	Dr. R.K. Dhuria, HOD
Animal Reproduction, Gyanecology and Obstetrics	Dr. J.S. Mehta, HOD
Animal Husbandry Extension	Dr. Devi Singh, Incharge
Assistant Librarian	Dr. Kuldeep Chand
Biochemistry	Dr. Meenaxi Sareen, HOD
Clinical Veterinary Medicine	Dr. A.P. Singh, HOD
Epidemiology and Preventive Medicine	Dr. Anju Chahar, HOD
Livestock Production Management	Dr. S.C. Goswami, HOD
Livestock Products Technology	Dr. Basant Bais, HOD
Microbiology	Dr. B.N. Shringi, HOD
Physiology	Dr. Sunita Pareek, HOD
Pathology	Dr. Sunita Rani, HOD
Parasitology	Dr. B.N. Shringi, HOD
Public Health	Dr. Rajani Joshi, Incharge
Pharmacology & Toxicology	Dr. Pratishtha Sharma, Incharge
Surgery and Radiology	Dr. Praveen Bishnoi, HOD

### **Important Meetings of University**

Meetings	Dates
Meeting of Review Committee (Online During Lockdown)	15.04.2020
22th Meeting of Board of Management	15.05.2020
16th Meeting of Academic Council	07.10.2020
1st Meeting of Councils of Officers	05.11.2020
7th Scientific Advisory Committee Meeting KVK Nohar	14.12.2020
17th Meeting of Academic Council	24.12.2020
11th Meeting of Board of Studies	08.02.2021
Meeting of NABARD District Managers	12.02.2021
23th Meeting of Board of Management	24.02.2021
18th Meeting of Academic Council	24.02.2021
2nd Meeting of Councils of Officers	20.03.2021
7th Meeting of Research Council	22.03.2021
7th Meeting of Extenstion Education Council held	23.03.2021

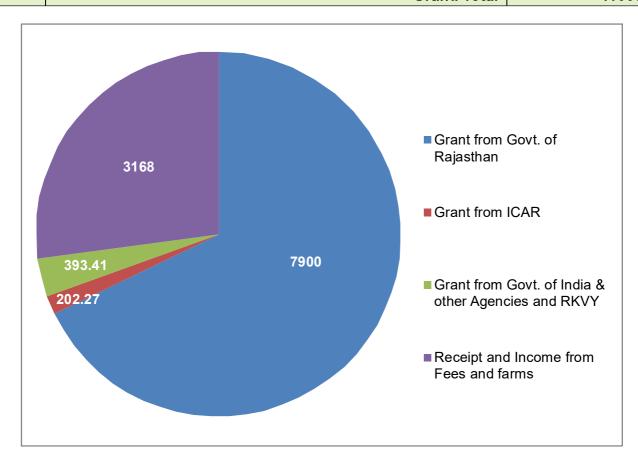


### 3. Finance and Budget

Rajasthan University of Veterinary and Animal Sciences, Bikaner had been given a financial grant of Rs. 7900 lacs for the financial year 2020-21 under State Plan. A grant of Rs. 393.41 lacs was obtained against the Govt. of India, other Agencies & RKVY projects being run under RAJUVAS, Bikaner for the year 2020-21. The University also got an assistance of Rs. 202.27 lacs under ICAR Projects. The total budget of RAJUVAS for 2020-21 was Rs. 8495.68 Lacs. The University through its internal resources added Rs. 3168.00 Lacs during 2020-21.

FINANCIAL RESOURCES FOR
RAJASTHAN UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES, BIKANER
2020-21

S.No.	Sources	<b>Budget for 2020-21</b>
1	Grant from Govt. of Rajasthan	7900.00
2	Grant from ICAR	202.27
3	Grant from Govt. of India & other Agencies and RKVY	393.41
	Total = 1+2+3	8495.68
4	Internal Resources	
	Receipt and Income from Fees and farms	3168.00
	Grand Total	11663.68





#### 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.

#### 4.1 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-Vallabhnagar; 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,

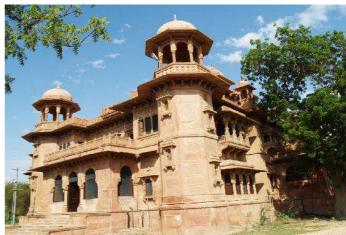


Navania-Vallabhnagar, Udaipur and Post-Graduate Institute of Veterinary Education & Research, Jaipur and 3 Affiliated Colleges. Addresses and contact numbers of Dean of constituent and affiliated veterinary colleges of the university are given below:

#### Details of all Constituent Colleges and Affiliated Private Colleges with the University

S.No	College Name	Year of Establishment	Telephone No.	Official Email of College
1.	College of Veterinary and Animal Science, Bikaner	1954	9414430084	cvas901@gmail.com
2.	College of Veterinary and Animal Science, Navania, Vallabhnagar Udaipur	2007	9414141189	cvas902@gmail.com
3.	Post Graduate Institute of Veterinary Education and Research, Jaipur	2012	9649551451	pgiverjaipur@gmail.com
4.	Arawali Veterinary College, Sikar	2009	9649600419	cvas908@gmail.com
5.	Mahatma Jyotiba Fule College of Veterinary & Animal Science, Chomu	2007	9784126000	mjfcvs@gmail.com
6.	Apollo College of Veterinary Medicine, Jaipur	2003	9940540262	apollovetjaipur@gmail.com
7.	M.B. Veterinary College, Dungarpur	2019	8696907001	cvas910@gmail.com







### CVAS, BIKANER M.V.Sc. Thesis 2020-21

S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
1	Jayesh Vyas	Animal Genetics and Breeding	Dr. Urmila Pannu	Study on population structure of Marwari sheep through pedigree analysis and effect of inbreeding on growth traits
2	Ram Kumar Saran	Animal Genetics and Breeding	Dr. Urmila Pannu	Genetic Diversity of Magra sheep through pedigree analysis and inbreeding effect on growth traits
3	Manoj Kumar	Animal Genetics and Breeding	Dr. Manju Nehara	Study of Milkability, dairy Temperament and Udder characteristics in Indian Dromedary Camel
4	Ambika Chaudhary	Animal Genetics and Breeding	Dr. Manju Nehara	Genetic evaluation of Marwari goat for growth performance under field condition in arid region of Rajasthan
5	Lokesh Vashishth	Animal Genetics and Breeding	Dr. G. C. Gehlot	Polymorphism in HSP90AA1 gene and its association with thermo-tolerance and milk production traits in Kankrej cattle
6	Narsiram Gurjar	Veterinary Microbiology and Animal Biotechnology	Dr. B.N. Shringi	Studies of cytokine expression levels upon infection of Different Viruses in Chickens
7	Leenu Tanwar	Department of Clinical Veterinary Medicine, Ethics and Jurisprudence	Dr. J.P. Kachhawa	M.V.Sc. / Therapeutic studies on Holarrhenaantidysenterica in colibacillosis affected calves
8	Raj Kumar Soni	Department of Clinical Veterinary Medicine, Ethics and Jurisprudence	Dr. J.P. Kachhawa	M.V.Sc. / In-vitro studies on antiparasitic activities of extracts of Aegle marmelosand Dalbergia sissoo
9	Pooja Solanki	Department of Clinical Veterinary Medicine, Ethics and Jurisprudence	Dr. Sunita Choudhary	Therapeutic Studies of Neem (Azadirachta indica) and Giloy (Tinospora cordifolia) on Subclinical Mastitis in Cattle
10	Savita	Department of Clinical Veterinary Medicine, Ethics and Jurisprudence	Dr. A. P. Singh	Studies on therapeutic efficacy of Prosopis cineraria (Khejri) in subclinical mastitis in cattle
11	Sunil Kumar Meena	Animal Nutrition	Dr. Rajesh Nehra	Effect of supplementation garlic (Aliumsativum) powder as feed additive on nutrient utilization and growth performance in goats
12	Buddha Ram	Animal Nutrition	Dr. Rajesh Nehra	Effect of incorporation of Mesquite (Prosopisjuliflora) pods on nutrient utilization and growth performance in Goats
13	Dilip Nagar	Animal Nutrition	Dr. Rajesh Nehra	Effect of supplementation of Panchagavya as feed additive on performance and carcass characteristics of broiler chicks in arid zone of Rajasthan
14	Mukesh Gurjar	Animal Nutrition	Dr. Rajesh Nehra	Effect of mint powder (Menthaspicata) and Indian Bay leaf powder (Cinnamomumtamala) as herbal feed additives on performance of broiler chicks
15	Chandra Shekhar Godara	Animal Nutrition	Dr. Dinesh Jain	Effect of harad (Terminaliachebula) powder as herbal feed additive on performance of broiler chicks



S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis	
16	Dipak Bhagora	Animal Nutrition	Dr. Dinesh Jain	Effect of Supplementation of Soapnut Shell (Sapindusmukorossi) Powder as herbal feed additive on performance of broiler chicks	
17	Mahaveer Suthar	Animal Nutrition	Dr. Dinesh Jain	Effect of Supplementation of garlic (Allium sativum) powder as herbal feed additive on performance of broiler chicks	
18	Jennise Daniel Gula	Department of Epidemiology and Preventive Veterinary Medicine	Dr. Anju Chahar	Survey of Some Infectious Diseases of Goat in Bikaner District of Rajasthan	
19	Mahaveer Suresha	Department of Epidemiology and Preventive Veterinary Medicine	Dr. Anju Chahar	Survey of Some Infectious Diseases of Sheep in Bikaner District of Rajasthan	
20	Kartar Singh	Veterinary Pharmacology and Toxicology	Dr. Pratishtha Sharma	Anthelmintic activity of various extracts of Carica papaya seeds and Moringa oleifera leaves in naturally infested goats.	
21	Hukma Ram Parihar	Veterinary Pharmacology and Toxicology	Dr. Ashok Gaur	Anthelmintic therapeutic efficacy studies on seeds of Moringa (Moringaoleifera) and Pumpkin (Cucurbitamaxima) in goats	
22	Chandani Jawa	Veterinary Public Health	Dr. Rajani Joshi	Characterization of Escherichia coli and Staphylococcus aureus isolated from raw fish meat outlets of Bikaner	
<b>2</b> 3	Deepika Jain	Veterinary Public Health	Dr. Rajani Joshi	Bacteriological profile of Bio-Medical Waste and assessment of the efficacy of autoclave and microwave	
24	Shivendra kumar Bhalothia	Department of Veterinary Gynaecology and Obstetrics	Dr. J. S. Mehta	Effects of Melatonin and Canthaxanthin on cooled storage of Magra ram semen.	
25	Sanjeev singh	Department of Veterinary Gynaecology and Obstetrics	Dr. Amit Kumar	Effect of caffeine and Butylated hydroxytolueneon seminal quality parameters in magra ram semen	
26	Shafiullah	Department of Veterinary Gynaecology and Obstetrics	Dr. G. N. Purohit	Effect of Pre-Breeding Supplementary Feeding on Reproductive Performance of Marwari Ewes Synchronized to Estrous	
27	Sasi G	Department of Veterinary Gynaecology and Obstetrics	Dr. G. N. Purohit	Bubaline ovarian biometry, evaluation of ovarian follicular structures and ovarian follicular fluid proteins during different phases of estrous cycle	
28	Dharmendra Choudhary	Livestock Product Management	Dr. Tara Bothra	Effect of Turmeric (Curcuma f longa) powder and neem (Azadirachta indica) leaf powder on performance and carcass characteristic of broiler chick	
29	Anamika Sharma	Livestock Product Management	Dr. Vijay Kumar	Effect of dietry supplement of Moringa (Moringa oleifera) and Tulsi (Ocimum sanctum) along with different bedding materials on performance of japanese quail	
30	Anita	Livestock Product Management	Dr. A.K. Jhirwal	Effect of dietry supplement of Giloy (Tinospora cordifolia) stem powder and Moringa (Moringa oleifera) leaves powder along with different bedding materials on performance of Broilers	
31	Gaurav Pargi	Livestock Product Management	Dr. S.C. Goswami	Effect of dietry supplement of Giloy (Tinospora cordifolia) stem powder and neem (Azadirachtaindica) leaves powder along with different bedding materials on performance of japanese quail	



S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
32	Ajay Sharma	Department of Livestock Products Technology	Prof. Basant Bais	Development and Quality evaluation of Fig (Anjeer) incorporated Camel and Buffalo Milk based Khoa Burfi
33	Nitesh Chand Sharma	Department of Livestock Products Technology	Prof. Basant Bais	Development and Quality Evaluation of Aloevera and Coconut waterbased Whey Beverages prepared from Camel and Goat milk
34	Yogendra Singh	Department of Livestock Products Technology	Prof. Basant Bais	Development and Studies of Beetroot and Muskmelon Basedwhey Beverages Prepared From Camel and Goat Milk
35	Abhinav Meena	Department of Veterinary Parasitology	Dr. P. K. Pilania	Epidemiological studies on gastrointestinal parasitic infections of camel population in arid western zone of Rajasthan
36	Rakesh Kumar	Department of Veterinary Parasitology	Dr. Abhishek Gupta	Epidemiological studies on gastrointestinal parasitic infections in dairy animals with special reference to bovine coccidiosis of irrigated north western plain of Rajasthan.
37	Babita Kumari	Department of veterinary physiology	Dr. Sunita pareek	Body condition score versus metabolic and antioxidant profile of Marwari sheep from the arid tract of Rajasthan during cold ambience
38	Bhagarj Godara	Vety. Biochem	Dr. N.S.Rathore	Sequencing and analysis of NLRP6 gene of camel
39	Ram Kumar Gahlot	Vety. Biochem	Dr. N.S.Rathore	Molecular characterization of TLR-2 gene in Bikaneri camels
40	Gagan Deep singh	Vety. Biochem	Dr. N.S.Rathore	Study on Hemato-Biochemical Analysis of different types of colic in indigenous horses
41	Anita Kumari	Veterinary Surgery and Radiology	Prof. Praveen Bishnoi	Evaluation of String ofPearls (SOP) plate for management of femur fractures in canines
42	Kamal Kishor	Veterinary Surgery and Radiology	Dr. Sakar Palecha	Clinical and Retrospective study on diverse surgical disorders in camels (Camelus dromedarius)
43	Kundan Singh Meena	Veterinary Surgery and Radiology	Dr. Suresh Kumar Jhirwal	Evaluation of preoperative B-mode ultrasound biometry of cataractous eyes in dogs
44	Manu Prabh Sharma	Veterinary Surgery and Radiology	Dr. Anil Kumar Bishnoi	Clinical use of circular external skeletal fixation system for management of long bone fractures of limbs in bovines
45	Nilam	Veterinary Surgery and Radiology	Dr. Sakar Palecha	Evaluation of Tiletamine –Zolazepam Anaesthesia in Dogs-A Clinical Study
46	Rohit Kumar Sharma	Veterinary Surgery and Radiology	Dr. Anil Kumar Bishnoi	Clinical use of circular external skeletal fixation system for management of long bone fractures of limbs in dogs
47	Tushar Goyal	Veterinary Surgery and Radiology	Prof. Praveen Bishnoi	A clinical study on use of CO2 Laser for various soft tissue surgeries in dogs
48	Vilas D.	Veterinary Surgery and Radiology	Dr. MahendraTanwar	Study of the laparoscope assisted ovariectomy in bitches in comparison with ovariectomy by right flank laparotomy
49	Vidya Bai Meena	Veterinary Surgery and Radiology	Dr. Suresh Kumar Jhirwal	A study on B-mode Echobiometry of Intraocular Structures in Cattle Calves



### CVAS, BIKANER Ph.D Thesis 2020-21

S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
1	Hemlata Chauhan	Animal Genetics and Breeding	Dr. Urmila Pannu	Study of Milk Production Genes and Their Association with Production and Reproduction Traits in Rathi Cattle
2	Sophia Zaidi	Veterinary Microbiology and Animal Biotechnology	Dr. A.K. Kataria	Genetic diversity among E. coli from some antelope and cat species based on various virulence and antibiotic resistance genes.
3	Aarti Nirman	Veterinary Microbiology and Animal Biotechnology	Dr. A.K. Kataria	Molecular differentiation of Staphylococcus aureus from various sources in reference to some genes for biofilm formation and antibiotic resistance.
4	Vasundhara Rathore	Veterinary Microbiology and Animal Biotechnology	Dr. A.K. Kataria	Differentiation of Staphylococcus aureus isolates obtained from animals, human and inanimate sources in reference to some virulence genes.
5	Jyoti Chaudhary	Veterinary Microbiology and Animal Biotechnology	Dr. B.N. Shringi	Sequencing and analysis of TLR 4 to 10.
6	Femina Anjum	Veterinary Microbiology and Animal Biotechnology	Dr. B.N. Shringi	Clonality and antimicrobial resistance mechanisms in enteric E. coli isolated from poultry at different age interval.
7	Kavita Shinde	Animal Nutrition	Dr. R.K. Dhuria	Effect of supplementation of Ocimum sanctum (Tulsi) leaf and Zingiber officinale (Ginger) powder as feed additives on growth performance and nutrient utilization of broilers
8	Umesh Kumar Prajapat	Animal Nutrition	Dr. Tribhuwan Sharma	Effect of incorporation of dried distillers grains with solubles (DDGS) on performance of Magra lambs in arid zone of Rajasthan
9	Neha Sharma	Animal Nutrition	Dr. Tribhuwan Sharma	Effect of cinnamon (Cinnamomumverum) and ajwain (Trachyspermumammi) as feed additives on the Performance of broiler chicks
10	Pratishtha Sharma	Veterinary Pharmacology and Toxicology	Dr. Amita Ranjan	Disposition Kinetics of Marbofloxacin and its Pharmacokinetic Interaction with Meloxicam in Sheep and Goat.
11	Ashok Gaur	Veterinary Pharmacology and Toxicology	Dr. Amita Ranjan	Disposition Kinetics of Moxifloxacin and its Pharmacokinetic Interaction Studies with Flunixin in Sheep and Goats.
12	Tikam Chand Goyal	Dept. of vety.&a.h. extension education	Dr. Devi Singh Rajput	Problems And Prospects of Information Technologies (ICTs) Use by Livestock Owners in Southern Rajasthan
13	Sandeep Dholpuria	Department of Veterinary Gynaecology and Obstetrics	Dr. G. N. Purohit	Effect of exogenous melatonin administration on serum melatonin, Testosterone, sexual behavior, biochemical and semen parameters in male camels(Camelus dromendarius)
14	Geetesh Mishra	Livestock Product Management	Dr. S.C. Goswami	Effect of season and stage of lactation on bioactive components and antioxidant activity in milk of sahiwal and kankrejcattle in arid region of Rajasthan
15	Gayatri Gujar	Livestock Product Management	Dr. Vijay Kumar	characterization of thermo-physiological and molecular changes in response to heat in sahiwal and kankrej cattle of hot arid region
16	Vijayata	Department of Veterinary Parasitology	Dr. Abhishek Gupta	Identification and Molecular characterization of the genes targeting ribosomal binding protein UBP-1 and transcription factor p57 of Trypanosoma evansi isolated from Camel



S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
17	Monika	Department of Veterinary Parasitology	Dr. Abhishek Gupta	Epidemiologiocal studies on bovine cryptosporidiosis in north western Rajasthan
18	Sunita Pareek	Department of veterinary physiology	Dr. Nalini kataria	Appraisal of superimposed stressors versus physiological approaches in Magra sheep entailing thermal indices, metabolomics, water retention ability, antioxidant status and responses of adrenal, organs, tissue and cells.
19	Ruchi Maan	Department of veterinary physiology	Dr. Nalini kataria	Environmental variables versus physiological contrivances in Murrahfemalebuffalo from arid tracts monitoring oxidative cellular stress responses, metabolic regulators and fluid retention capabilities
20	Bhagat Singh Saini	Department of veterinary physiology	Dr. Nalini kataria	Analysis of abiotic stressor vis-à-vis physiological gambits in female non-descript indigenous cattle encompassing fluid and acid base status, liver semiology, oxidative stress biomarkers, energy tweaking and endocrine retorts
21	Subhash Garhu	Veterinary Surgery and Radiology	Prof. Praveen Bishnoi	Clinical diagnosis, Categorization, Surgico- therapeutic treatment and rehabilitation of large downer animals

### CVAS, UDAIPUR MVSc Thesis 2020-21

S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
1	Dr. Arpita Sain	Veterinary Microbiology	Dr. Deepak Kumar Sharma	Virulence And Antimicrobial Gene Profiling of Salmonella Spp Associated With Poultry Enteritis
2	Ravta Ram	Animal Husbandry Extension Education	Dr. Tikam Chand Goyal	Awareness and Utilization Pattern of e- resources Among Postgraduate Students of RAJUVAS Bikaner
3	Dr. Sandeep Kumar	Veterinary Parasitology	Dr.Sanweer Khatoon	Studies on the Status of Babesia and Anaplasma Species in Cattle of Udaipur (Rajasthan)
4	Dr.Robin Singh	Veterinary Parasitology	Dr. H.M.Alam	Studies On Prevalence Of Gi Nematodes And Haematological Changes In Cattle And Buffalo In Udaipur District (Rajasthan)
5	Dr. Altaf Hussain Kohri	Animal Nutrition	Dr. K. A. Shende	Effect of dietary supplementation of tulsi (Ocimum sanctum) leaf and synbiotic powder as feed additives on growth performance and nutrient utilization in broiler chicks
6	Dr. Manish Kumar Nagar	Animal Nutrition	Dr. K. A. Shende	Effect of Turmeric (Curcuma longa)Powder and Synbiotic as Alternative to Antibiotic Growth Promoter on Performance, Carcass Characteristics and Nutrient Utilization in Broiler Chicks
7	Dr.Anklesh Katara	Veterinary Gynaecology & Obstricts	Dr.Mitesh Gaur	Effect of various concentration of caffeine on pre-freeze and post thaw quality of Surti buffalo ( <i>Bubalusbubalis</i> ) bull semen
8	Dr. Deepak	Veterinary Gynaecology & Obstricts	Dr. Dinesh Jhamb	Ultrasonographic features of preovulatory follicle, estrus endometrial echotexture and early conceptus development in Marwari mares



S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
9	Dr.Rohit Juneja	Veterinary Gynaecology & Obstricts	Dr. Dinesh Jhamb	Studies on certain haemato-biochemical parameters, histopathology, radiography and ultrasonographic evaluation in canine pyometra
10	Dr.Kailash Kumar	Veterinary Gynaecology & Obstricts	Dr. Mitesh Gaur	Glutathione as a semen additive to improve Surti buffalo ( <i>Bubalus bubalis</i> ) semen cryopreservation
11	Dr. Naina Manat	Vetrinary Medicine	Dr. S.K. Sharma	Clinical and Therapeutic Studies on Colibacillosis in Goat Kids
12	Dr. Manoj Kumar Kalwaniya	Veterinary Public Health	Dr. Abhishek Gaurav	Molecular characterization and antibiogram of Escherichia coli isolated from meat and meat products
13	Dr Ankita Kumari	Veterinary Public Health	Dr Abhishek Gaurav	Assessment of bacteriological quality of raw and pasteurized milk in Udaipur and its public health significance
14	Dr Surendra	Veterinary Public Health	Dr Abhishek Gaurav	Prevalence and characterization of Salmonella species isolated from poultry farms and chicken meat
15	Dr. Jagdish Das	Veterinary Surgery and Radiology	Dr.Pradeep Kumar	Clinical evaluation of various ocular affections in bovines
16	Dr.Yatish Bamaniya	Veterinary Surgery and Radiology	Dr.Pradeep Kumar	Imaging of horn using computed radiography and computed tomography in cattle
17	Dr. Pravin Kumar Purohit	Veterinary Pathology	Dr.Kamal Purohit	Pathological Studies on Spontaneously Occurring Liver Conditions of Goats ( <i>Capra hircus</i> ) in Southern Region of Rajasthan
18	Dr. Dushyant Dev Bhal	Veterinary Pathology	Dr.Anita Rathore	Occurrence And Pathology of Various Conditions in Urinary System of Goats in Southern Region of Rajasthan
19	Dr. Anuj Kumar	Livestock Products Technology	Dr. Arun Kumar	Quality evaluation of goat meat balls incorporated with pomegranate peel powder and essential oils
20	Pavan Kumar Damor	Livestock Products Technology	Dr. Arun Kumar	Development and quality assessment of chia seed, mulethi and green tea incorporated chicken nuggets
21	Dr. Shripal Siyak	Livestock Production Management	Dr. M.L.Gurjar	Goat Management Practices in Marwar Region of South – Western Rajasthan.
22	Dr. Rahul Kumar Saini	Livestock Production Management	Dr. M. L. Gurjar	Study on Cattle Management Practices in Alwar District of Rajasthan.
23	Dr. Namo Narayan Meena	Livestock Production Management	Dr. Hina Ashraf Waiz	Influence of Stocking Density on Performance, Welfare, Haemato-biochemical Indices and Carcass characteristics of Broiler Chicken under Intensive Poultry Production System.
24	Dr.Rakesh Gena	Veterinary Anatomy	Dr.Balwant Meshram	ComperativeHistomorphological Study on the Digestive System of White Leghorn (Gallus gallusdomesticus) and Guinea Fowl ( <i>Numida meleagris</i> ) Bird with Speical Reference to the Histomorphological, Histochemical and Ultrastructural Observance of their Cloaca.
25	Dr. Vinit Kumar	Veterinary Anatomy	Dr. Balwant Meshram	The Comparative microscopical, Histomorphilogical and Histochemical Studies on Pancreas in White Leghorn (Gallus gallus domesticus) and Guinea fowl (Numida meleagris) Birds.



S. No	Name of student	Name of Department	Name of Advisor	Title of Thesis
26	Dr. Shashikant	Animal Gentics & Breeding	Dr. R.K. Nagda	Study on bio-prediction of body weight from zoometrical traits in Sirohi goats under farm and field condition
27	Dr. Gaurav Kumar Bansal	Animal Gentics & Breeding	Dr. Vishnu Kumar	Genetic study on average daily gain and Kleiber ratio in Sonadi sheep
28	Dr. Renuka Hada	Animal Gentics & Breeding	Dr. R.K. Nagda	Study on growth performance of Sonadi sheep under farm conditions
29	Dr. Kamal Meena	Vetrinary Physiology & Biochemistry	Dr. B.S. Saini	An appraisal of milk components, hemato- biochemical variables and serum electrolytes in lactating Sirohi Goat

### PGIVER JAIPUR M.V.Sc. Thesis 2020-21

S.No.	Name of Students	Name of Department	Name of Advisor	Title of Thesis
1	Khushiram Yadav	Animal Nutrition	Dr. Sheela Choudhary	Effect of <i>Moringa Oleifera</i> Leaves, Seeds and Multienzyme supplementation on performance of broiler chickens
2	Vipin Chandra	Livestock Production Management	Dr. Sanjita Sharma	Comparative efficacy of evaporative cooing pad and fogger system on growth performance and carcass characteristics of broiler chicken in semi-arid region of Rajasthan
3	Om Prakash Meena	Veterinary Clinical Medicine	Dr. Nirmal Kumar Jeph	Studies on Sero-Prevalence of Brucellosis in Sheep (Ovies aries) in and around Jaipur
4	Ghan Shayam Singh Rathore	Veterinary Microbiology and Biotechnology	Dr. Sandeep Kumar Sharma	Molecular Characterization of Staphylococcus aureus Obtained from Clinical Samples of Animal with Special Reference to Antibiotic Pattern
5	Santosh Kumar Rao	Livestock Production Management	Dr. Sanjita Sharma	Survey Study on Traditional Camel Husbandry Practices and Major Constraints in Jaipur and Ajmer districts of Rajasthan
6	Satish Kumar Yadav	Veterinary Microbiology and Biotechnology	Dr. Sandeep Kumar Sharma	Phenotypic and Genotypic on Antibiotic Resistance Pattern of <i>Klebsiella pneumonia</i> Associated with Various Clinical Conditions of Animals
7	Kavita Meena	Animal Nutrition	Dr. Manju	Effect of Supplementation of Herbs and Spices as Feed Additives on Performance of Broiler Chickens
8	Kamlesh Suthar	Animal Nutrition	Dr. Monika Karnani	Effect of Supplementation of Moringa oleifera and Morus alba Forage on Dry Roughage Based Maintenance Diet in Sheep
9	Shashi Choudhary	Veterinary Clinical Medicine	Dr. Nazeer Mohammed	Clinical Studies on Diabetes Mellitus in Canine

#### PGIVER JAIPUR Ph.D Thesis 2020-21

S.No.	Name of Students	Name of Department	Name of Advisor	Title of Thesis
1	Dharmendra Charrang	Animal Nutrition	Dr. Sheela Choudhary	Effect of Probiotics Supplementation on Nutrient Utilization in Captive Asian Elephants
2	Y.R. Abemdkar	Livestock Products Technology	-	Effect of Ageing on Tenderization of Tough Meat Through Selective Multiple Approaches in Different Species (Buffalo, Pork, Sheep, Goa)





# College of Veterinary and Animal Science, Bikaner

#### **Brief Introduction:**

The College of Veterinary & Animal Science was started in 1954 keeping in view the importance of livestock in the rural economy of the state in general and this area in particular. It was started as the government college and named as the Rajasthan Veterinary College. Later on, it became a part of the faculty of Medicine and Veterinary of the Rajasthan University, Jaipur. In 1962, a separate Rajasthan Agriculture University was started and the college became the part of the faculty of this University. In 1964, college was affiliated with the University of Udaipur. This University was renamed as Mohan Lal Sukhadia University and then Sukhadia University. The Rajasthan Agricultural University (RAU), formerly a part of the Sukhadia University, Udaipur, became a separate entity on 1st of August 1987 because of promulgation of an Ordinance (Ordinance No. 13 of 1987) by the Government of Rajasthan, which was later enacted by an Act of Rajasthan State Legislation (Act No. 39 of 1987). RAU has been renamed as Swami Keshwanand Rajasthan Agricultural University, Bikaner (SKRAU, Bikaner) vide Gazette notification No. F. 4 (2) vidhi/2/2009 dated June 09, 2009. In May 2010, it becomes the part of the Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner which was established under subsection (3) of section 1 of the Rajasthan University of Veterinary and Animal Sciences Act. 2010.

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 University implemented new VCI pattern 2016.

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. After its incaption in 1954, it has expanded horizontally in terms of 17 departments having laboratories equipped with sophisticated instruments and gadgets; well-developed library with >36,000 books and journals; a

workshop; three examination halls of the capacity of >200 students; clinical complex having indoors, outdoors, dormitory and outpatient departments of major clinical departments with richest clinical facilities; apex centre for animal disease diagnosis, monitoring and surveillance etc. The annual turnover of the cases reaches 20-25 thousand per anum 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. 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.

The college also have animal biotechnology laboratory, a radioisotope laboratory, computer facilities, LAN server, central instrumentation facility, animal house, canine welfare society, placement cell, internet facility and 24x7 days a week clinical and hospital facility, diagnostic laboratory, NCC (R&V) squadron unit, numerous research projects. 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. Every department is equipped with LCD projector to facilitate improved teaching.

The facilities for students are excellent in terms of 6 boys' hostels, 2 girls' hostels; spacious canteen and an elegant auditorium. The college is having ample student and faculty amenities. Staff colonies of the college have 92 quarters for all cadres. Ample playgrounds like football, hockey, basketball, tennis, volleyball, kabaddi, badminton and table-tennis etc. are there within the campus. Heritage buildings amalgamate very well with the latest ones on the campus. The campus is having a Bank located within and a post-office, located just attached to the campus.

#### **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 54 regular including 14 state, 12 ICAR and 28 payment seats are available in M.V.Sc. programmes.

Ph.D.: Currently there are two seats in each department except in Animal Breeding and Genetics, Veterinary Public Health and Animal Biotechnology where there is only one seat and Livestock production and Management, Veterinary Pathology and Veterinary Surgery and Radiology where there are 3 seats for each discipline. Admissions to Ph.D. are made through merit following reservation on the basis of roster.

	PROGRAMMES OFFERED WITH DURATION	DURATION
PRE	DIPLOMA IN ANIMAL HUSBANDRY PROGRAMME (basic qualification for minor veterinary service providers as per Indian Veterinary Council Act, 1984)	2 years
UG	B.V.Sc. & A.H.	5½ years
PG	M.V.Sc.  Vety. Anatomy, Vety. Physiology, Vety. Biochemist ry, 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	M.Sc. Animal Biotechnology Ph.D.  Vety. Anatomy, Vety. Physiology, Animal Nu trition, 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, Livest ock Product Technology Vety. & Animal Husbandry Extension Education, Vety. Pharmacology & Toxicology	2 years 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. In University, there are 7 AHDP institutes- at all the three constituents colleges, LRS, Chandan, LRS Nohar, LRS Dug (Jhalawar), LRS Bojunda (Chittorgarh). In

addition, there are also 73 University affiliated AHDP Institutes including 4 Institutes of Government of Rajasthan located at Jaipur, Jodhpur, Kota and Udaipur.

Short-term certificate courses: 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 Strength of College

B.V.Sc.&A.H.			Total	M.V.Sc.		Total C.hQ		Total	2 Years Diploma in A.H.		Total	. Total				
I	П	Ш	IV	V		I	П		I	Ш	Ш		ı	Ш		Ö
80	81	73	65	63	362	54	55	109	13	12	20	45	39	42	81	597

#### **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	-
Educational Loan	06
Mohan Singh Memorial Scholarship	Topper of IV year
Department-wise scholarships awarded	
KaushalVikashYojana	03
Ward of Railway Employer	06
Ward of Police department	05

#### Students selected for ICAR's All India Entrance Examination AIEEA (PG)

Sr. No.	Name	Subject & University
1	Tanvi D. Bhavsar	Veterinary Physiology, NDRI, Karnal
2	Pyare Lal	Ani. Biochemistry, NDRI, Karnal
3	Pradeep Kumar	Ani. Biochemistry, NDRI, Karnal
4	Kalpana Jorasia	Ani. Biochemistry, NDRI, Karnal
5	Indu Yadav	Veterinary Parasitology, IVRI
6	Jitendra Bagra	Veterinary Microbiology, IVRI
7	Manoj Kumar	Animal Nutrition, NDRI, Karnal

#### Students selected for ICAR's All India Entrance Examination AIEEA (Ph.D.)

Sr. No.	Name	Subject & University
1.	Aparajita Johari	Veterinary Medicine (G.B. Pant University of Agriculture and Technology, Pantanagar, Uttarakhand)
2.	Ashok Singh Rathor	Veterinary Medicine (G.B. Pant University of Agriculture and Technology, Pantanagar, Uttarakhand)
3.	Yogesh Soni	Veterinary Gynaecology, NDRI, Karnal
4.	Pankaj Dhakarwal	Veterinary Microbiology, IVRI
5.	Himani Dhiman	Veterinary Microbiology, IVRI
6.	Kumar Gaurav	Veterinary Microbiology, IVRI
7.	Manju Gari	Veterinary Pharmacology, IVRI
8.	Maina Dhaka	Veterinary Extension, IVRI
9.	Apeksha Jangir	LPT, IVRI
10.	Shali Swami	LPT, IVRI
11.	Nilam Tanwar	Animal Nutrition, IVRI
12.	Dinesh Sunwasiya	ABG, ,NDRI, Karnal

#### **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 2020-21 was 19326.

In the Veterinary Clinical Diagnostic Laboratory total 1521 diagnostic lab tests were performed. During this period two anti-rabies vaccination camps were also organized and total numbers of vaccinations done were 120. During this period total artificial insemination was 115 (cattle and buffaloes).



Intra Medullay pinning in Camel



**Ruminotomy in Cattle** 



## **Brief: About Clinic**

Total Cases (VCC):	19326
Diagnostic Lab Tests (VCC):	1434
Vaccination Camp (Anti Rabies):	02
Infertility Camp /Health Camp (No of Camp along with Cases):	-
Artificial Insemination (Cattle/Buffalo):	115

# **Veterinary Diagnostic Laboratory: 2020-21**

S.No.	Type of Sample	No. of Samples
1.	Blood	539
2.	Faecal	75
3.	Milk	301
4.	Urine	573
5.	Skin Scrapping	33
	Total	1521





Ultra sonography in Mare



Handling of dystocia in she donkey



wise):
month
report (
attended
of case
Number of

တ်	TOTAL	575	1174	1521	1740	1647	2112	1935	1388	2271	1933	1392	1638	19326
	GKN.	59	94	142	144	152	238	287	263	314	294	276	122	2385
TOTAL	SUR.	151	293	327	352	384	473	454	335	474	364	339	531	4477
F	MED.	365	787	1052	1244	1111	1401	1194	790	1483	1275	777	982	12464 4477 2385
~	GAN.	-	3	-	2	က	33	0	ಣ	0	2	0	5	23
OTHER	.aus	13	22	34	19	48	40	33	13	37	0	0	29	326
0	MED.	36	36	84	85	02	92	82	130	83	0	0	69	692
	GVN.	0	-	0	0	0	0	0	0	0	-	0	2	4
SHEEP	.я∪s	_	2	-	9	0	-	2	0	0	12	2	-	28
	MED.	0	2	4	5	2	2	2	1	9	9	4	6	43
	GVN.	18	26	41	25	51	81	133	105	136	146	98	59	919
GOAT	SUR.	31	73	73	96	113	140	131	09	72	117	105	06	1101
	MED.	40	151	151	169	158	252	419	202	128	236	163	168	2237
	GKN.	5	10	15	16	15	37	29	21	47	39	58	19	311
D0G	.я∪s	61	100	124	97	104	121	118	132	177	114	135	203	1486
	MED.	163	411	486	591	662	633	411	301	1034	794	377	478	6341
	GKN.	~	0	-	-	2	2	0	2	-	_	2	က	16
HORSE	SUR.	0	5	က	2	2	7	6	8	14	9	4	15	84
	MED.	2	13	7	14	16	10	9	4	9	5	5	13	105
	GKN.	0	0	0	0	0	0	0	0	0	0	0	-	_
CAMEL	SUR.	4	10	17	20	18	29	27	16	12	31	23	16	223
	MED.	8	4	19	22	7	2	20	9	4	5	7	21	129
0	сли.	3	10	10	26	18	37	27	39	27	20	23	5	245
BUFFALO	.AUS	4	7	9	15	7	26	22	24	22	17	∞	23	189
)   	MED.	œ	10	35	34	35	44	36	40	63	35	28	31	398
1111	GAN.	31	44	74	74	63	78	86	93	103	85	95	28	866
CATT∟E	.AUS	37	20	69	97	83	105	112	82	140	29	62	116	1040
J	MED.	108	157	262	324	158	363	222	106	159	194	193	196	2442
	ţ	APR.	MAY	JUN.	JUL	AUG	SEP.	OCT.	NOV	DEC.	JAN.	FEB.	MAR.	TOTAL 2442 1040

#### 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, 2020-21 total 58 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 progarmme (ABC program me), 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.

#### **LFC Strength**

Breeds	Strength
1. Murrah	02 buffalo
2. Bikaneri	01 Camel

#### Poultry Unit (LFC) Strength

Name of breeds (Adults b	oirds) Strength
1. White leghorn	426
2. Kadaknath	2173
3. B.B. White turkey	28
4. B.B. Bronge turkey	02
5. Lavender guinea fowl	42
6. White pekin duck	17
7. Khakhi Campbell ducl	64
8. Emu	04
9. Japanese quail	235
10. Rabbit Dutch	08
11. Rabbit New Zealand v	vhite 07
12. R.I.R.	152
13. Chabro	138

The detailed annual report is as under -

- Two thousand four hundred four pet owners were educated for health care and management of pet dogs.
- One hundred twenty pets were vaccinated under Rabies control programme and vaccination token were issued to the owners.
- 3. Under Rabies control programme overall 160 students had been educated for control of rabies in dog with help of pamphlets, posters and charts.
- Twenty seven animals (Dogs-25 and Cats -2) were brought to canine welfare society and treated as per their requirement.
- Under mange control programme 67 stray dogs were treated.

#### **Livestock Farm Complex Activities:**

It is the instructional unit for undergraduate teaching purposes, comprising of housing of different livestock species and poultry birds. It is useful perticularly for under graduate students in learning of different livestock management practices and all other aspects of livestock rearing.





#### **Publications**

#### Research papers in journals:

- A K Chouhan, Monika, P K Pilania, Bhavana Rathore, D B Sodha and Upkar Choudhary (2021) Identification of nematode infective larvae in black bucks (*Antilope cervicapra*). *Journal of Entomology* and *Zoology Studies*; 9(1): 206-208.
- A.K. Chaudhary, G. N. Purohit, J. S. Mehta, S. K. Ravi and T. R. Talluri (2021): Age related differences in seminal parameters and expression of fertility marker genes in Marwari stallion. Reproduction, Fertility and Development. 33(2): 158.
- Abhishek Sharma, RK Dhuria and Anuj Kumar. (2021) Effect of feeding hydroponics maize fodder on haemato-biochemical parameters in Gir cows. *Journal of Entomology and Zoology Studies* 2021; 9(1): 2116-2118.
- Ajay Sharma, Basant Bais, Jorawar Singh, Lokesh Tak, Ashok Prajapat, Nitesh Sharma and Yogendra Kumar((2021), Formulation and sensory evaluation of fig (Anjeer) incorporated camel and buffalo milk based khoa burfi, The Pharma Innovation Journal 2021; SP-10(3): 22-26ISSN (E): 2277-7695 ISSN (P): 2349-8242 (NAAS Rating: 5.03).
- B. P. Meena, S. C. Goswami, V. Kumar, A. K. Jhirwal, V. Singh and V. Sharma (2020). Study The Changes In Body Condition Score (Bcs) Pattern During Pre- Partum And Post-Partum In Kankrej Cattle. Veterinary Practitioner, 21 (1): 129-130
- Basant, Panwar, R., Gorachiya, P.R., Shringi, B.N., Maherchandani, S., Pandey, A.K. (2020). Synergistic effect of some synthetic peptides and antibioticson efflux pump of *E.coli*. International Journal of Current Microbiology and Applied Science. 9(6): 2867-2876.
- Bhabhor H.S., TanwarMahendra, Palecha Sakar, Bishnoi A.K., Kachwaha K., Gahlot T.K. and Bishnoi P. (2020). Surgical Management of Mandibular Fracture in Camels Using Interdental Wiring (IDW) Technique. Ruminant Science 9(1):169-172.
- Bharti Gujar, Devi Singh Rajput, N. K. Sharma and TC Goyal (2020): Knowledge and adoption level of livestock owners about management practices under organic animal husbandry system in arid

- zone of Rajasthan, Journal of Entomology and Zoology Studies 8(4): 593-596.
- Bhojani, R.J., Chahar, A., Dedar, R.K., Kachhawa, J.P. (2021). Haemato-Biochemical Studies on TheileriaEqui Infection in Seropositive Horses. Ind J Vet Sci and Biotech, 17(2): 92-94.
- Bhupendra Kaswan, D. Jain, T Sharma, RK Dhuria, Umesh Kumar Prajapat and YogeshArya (2020). Effect of dietary supplementation of garlic (*Allium sativum*) on carcass characteristics of Kadaknath layer birds in arid zone. *Journal of Entomology and Zoology Studies* 2020; 8(5):1379-1381
- 11. Chharang, D. and Sharma, T. (2021). Impact of feeding *Prosopisjuliflora* pods and *Citrulluslanatus*seed cake on nitrogen and mineral metabolism in Goats. *International Journal of livestock Research*, 11(2): 98-103.
- 12. Chouhan, A.K., Pilania, P.K., Monika, Rathore, B., Gupta, A., Sodha, D.B. and Pateer, D.P. (2021). Prevalence of Gastrointestinal Helminthic Infections in Black Bucks (Antilope cervicapra) of Tal Chhapar Sanctuary of Rajasthan. Indian Journal of Animal Research. DOI: 10.18805/IJAR.B-4388.
- 13. D. Jain, R.K. Dhuria, T. Sharma, Tara bothra and Umesh Kumar Prajapat (2020). Effect of Supplementation of Geloi Herb (TinosporaCordifolia) and Ascorbic Acid on Economics of Broiler Production in Arid Zone of Rajasthan. *Indian Journal of Animal Nutrition*. 37 (1): 78-81
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#### **Patents Filed**

- Pandey AK, Mohta P, Shringi BN, Maherchandani S, Rathore NS, Gahlot K. (2020). Novel primer sets for amplification of BLG gene, DNA based kit and method for detection of BLG gene" TEMP/E-1/22744/2020-DEL Patent application 20201 1020751.
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#### Seminar/Symposium/workshop attended

- Harnessing Potential of Indigenous Animal Genetic Resources for Enhancement of Productivity and Profitability held online at NBAGR, Karnal from 10-11 Feb 2021 attended by Dr Urmila Pannu, Dr Manju Nehara.
- Dr Manju Nehara has completed an online training on "Advances in pharmacology: Addressing the paradigm shift in clinical and para clinical sciences" organised by Department of Vet. Pharmacology and toxicology, College of vet science and animal husbandry, Rewa (M.P), India from 28 Dec. to 21 Jan. 2021.
- Dr Manju Nehara attended international training on "Advanced Reproductive Technologies for Augmentation of fertility in dairy Animals organized post Graduate Institute of Veterinary & Animal Science, Akola, MAFSU, Nagpur.
- Three days online training on "Basic and Applied bioinformatics in Animal sciences organised by IVRI, Izatnagar from 09-11 Feb. 2021.
- 5. Dr Manju Nehara has attended DST funded 21 days e-training on "Skill Development on Advanced Bioinformatics in Genome Analysis of Livestock and Pets" organized by the College of Animal Biotechnology and DBT-CRCN project Monitoring Unit of Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, from 5th to 25th March 2021, under the research project "Parentage determination and cytogenetic profiling in dogs"
- TarunaBhati attended Ist National conference on Biotechnology on A key link to the research on the prevention of zoonotic diseases on 25 Feb 2021
- 7. TarunaBhati attended International Conference on "Current Approaches in Agricultural, Animal Husbandry and Allied Sciences for Successful Entrepreneurship (CAAAHASSE-2021)" held on 13-15 March by virtual mode by AEDES.
- 8. TarunaBhati attended V th Annual Convention of SVBBI and National Symposium on "Current Challenges for Animal Biochemists and Biotechnologists for Improving Animal Health and Production" from March 24-25, 2021 organized by Department of Veterinary Biochemistry, College of Veterinary Science & Animal Husbandry, DUVASU, Mathura on March 24th& 25th 2021 through virtual mode.

- Mukul and Kritika Gahlot attended International symposium on bioinformatics (InSyB) for disease therapeutics held at Vignan University, AP on 21-22 December 2020
- Sudesh kumar attended e-course on "Wildlife: Rescue Techniques and Care " organized by DHRD, RAJUVAS Bikaner 27-29 August 2020
- 11. Sudesh kumar attended Online International Training Course on "Biotechnological Approaches in Animal Research and Disease Diagnosis." College of animal biotechnology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab INDIA (Feb 2021)
- 12. Sudesh kumar attended International e-Conference on "Expanding Horizons in Physio-Biochemical and Molecular Approaches for Improving Livestock Health and Production" Organized by the Department of Veterinary Physiology and Biochemistry, Veterinary College and Research Institute, Orathanadu. 19-20 Oct 2020
- 13. Kritika dhial and Sudesh kumar attended V<sup>th</sup> Annual Convention of Society of Veterinary Biochemists and Biotechnologists of India (SVBBI) and National Symposium, on "Current challenges for Animal Biochemists and Biotechnologists for improving Animal Health and Production in Post COVID scenario", on March 24-25, 2021.
- 14. Kritika dhial attended 2 days workshop on modern techniques of antibody production under ICAR-Niche area of Excellence project on 'Phage display techniques for production of Veterinary Immuno biological without sacrificing animals on 25-26 march 2021.
- 15. Dr. Pratishtha Sharma, Dr. Ashok Gaur, Dr. Amita Ranjan and Dr. Laxmi Narayan Sankhala attended XX Annual Conference of ISVPT as Virtual or e-Conference and International webinar on "Receptor Dynamics in Cell Signalling" and National webinar on "Translational Approaches in Herbal Drug Development" from 4-5 October, 2020 organized by Department of Veterinary Pharmacology and Toxicology, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura.
- Dr. Pratishtha Sharma attended "XVI National Online Conference of Indian Association of Women Veterinarians (IAWV-2020)" on "Sustainable



- Contribution of ATMANIRBHAR Women Veterinarians in Enrichment of Production Potential in Livestock through Applications of Modern Technologies" from 9-10 Dec, 2020 at College of Veterinary and Animal Sciences, MAFSU, Parbhani.
- 17. Dr. Amita Ranjan attended International seminar entitled 'Alternative Therapies to Mitigate Microbial Resistance' held online on Feb 23-24, 2021, organized at ICAR- Indian Veterinary Research Institute, Izatnagar-243122, Uttar Pradesh, India, sponsored by National Bank for Agriculture and Rural Development (NABARD).
- 18. Dr. L.N. Sankhala attended two days National seminar on "COVID 19: Immunopathology, Clinical manifestation and Therauptic measurements" from 30 June -1 July 2020, organized by Department of Zoology and Internal Quality Assurance cell (IQAC), Govt. Madhav Science P.G. College, Ujjain , M.P.
- 19. Dr. L.N. Sankhala attended E-Conference on "Alternative to animal experimentation in pharmacology from 3-4 Sept, 2020 organized by Dept of Pharmacology, V.V. Institute of Pharmaceutical Science.
- 20. Dr. Pratishtha Sharma and Dr. Ashok Gaur attended 10 days online Training Program on "Achieving zero hunger by 2030 Critical Role of Agriculture & Allied Sectors" from 17-27 August, 2020 organized by SKUAST-KASHMIR Faculty of Veterinary Sciences & Animal Husbandry Shuhama, Srinagar (J&K).
- 21. Dr. Pratishtha Sharma attended 11 days online training programme on "Advance Diagnostic Approaches: A Preparation to Combat New Challenges of Veterinary Science" from 19-30 October, 2020 organized by College of Veterinary Sciences & Animal Husbandry, Mhow, Nanaji Deshmukh Veterinary Science University, Jabalpur.
- 22. Dr. Pratishtha Sharma, Dr. Ashok Gaur and Dr. L.N. Sankhala attended 21 days online international etraining cum orientation program on "Physiobiochemical and Biotechnological Approaches for optimization of Health and Reproduction in Animals" from 01-21 December, 2020 organized by Department of Veterinary Physiology and Biochemistry, College of Veterinary Science & A.H.,

- Mhow (M.P.), Nanaji Deshmukh Veterinary Science University, Jabalpur (M.P.)
- 23. Dr. Amita Ranjan and Dr. L.N. Sankhala attended 21 days online training-cum-orientation programme on 'Advances in Clinico-pathological Diagnosis of Farm Animals Diseases: A Radical Approach in Doubling Farmer's Income' from Feb 03-22, 2021 organized by Department of Veterinary Pathology, College of Veterinary Science and A.H., Rewa (M.P), India.
- 24. Dr. L. N. Sankhala attended E-course on "Field Application of Veterinary Laboratory Diagnosis" from 7-19 October, 2020 organized by Directorate of Human Resource Development, Rajasthan University of Veterinary and Animal Sciences, Bikaner.
- 25. Dr. L. N. Sankhala attended online training programme on "Smart dairying farming boosting productivity through innovations" from 18-22 Aug, 2020 organized by NAHEP-CAAST, NAU, Navsari, Gujarat.
- 26. Dr. L. N. Sankhala attended three days international online training programme on "Recent advances in nutritional management of dairy cow in changing paradigm" from 6-8 October, 2020 organized by post Graduate Institute of Veterinary and Animal science, AKOLA, Maharastra.
- 27. Dr. L. N. Sankhala attended 21 days Online International Training cum Orientation programme on "Advances in Pharmacology : Addressing the paradigm shift in clinical and paraclinical sciences" from 28 December to 21 January 2021 organized by Department of Veterinary Pharmacology and Toxicology , College of Veterinary and Animal Husbandry, Rewa, NDVSU, Jabalpur, M.P.
- 28. Dr. L. N. Sankhala participated in 21 days Massive Open Online Course (MOOC) on "Information handling skills for teaching, learning and research" From 01 -21 March, 2021 organized by Professor Jayashankar Telangana State University under ICAR-NAHEP (IG) Sub Project on National Knowledge Management Centre For Agricultural Education and Research.
- 29. Dr. Pratishtha Sharma attended three days online National workshop on "Climate-smart Livestock Production in India" from 5-7, August, 2020 organized by Department of Veterinary Physiology, Faculty of Veterinary and Animal Sciences, West



- Bengal University of Animal and Fishery sciences, Kolkata, West Bengal, India.
- 30. Dr. Pratishtha Sharma attended three days online National workshop on "Application of HPLC in Pharmacokinetic Studies" from 4-6, January, 2021 organized by Department of Veterinary Pharmacology & Toxicology NTR College of Veterinary Science, Gannavaram, Andhra Pradesh, India.
- 31. Dr.L.N.Sankhala participated in National workshop on "An insight to research proposal, statistical techniques and intellectual property rights" organized by College of Veterinary and Animal Husbandry, Mhow, NDVSU, Jabalpur, M.P on 26-28 June 2020
- 32. Dr.L.N.Sankhala participated in Workshop on "ABC of scientific writing" organized by Krishi Vigyan Kendra, ICAR-National Rice Research Institute, Cuttack on 18 Aug to 2 September 2020
- 33. Dr. L. N. Sankhala participated in Six days online National workshop on "Fish health and disease management in tropics 9-14 September, 2020 organized by College of Fishery Science, NDVSU, Jabalpur, M.P.
- 34. Dr. Manohar Lal Sain participated in seven days e course on "Basics of Electrocardiography in dogs" held at Department of Veterinary Medicine, DUVASU, Mathura from 17/08/2020 to 23/08/2020.
- 35. Dr Ashok Kumar and Dr Amit Kumar participated in 47<sup>th</sup> Annual conference (Virtual Conference) of the International Embryo Technology Society (IETS), 18–21 January 2021.
- 36. Prof. Basant Bais attended On-line Training Programme on "Stress Management Organized by NAARM - ICAR from 07-10/07/2020.
- 37. Prof. (Dr.) Basant Bais, Dr. Lokesh Tak and Dr. Jorawar Singh attended Virtual International Conference on Livestock Products & Food Safety: Realities & Imperatives for Global Healthorganised by Department of Livestock Products Technology-VCRI, Orathanadu & Veterinary College, Bangalore on 24, 25 and 30 November 2020
- 38. Prof. Basant Bais attended International e-Conference on "INSIGHTS INTO THE DIAGNOSIS AND CONTROL OF PARASITIC DISEASES FOR ENHANCED LIVESTOCK PRODUCTION" Organized by Department of

- Veterinary Parasitology, Veterinary College and Research Institute, Orathanadu, Thanjavur from 07.12.20 to 08.12.20.
- 39. Prof. Basant Bais attended National virtual conference on Recent advances in Management & Preventive health care of Livestock in India Organized by Department of Livestock Production Management & Department of Veterinary Medicine College of Veterinary Science, Hyderabad, Telangana from 10-11th December 2020.
- 40. Dr. Jorawar Singh attended International Conference on "Insights into wildlife conflicts, rescue and rehabilitation: Challenges and opportunities for Conservation Organized by Wildlife Research & Training Centre, Gorewada Rescue centre, Nagpur & Association of Indian Zoos & Wildlife Veterinarians.from 18th - 20th December, 2020.
- 41. Dr. Jorawar Singh attended Yong Scientists Conference (YSC) as part of INDIA INTERNATIONAL SCIENCE FESTIVAL 2020 (IISF 2020) Organized by Ministry of Science and Technology, Ministry of Earth Sciences and Ministry of Health and Family Welfare, Govt. of India in collaboration with Vijnana Bharati (VIBHA) by Council of Scientific & Industrial Research (CSIR). from 22-12-2020 to 25-12-2020.\
- 42. Prof. (Dr.) Basant Bais, Dr. Lokesh Tak and Dr. Jorawar Singh attended Virtual International Conference on Promising Genetic and Genomic Technologies-Frontier in selection and animal improvementorganised by Department of Animal Genetics and Breeding, VCRI, Orathanadu , (TANUVAS) and Kerala Veterinary and Animal Sciences University (KVASU) on 27.01.2021-28.01.2021
- 43. Dr. Lokesh Tak and Dr. Jorawar Singh attended Online Fitness and Self-Defence Programme organised by Veterinary College and Research Institute, Orathanadu on 28.01.2021 & 29.01.2021.
- 44. Prof. Basant Bais attended Value Addition to Sheep Products with Special Reference to Wool & Mutton Organized by ICAR-CSWRI, Avikanagar, Rajasthan & MANAGE, Hyderabad from 12-16 April, 2021.
- Dr. Sunita Pareek participated in conference on "Climate – Smart Livestock Production in India (online)" at WBUAFS, Kolkata held on 05/08/2020 to 07/08/2020.



- 46. Dr Sunita Pareek participated in conference on "Achieving Zero Hunger by 2030: Critical Role of Agriculture & Allied Sectors" at SKUAST-K, Srinagar, Kashmir held on 17/08/2020 to 27/08/2020
- 47. Dr. Sunita Pareek, Dr Ruchi Maan participated in conference "Expanding horizons in physiobiochemical and molecular approaches for improving livestock health and production " Expanding horizons in physio-biochemical and molecular approaches for improving livestock health and production held on 19/10/2020 to20/10/2020
- 48. Dr. Sunita Pareek participated in conference "Immunological Advancements in Male and Female Fertility" at COVSAH, JAU, Junagadh. Held on 01/09/2020 to 05/09/2020
- 49. Dr. Sunita Pareek and Dr Ruchi Maan participated in conference "Recent approach to escalate livestock productivity under current socioeconomic scenario" at BASU, Patna, Bihar held on 25/02/2021 to 26/02/2021.
- 50. Dr. Sunita Pareek and Dr Ruchi Maan participated in conference "Physio biochemical and Biotechnological Approaches for Optimization of Health and Reproduction in Animal" at Department of Veterinary Physiology and Biochemistry, College of Veterinary Science and Animal Husbandry, Mhow (M.P.) held on 01/12/2020 to 21/12/2020.
- 51. Dr Ruchi Maan participated in conference "ART OF WRITING RESEARCH ARTICLES: TOOLS & TECHNIQUES" at Indian Institute of Social Reform & Research InCollaboration with School of Commerce and Business Management Maulana Azad National Urdu University. Held on 17/03/2021 to 24/03/2021.
- 52. Dr. Ruchi Maan participated in conference "Innovative Ideas for Entrepreneurship Development in Livestock Sector" at MANAGE, Hyderabad held on 14/09/2020 to 17/09/2020.
- 53. Dr. Anil Moolchandani participated in SAPICON 2020: XXVIII Annual Conference & National Symposium on "Physiological approaches to address environmental challenges for increasing animal productivity and farmer's income". ICAR-Central Sheep and Wool Research Institute, Avikanagar-304501 from 18-19 February, 2020.
- 54. Dr. Anil Moolchandani participated in ONLINE SAPICON-2021: XXIX Annual conference of

- Society of Animal Physiologists of India on "RECENT APPROACH TO ESCALATE LIVESTOCK PRODUCTIVITY UNDERCURRENT SOCIO-ECONOMIC SCENARIO". Society of Animal Physiologists of India In association with Bihar Animal Sciences University, Patna-800014 from 25-26 February, 2021.
- 55. Dr. Narendra Singh Rathore participated in SAPICON 2020: XXVIII Annual Conference & National Symposium on "Physiological approaches to address environmental challenges for increasing animal productivity and farmer's income". ICAR-Central Sheep and Wool Research Institute, Avikanagar-304501 from 18-19 February, 2020.
- 56. Dr. Narendra Singh Rathore participated in ONLINE SAPICON-2021: XXIX Annual conference of Society of Animal Physiologists of India on "RECENT APPROACH TO ESCALATE LIVESTOCK PRODUCTIVITY UNDERCURRENT SOCIO-ECONOMIC SCENARIO". Society of Animal Physiologists of India In association with Bihar Animal Sciences University, Patna-800014 from 25-26 February, 2021.
- 57. Dr. Pyare Lal participated in SAPICON 2020: XXVIII Annual Conference & National Symposium on "Physiological approaches to address environmental challenges for increasing animal productivity and farmer's income". ICAR-Central Sheep and Wool Research Institute, Avikanagar-304501 from 18-19 February, 2020.
- 58. Dr. Pyare Lal participated in Wildcon- 2020 Online International Conference on "Insights into wildlife conflicts, rescue andrehabilitation: Challenges and opportunities for Conservation" and 14th Annual Convention of Association of Indian Zoo and Wildlife Veterinarians. Wildlife Research & Training Centre, Gorewada Rescue centre, Nagpur. From 18th 20th December, 2020

# Books/Book Chapter/Training Manuals/Any other Publication:

- "Subclinical mastitis" by Dr. Taruna Bhati in the edited book titled "Recent Research Trends in Veterinary Sciences and Animal Husbandry (Volume - 10)". 2021. AkiNik Publications, Printing Press License No.: F.1 (A-4) press 2016
- Practical Manual Veterinary Medicine for Fourth Profession Year B.V.Sc. prepared by Dr. J.P.Kachhawa, Dr. Sitaram Gupta, Dr. Sunita Choudhary and Dr. A.P. Singh



- 3. Dr. A.P. Singh working as Executive Editor of NAAS Rated Journal "VETERINARY PRACTITIONER".
- Dr. Anil Ahuja working as Editor & Dr. D. K. Bihani working as Executive Editor of the "Journal of Canine Development & Research" an annual publication.
- 5. Dr. L.N. Sankhala, Dr. Yogesh Somvanshi, Dr. Manish Vashistha, Dr. Ashok Dangi, Dr. Murli Lal Mathur published book on पशुचिकित्साविज्ञान (Veterinary Medicine) (ISBN: 978-81-940608-3-3).
- 6. Dr. L.N. Sankhala, Dr. Manish Vashistha, Dr. Ashok Dangi, Dr. Murli Lal Mathur published book on पशुपोषण (Animal Nutrition) (ISBN: 978-81-940608-5-7).
- 7. Dr. L.N. Sankhala, Dr. Manish Agrawal, Dr. Manish Vashistha, Dr. Ashok Dangi, Dr. Yashpal Jangir published book on पशुऔषध विज्ञान (Veterinary Pharmacology) (ISBN: 978-81-940608-1-9).
- 8. Dr. Ashok Dangi, Dr. Mukesh Kumawat, Dr. Virendra Sharma, Dr. L.N. Sankhala, Dr. Nitin Jain published book on आनुवांशिकी एवं प्रजनन (Genetics and Breeding) (ISBN:978-81-940608-4-0).
- 9. Dr. Ashok Dangi, Dr. Manish Vashistha, Dr. L.N. Sankhala, Dr. Dheeraj Pratap Singh published book on पशु शरीर क्रिया विज्ञान (Veterinary Physiology) (ISBN: 978-81-940608-2-6).
- 10. Dr. Ashok Dangi, Dr. Manish Vashistha, Dr. L.N. Sankhala, Dr. Pradeep jangir published book on पशु शरीर रचना विज्ञान (Veterinary Anatomy) (ISBN: 978-81-940608-0-2).
- 11. Dr. Seema Sharma, Dr. Manish Vashistha, Dr. L.N. Sankhala, Dr. Sumit Choudhary published book on पशुपालन प्रसार शिक्षा (Animal Husbandry Extension Education) (ISBN: 978-81-940608-7-1).
- 12. Dr. Manish Vashistha, Dr. L.N. Sankhala, Dr. Anil Gattani, Dr. Sumit Choudhary published book on पशु शल्य चिकित्सा (Veterinary Surgery) (ISBN : 978-81-940608-6-4).

- 13. Dr. Ashok Dangi, Dr. L.N. Sankhala, Dr. Sumit Choudhary. Practical manual on पशुशरीर रचना विज्ञान (Practical Veterinary Anatomy).
- 14. Dr. L.N. Sankhala, Dr. Ashok Dangi, Dr. Sumit Choudhary. Practical manual on पशु औषध विज्ञान (Practical Veterinary Pharmacology).
- 15. Dr. L.N. Sankhala, Dr. Ashok Dangi, Dr. Sumit Choudhary. Practical manual on पशुपोषण (Practical Animal Nutrition).
- 16. Dr. Ashok Dangi, Dr. L.N. Sankhala, Dr. Sumit Choudhary. Practical manual on पशुचिकित्सा विज्ञान (Practical Veterinary Medicine).
- 17. Dr. L.N. Sankhala, Dr. Ashok Dangi, Dr. Sumit Choudhary. Practical manual on आनुवांशिकी एवं प्रजनन (Practical Genetics and Breeding).
- 18. Dr. L.N. Sankhala, Dr. Ashok Dangi, Dr. Sumit Choudhary. Practical manual on पशु शरीर क्रिया विज्ञान (Practical Veterinary Physiology).
- 19. Dr. L.N. Sankhala, Dr. Ashok Dangi, Dr. Sumit Choudhary. Practical manual on पशुपालन प्रसार शिक्षा (Practical Animal Husbandry Extension Education).
- 20. Dr. Ashok Dangi, Dr. L.N. Sankhala, Dr. Sumit Choudhary. Practical manual on पशुशल्य चिकित्सा (Practical Veterinary Surgery).
- 21. Dr. Ashok Dangi, Dr. L.N. Sankhala, Dr. Sumit Choudhary. Practical manual on पशु प्रसूति विज्ञान (Practical Veterinary Gynaecology).
- 22. Dr. Ashok Dangi, Dr. L.N. Sankhala, Dr. Sumit Choudhary. Practical manual on पशुधन उत्पादन एवं प्रबन्धन (Practical Livestock Production and Management).
- 23. Practical manual (Unit-I Veterinary Public Health and Food Safety) and Unit-II (Veterinary Epidemiology)
- 24. Practical manual (Unit-III- Zoonotic Diseases) and (Unit-IV- Environment Hygiene)



# E-Certificate courses under Continuing Veterinary Education (CVE) Programme:

S. No.	Department	Topic of training programme	No. of beneficiary
1	Department of Veterinary Gynaecology and Obstetrics 27 - 29 July 2020	E-certificate course on felid base approaches for management of functional infertility- pat falls and clues	45
2	Livestock Production Management 2-20 March 20 & 07-17 January 21	The skill development training on small poultry farmer by Agriculture skill council of India	20
3	Veterinary Surgery & Radiology 20-24 July 2020	E-certificate course on Diagnostic Imaging	127
4	Veterinary Surgery & Radiology 03-07 August 2020	E-certificate course on Veterinary Orthopaedics	81
5	Department of Veterinary Anatomy 9-11 August 2020	E-Certificate course on "Animal Species Identification in Vetero-legal cases"	68

## **Hostel Facilites:**

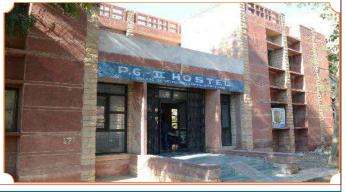
SN	Name of Hostel	Type of Hostel	Wi-Fi	Accomm	odation Fac	ilites in Number	Alternative
		(Boys/Girls)		Rooms	Beds	Total No. of allotted Beds	Arrangements Beds
1.	UG-I	Boys	Available	79	175	126	100 Beds are
2.	UG-II	Boys	Available	10	30	30	available
3.	PG-I	Boys	Available	35	35	35	
4.	PG-II	Boys	Available	37	53	53	
5.	Intern	Boys	Available	11	33	-	
6.	Girl's (Old Wing)	Girls	Available	50	78	78	
7.	Girl's (New Wing)	Girls	Available	13	39	39	
8.	New Boys Hostel	(Family Hostel)	Available	13	-	13 Families	

# 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, ebooks, 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 upto-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.



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
	Total	54016

#### E-BOOKS:

1. E-BOOKS	203
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#### **CD-ROM Database:**

1	Video-Cassettes	15
2	Books CD	100
3	VET/BEAST CD-ROM DATABASE	48
4	CAB-CD, CD-ROM DATABASE	36



# Miscellaneous Documents (received exchange bases):

1.	Journals	2965
2.	Books	1248
3.	Annual Reports	1466
4.	Newsletters	2217
5.	Bulletins	123
	Total =	8019

#### 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 elibrary 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 form 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

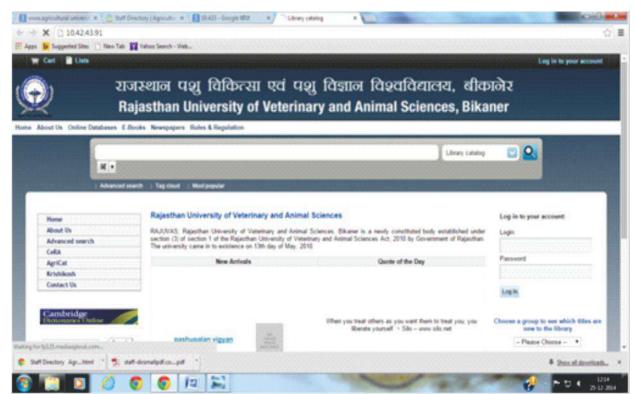
# College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur

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







#### Smart village (Jaimalsar) related activities:

- An Ayurvedic Health Camp was organized at Gram Panchayat Bhawan of adopted village Jaimalsaron 18.06.2020 by following social distancing guidelines. Ayurvedic Kadha was prepared and distributed among 500 villagers to boost up the immunity against COVID-19 and other infections. 150 Masks and 200 Soaps were distributed among the villagers. Villagers were also made aware about precautions and preventive measures about COVID-19. Building of Govt. Sr. Sec. School, Primary Health Centre, Gram Panchayat Bhawan and Chaupalof village were sanitized by spray of Sodium Hypochlorite solution.
- A plantation drive was organized in village Jailmalsar on 28.07.2020. University officers planted the saplings in the village. 1001 plants were distributed among the villagers under "EkGhar-EkPaudhaAbhiyaan". Villagers were also motivated for care and management of the plants.
- 3. An already established old pond was renovated by the university with the assistance of local people and Gram Panchayat Jaimalsar from 30.07.2020 to 01.08.2020. Registrar, RAJUVAS & Director Extension Education, RAJUVAS started renovation of pond. The silt and mud was removed from the bottom and catchment area. Around 3 Bighaof area was cleared through JCB Machine and 4 Tractors. local people, Gram Panchayat& MNREGA labourers actively participated in this activity
- 4. A Computer Saksharta Kendra has been established in the Gram Panchayat Bhawan Campus of village Jaimalsar. It was inaugurated by Prof. (Dr.) Vishnu Sharma, Vice-Chancellor, RAJUVAS on 29.08.2020. He told that this is the era of computer, everybody should have knowledge of computer. Every student, youth and villager would be educated about basics of computer through this centre. Forty Eight school children have been enrolled. They were motivated to learn the computer.
- 5. An All India Coordinated Research Project on Marwari Goat was started in the adopted village Jaimalsar. A no. of 8 livestock farmers have been registered. This process is in progress. A Skill development Gosthie was organised on Scientific management &Breeding improvement of Marwari

- Goat on 07/09/2020. A No. of 13 livestock owners participated in the Gosthie by following Social distancing rules. The livestock owners were also made aware about prevention and control of seasonal diseases especially of rainy season. Umbrellas were also distributed to the registered livestock owners.
- 6. A training programme on Organic Animal Production was organised by RAJUVAS under Schedule Cast Sub-Plan (SC-SP) of Indian Council of Agricultural Research, New Delhi from 15-16 January, 2021 at adopted village Jaimalsar. Total 39 livestock owners (SC beneficiaries) of adopted village, Jaimalsar participated in the training programme. Various experts provided scientific knowledge regarding organic livestock farming, poultry farming, goat farming, organic fodder production etc. The participants were also visited the Livestock Research Station, Kodemdesar of the university and observed the various scientific practices being followed at farms. Certificates were also distributed to the participants.
- 7. An Adult Literacy Programme was organized in collaboration with Govt. Senior Secondary School, Jaimalsar, Department of Education, GoR, Bikaner at Jaimalsar village under University Social Responsibility on 28.01.2021. In this Programme, School teachers and students of Class 12<sup>th</sup> participated. The students were motivated to play their role for eliminating illiteracy in their family and neighbourhood as voluntary service. All the students took resolution for eliminating illiteracy.
- 8. A training programme on Organic Animal Production was organised by RAJUVAS under Schedule Cast Sub-Plan (SC-SP) of Indian Council of Agricultural Research, New Delhi from 19-20 February, 2021 at adopted village Jaimalsar. Total 24 livestock owners (SC beneficiaries) of adopted village, Jaimalsar participated in the training programme. Various experts provided scientific knowledge regarding organic livestock farming, poultry farming, goat farming, organic fodder production etc. Certificates were also distributed to the participants.
- A SwachhtaGosthi and rally was organized in Govt. Senior Secondary School, Jaimalsar, Department of Education, GoR, Bikaner at Jaimalsar village under University Social Responsibility on



- 27.02.2021. In this Programme, School teachers, Post graduate students and students of Class 9<sup>th</sup>& 11<sup>th</sup> participated. The experts from Animal Bio-Medical Waste Disposal Technology Centre made aware the students about hygienic measures and preventive measures for zoonotic diseases. A *Swachhta* Awareness Rally was also organised on this occasion to motivate and make aware the villagers about hygienic measures.
- 10. A SwachhtaGosthi and rally was organized in Govt. Praveshika School, Jaimalsar, Department of Sanskrit Education, GoR, Bikaner at Garhwala village under University Social Responsibility on 23.02.2021. In this Programme, School teachers, Post graduate students and students of Class 8<sup>th</sup> to 10<sup>th</sup> participated. The experts from Animal Bio-Medical Waste Disposal Technology Centre made aware the students about hygienic measures and preventive measures for zoonotic diseases. A Swachhta Awareness Rally was also organised on this occasion to motivate and make aware the villagers about hygienic measures
- 11. A Nasha MuktiSangosthi was organised at Primary Health Centre of Jaimalsar village on 31/03/2021.

- Dr. Neeraj Kumar Sharma, Coordinator, USR made aware the villagers about harmful effects of addiction on their health, family and society. Dr. Dinesh Chandra, Incharge, PHC addressed the villagers and told about the therapeutical and corrective measures for addiction. A good number of villagers participated in the Sangosthi.
- 12. A Nasha MuktiSangosthi was organised at Garhwala village on 27/03/2021.Prof. R. K. Dhuria, Director of Extension Education made aware the villagers about harmful effects of addiction on their health, family and society. Mr. Jagdish Pander, SHO Napasar addressed the villagers and told about the bad effect of addiction on youth. Dr. Kuldeep, Department of Health and Family Welfare made aware the villagers about de addiction centres established by government at district level. A good number of villagers participated in the Sangosthi.
- Dr Ruchi Maan participated in awakening women on the occasion of International Women's Day 2021 on 8<sup>th</sup> March 2021 in village Jaimalsar which is adopted by the university as social responsibility.









#### NCC Activities of College:

#### 1 Raj R&V NCC Sqn CVAS Bikaner during 2020-21

- All NCC Cadets have done i-got e-certificate online course in May 2020 about awareness on COVID-19.
- International yoga day was organized on 21<sup>st</sup> June 2020 online in which 110 cadets participated.
- 3. Kargil Vijay diwas:1 Raj R&V sqn NCC, Bikaner has conducted webinar on the occasion of Kargil Vijay diwas on 26th July 2020 in which cadets were told about Kargil diwas importance and video on national war memorial was shown. Cadets were also informed about Param vir chakra awardees of Kargil war. SD 69 28 SW Cadets actively participated by presenting poem and posters on Kargil Vijay diwas. In the last cadets took online National pledge.
- Tree plantation drive was carried out in RAJUVAS
   Campus on 24 July 2020 by Prof. (Dr.) RK singh
   Dean, CVAS, Bikaner, Directors of University and
   Commanding officer of 1 Raj R&V Sqn NCC and
   other staff members of CVAS and NCC unit.
- 5. National Campaign and programmes: NCC cadets paticipated in various online National Campaign and programmes like An Orientation webinar on Child Protection during COVID-19 by UNICEF, National Pledge taking ceremony was conducted on Prime Ministers appeal for Local par Vocal on 1st Aug 2020, Fit India Campaign-launch of "Fit-India Youth Club". Fit India Freedom Run movement done by cadets from 15 Aug -02 Oct

- 2020 and received certificate. Activities carried out during this are Cycling, Running, Walking, Yoga, Gym, Exercises
- 6. **National camps**: Cadets participated in various camps like Republic day parade, Ek Bharat Shesth Bharat, India Military Academy training camp, Atam Nirbhar camp and ATC Camp.
- Social activities carried out by NCC cadets of 1
  Raj R&V NCC Sqn CVAS Bikaner were Swachtha
  Abhiyan, Cleaning and Maintenance of statues,
  tree plantation, awareness about COVID 19 by
  videos and lectures.
- NCC cadets celebrated various events and days like Gandhi jayanti by taking oath, Constitutional Day by taking Pledge and got certificates from Dept of Justice, NCC day on 22<sup>nd</sup> Nov 2020, Independence day, Republic day.
- 9. Covid 19 Awareness Rally: 1 Raj R&V NCC Sqn CVAS Bikaner had organized an awareness rally on "Harega Corona Jitega Bikana" on 27 Nov 2020 from College of Veterinary and Animal Sciences, RAJUVAS, Bikaner to Dunger College. Total 99 cadets participated in the rally along with NCC staff. Cadets lead the rally on horses infront followed by foot rally, carrying banners of NO mask No entry. Green flag to the rally was given by Collector Nirmat Mehta. He had addressed Officials present during the rally were Col. PPS Grewal, commanding officer 1 RAJ R&V NCC Sqn.
- 10. Pipping ceremony of Prof. (Dr.) Vishnu Sharma, VC, RAJUVAS on 26<sup>th</sup> March 2021 in presence of DDG NCC and various dignitaries.







#### Extra Curricular Activities:

#### World Veterinary Day:

World Veterinary day was celebrated online at RAJUVAS on 25th April and the theme of the day was "Environmental protection for improving animal and human health". Vice-Chancellor emphasized that the role of veterinarians is very important in the changing climate and ecosystem system in the whole world. Society has deep expectations from veterinarians in areas such as environmental and biodiversity conservation, food security and zoonotic diseases therefore, veterinarians must ensure their emerging role.

#### Online Virtual Classes:

Online Virtual classes are running successfully as per the common time table issued by University. Faculty from all constituent colleges has been engaged in these classes. Students can interact live with the teacher in the class and they can also see the recorded class on the platform later on. Proper record of each class is also available in respect of student attendance and performance.



#### Decade Year Celebration:

Decade Year of establishment was celebrated on 18.05.20 through online mode. Hon'ble Governor and Chancellor Sh. Kalraj Mishra was the Chief Guest of the function and Hon'ble Vice Chancellor Prof. Vishnu Sharma presided over the function. Hon'ble Governor and Chancellor sir addressed the function. The Vice-Chancellor shared information about the smart class rooms, virtual classes, self-service portals, conservation and preservation of indigenous cattle, organic milk and milk products, self-sufficiency in animal feed, livestock innovation, knowledge entrepreneurship skills development, university



राजुवास : एक दशक की यात्रा(2010-2020)

research patents and different works being done in the interest of livestock and livestock owners of the state even under the adverse circumstances of COVID-19 Hon'ble Governor has released the "RAJUVAS Golden Decade" souvenir. This programme was webcasted live on university website as well as Facebook page of the university. A large number of people (14 thousand till now) viewed this programme.



#### Live Webinar on Decade Year:

Live webinar was held for the students of RAJUVAS in the series of Decade Year programmes on 19.05.20 at 11 AM. The key speaker was Col. (Dr.) P. K. Chug, Ministry of Home Affairs, Govt. of India on the topid "Vets as Scholar Warriors in Defense and Police Forces". This webinar was also webcasted live through Facebook page of the university. Students benefitted a lot by this and they interacted live with the speaker.



#### Training about Online Library Facilities:

An online training was held by Informatics, Bangaluru to make aware about the online library facilities available for the students by Indian Council of Agricultural research, New Delhi on 22.05.20. PG students and faculty members participated in this online webinar.

#### MoU with MPUAT, Udaipur

A has been signed between Maharana Pratap University of Agriculture and Technology, Udaipur and RAJUVAS on 19th June, 2020. MPUAT Vice-Chancellor Prof. N.S. Rathore said that working together with the mutual agreement of universities will be in the interest of students, teachers, farmers and cattle rearers. This agreement will meet social needs by jointly using research forms, laboratories, library services by students and teachers of both universities.



#### Alumni Webinar Series:

Live webinar was held for the students of RAJUVAS in the series of RAJUVAS Alumni Webinar on 20.06.20 at 11 AM. RAJUVAS Alumni Webinar series on

"Opportunities of Start-up in Animal Husbandry and Vet Medicine sector and understanding building a start-up" by Dr Prithwi Singh, Co-Founder SuperZop. This webinar was also webcasted live through Facebook page of the university. Students benefitted a lot by this and they interacted with the speaker.



#### World Zoonosis Day Celebration:

On the occasion of World Zoonosis Day, a poster was released by Hon'ble Vice Chancellor Prof. (Dr.) Vishnu



Sharma on 06.07.2020. Dr Rajani Joshi prepared a poster depicting details of zoonotic diseases which spread from animal to human. Other Deans and Directors were also present on the occasion.

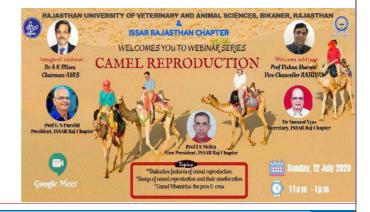
# MoU with National Research Center on Equine, Hisar

A MoU has been signed between National Research Centre on Equines (NRCE), Hisar and RAJUVAS on 4th July, 2020. Vice-Chancellor Prof. Vishnu Sharma and Director NRCE, Dr. Yash Pal Sharma signed the agreement and handover the documents of MoU to each other. This mutual agreement will be helpful in the interest of researchers, scientists and livestock owners working for the well being of equines.



#### **International Webinar on Camel Reproduction:**

An online International Webinar was organized by Department of Veterinary Gynaecology and Obstetrics on the topic "Camel Reproduction" on 12.07.2020.





1324 delegates from 65 countries participated in this webinar. Chief Guest of the webinar was Prof A. K. Mishra, Chairman, Agricultural Scientist Recruitment Board, New Delhi and the function was presided by Hon'ble Vice- Chancellor Prof. (Dr.) Vishnu Sharma. The keynote speakers of the webinar was Dr. Sumant Vyas, Principal Scientist, NRCC, Bikaner. Indian Society for Studies on Animal Reproduction Rajasthan Chapter in collaboration of RAJUVAS organized this event.

#### International Webinar on Equine Reproduction:

An online International Webinar was organized by Department of Veterinary Gynaecology and Obstetrics on the topic "Equine Reproduction" on 19.07.2020. 946 delegates from 21 countries participated in this webinar. Chief Guest of the webinar was Prof V. Chandershekhar Murti, President, Indian Society for Studies on Animal Reproduction and the function was presided by Hon'ble Vice- Chancellor Prof. (Dr.) Vishnu Sharma. Indian Society for Studies on Animal Reproduction Rajasthan Chapter in collaboration of RAJUVAS organized this event.



# E-Courses Under Continuing Veterinary Education Programme:

RAJUVAS has started four online e-courses under continuing veterinary education programme for the field veterinarians to make them aware about the latest techniques and to revise subject knowledge. First e-course on Diagnostic Imaging Techniques for Veterinary



Practitioners (Digital Radiography, Ultrasound and CT) was held from 20-24 July 2020. Subject experts of Department of Surgery and Radiology delivered lectures on the topics related. Total 127 participants from 22 states of country as well as from abroad were registered for this e-course. Participants were given e-certificate also for this course. This course was started under Directorate of Human Resource Development, RAJUVAS, Bikaner.

#### Plantation by 1<sup>st</sup> Raj R&V SQN NCC Unit:

A plantation drive was held on 24.07.2020 by 1<sup>st</sup> Raj R&V SQN NCC Unit of CVAS, Bikaner under "Green Earth – Save Nature" campaign. Col. P. P. S. Grewal, CO of Unit motivated the cadets to plant tree at home also. ANO of Unit Dr. Sunita Choudhary arranged this programme. Deans and Directors of University were also planted the plants on this occasion.



# E-Course on Management of Functional Bovine Sub-Fertility:

In the series of e-courses the second e-course on Field based approaches for management of functional bovine sub-fertility-the pitfalls was held from 27-29 July 2020. Subject experts of Department of Veterinary Gynaecology and Obstetrics delivered lectures on the topics related. Total 45 participants were registered



for this e-course. Participants were given e-certificate also for this course. This course was started under Directorate of Human Resource Development, RAJUVAS, Bikaner.



#### MoU with International Brook India Association

A MoU has been signed between International Brook India Association and RAJUVAS on 29th July, 2020. Vice-Chancellor Prof. Vishnu Sharma and Brook India Chief Executive Officer Brig. J.S. Dharmadhirn signed the agreement. Prof. Vishnu Sharma said that with this agreement, RAJUVAS will ensure its participation in the research and conservation of horse breeds and development of knowledge and skill of horse breeders around the country.



#### Workshop on Cleanliness Action Plan:

A workshop on Cleanliness Action Plan was held on 31.07.2020 in collaboration with Mahatma Gandhi Rural Education Council, MHRD, Govt. of India. Chief Guest of the workshop was Prof. (Dr.) Vishnu Sharma, Hon'ble Vice-Chancellor, RAJUVAS, Bikaner. He told about the strong efforts done by RAJUVAS in the direction of water conservation, solar energy, waste disposal, plantation etc.

#### Independence Day Celebration:

74<sup>th</sup>Independence Day' was celebrated with great enthusiasm at main campus Bikaner following all COVID-19 guidelines and protocols issued by various authorities. Hon'ble Vice-Chancellor Prof. (Dr.) Vishnu Sharma hoisted the tricolour national flag. After this a



plantation drive was held in campus, intensive tree plantation was done by the faculty members and staff in the university campus as per the directives of Hon'ble Chancellor and Governor of Rajasthan Sh. Kalraj Mishra Ji.

#### **E-courses on Fracture Management Techniques:**

RAJUVAS has started online e-courses under continuing veterinary education programme for the field veterinarians to make them aware about the latest techniques and to revise subject knowledge. In the series third e-course was conducted on Fracture Management Techniques



in large and small animals from 03-07 August, 2020. Subject experts of Veterinary Surgery and Radiology department conducted the online lectures. Participants were given e-certificate also for this course. This course was started under Directorate of Human Resource Development, RAJUVAS, Bikaner.

#### E-courses on Vetero-Legal Cases:

In the series of e-courses the fourth e-course on Animals Species Identification in vetero-legal cases for field veterinarians was held from 09-11 August 2020. Subject experts of Department of Veterinary Anatomy delivered lectures on the topics related. Total 68 participants were



registered for this e-course. Participants were given e-certificate also for this course. This course was started under Directorate of Human Resource Development, RAJUVAS, Bikaner.

#### **Teachers Day Celebration:**

Teachers Day was celebrated in RAJUVAS, Bikaner on 05.09.2020. Hon'ble Vice-Chancellor Prof. (Dr.) Vishnu





Sharma remembered Dr. Sarvpalli Radhakrishanan and emphasized his contribution in the development of country. All the faculty members were connected online along with senior retired teachers. Students took blessings from faculty members on this occasion.

#### Annual Inspection of 1st Raj R&V SQN NCC Unit:

Annual Inspection of 1st Raj R&V SQN NCC Unit of CVAS, Bikaner was done on 11.09.2020 by NCC Group Head Quarter, Jodhpur Col. M. S. Mahar. Col. He gave mementos to the cadets who represented the unit during Republic Day parade at New Delhi.



#### RAJUVAS Included in NAHEP Project:

RAJUVAS, Bikaner has been included in NAHEP Component-2 project by ICAR, New Delhi. One Virtual Classroom has been setup at Bikaner campus under this project through which students can connect anywhere anytime with the faculty members through online mode. These lectures will be recorded also on ICAR server and will be available for veterinary students spread over the country in different universities. Total 18 Universities has been selected for this project in country and RAJUVAS is one of them.

# Training on Animal welfare & Compassionate Handling:

An online training on 'Animal welfare & compassionate handling' was held on 18.09.2020 for the students of RAJUVAS. Animal Welfare and its frameworks, Natural Behaviour of equine/Ethology, how equines communicate, Guiding Principles to handling with compassion and Welfare friendly handling & restraining. This training was conducted by Dr Nidhish Bhardwaj, Head of Animal Health & Welfare, Brooke India.

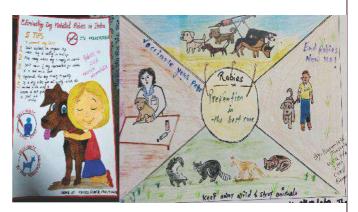
# Webinar on Transition Management in Dairy Animals:

An online webinar on "Target 150-Transition Management in Dairy Animals" was conducted on 16.09.2020 at CVAS, Bikaner in collaboration with Virbac under their Budding Vet Initiative for Final Year, Internship and MVSc students. Prof. R K Singh was chief guest of the webinar. Dr Sanjay Awaghate from VIRBAC gave the presentation on the topic.

#### **Digital Poster Making Competition:**

Digital Poster making competition was held at CVAS, Bikaner on the occasion of World Rabies Day by Department of Veterinary Public Health, CVAS, Bikaner. Students were given e-certificate for this.

151<sup>st</sup> Birth Anniversary of Mahatma Gandhi was celebrated with full enthusiasm at CVAS, Bikaner. NSS volunteers contributed in cleanliness drive along with faculty members. NCC cadets took oath on this occasion via online mode. An essay writing competition was held on this day and certificates were awarded to winners.



#### Coordination Center of NBAGR at RAJUVAS

The National Bureau of Animal Genetic Resources (NBAGR), Karnal and RAJUVAS will work together to enhance the productivity in indigenous cattle through genetic improvement. Vice-Chancellor Prof. Vishnu Sharma highlighted that the research and development work on six indigenous cattle is being done at eight LRSs of the university including Rathi, Tharparkar, Sahiwal, Kankrej, Gir and Malvi indigenous cattle breed of Rajasthan. The results of the joint study on genetics basis will increase the production capacity of animals. Dr. R.K. Vij, Director, NBAGR, Karnal said that a







national project to increase the production capacity of indigenous cattle from genetics is being worked out. The Bureau can make an unprecedented contribution to the development of native breeds by sharing the genotype data of indigenous cows and survey studies of breeds with the RAJUVAS. In the meeting, it was agreed to set up a coordination center at the RAJUVAS.

#### National Webinar on Advancement in Diagnostics:

RAJUVAS and IAVP jointly organised National Webinar on "Advancement in Diagnostics-A Journey in Veterinary Pathology on 14 October 2020, 3:00PM. Dr. K. P. Singh, Head Division of Veterinary Pathology, IVRI, Izzatnagar and Dr. R. S. Chouhan, Prof. & Head, GBPUAT, Pantnagar and Ex Diretor, IVRI, Izzatnagar were the key speakers. Chief Guest was Prof. B. N. Tripathi, Deputy Director General, Animal Science, ICAR, New Delhi. More than 1000 participants from India as well as abroad attended the webinar.



#### Stone Laying Ceremony of Constitution Park:

Foundation Stone laying ceremony of Constitution Park and Skill Development Center was held via online mode on 28.10.2020 by Hon'ble Governor Rajasthan and Chancellor, RAJUVAS Sh. Kalraj Mishra. Assistant Director General, Education Division, ICAR, New Delhi was special guest of the function.

#### National Webinar on Entrepreneurship:

National Webinar on "Entrepreneurship & Market Led Extension for Livestock Development" organised by Livestock Innovation, Knowledge & Entrepreneurship Skill Cell (LIKES) CVAS, Bikaner on 03.11.2020 under the chairmanship of Prof. (Dr.) Vishnu Sharma, Hon'ble Vice —Chancellor, RAJUVAS, Bikaner. Guest speaker was Dr. Mashesh Chander, Joint Director (Extension Education) ICAR-IVRI, Izzatnagar (UP). Webinar was webcasted live through Facebook page of the university.

#### **NCC Day Celebration:**

NCC Day was celebrated by 1<sup>st</sup> Raj R&V SQN NCC Unit of CVAS, Bikaner on 22.11.2020. Prof. R. K. Singh, Dean & Chairman Faculty presided the online function. Chief Guest was Dr. Sonam Lodha from Blood Bank, PBM Hospital, Bikaner and she delivered a lecture on importance of blood donation. Students presented poem and cultural programme on this occasion.

#### Harega Corona Jeetega Bikana:

"Harega Corona Jeetega Bikana" programme was held in collaboration with district administration on 24.11.2020. Oath was taken by faculty members and students. University officers were present on this occasion. A rally was also held on 27.11.2020 by NCC cadets for this. District Collector Sh. Namit Mehta was the chief guest of function along with University officers.



#### **Constitution Day Celebration:**

Constitution Day was celebrated by 1<sup>st</sup> Raj R&V SQN NCC Unit of CVAS, Bikaner on 25.11.2020. Prof. R. K. Singh, Dean & Chairman Faculty presided the online function. Chief Guest was Gajendra Singh Rathore,





Prosecuting Officer, CJM Court, Bikaner and he delivered a lecture on importance of constitution.

# Inauguration of Newly Constructed Synthetic Lawn Tennis Courts:

Hon'ble Vice Chancellor, RAJUVAS, Bikaner Prof. (Dr.) Vishnu Sharma inaugurated newly constructed synthetic lawn tennis courts along with other officers of the university. These courts are of international standards and students and faculty members of



RAJUVAS will be benefited by these facilities in their overall development.

#### Oath Taking Ceremony:

Oath taking ceremony was held on 21.12.2020 for the final year students after successful completion of their 6-month internship programme. Total 231 students took veterinarian oath from all three constituent colleges of the university. Hon'ble Vice Chancellor, RAJUVAS, Bikaner Prof. (Dr.) Vishnu Sharma addressed the students via online mode and advised them to keep the name of university high.



#### Birth Anniversary of Swami Vivekananda:

158<sup>th</sup> birth anniversary of Swami Vivekananda was celebrated as "राष्ट्रीय युवा दिवस"on 12<sup>th</sup> January, 2021. All Dean/ Directors along with staff members and students were present in the event and remembered Swami Vivekanandaji.



#### 72 Republic Day

72 Republic Day was celebrated with great fervour and gaiety on 26<sup>th</sup> January 2021 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. After the ceremony, the Vice Chancellor, Registrar and Dean-Directors planted trees in the university campus. During the ceremony, the state government's Covid-19 guideline was ensured to be followed.



#### **Seminar on Infectious Diseases:**

A one-day online seminar was organised on infectious diseases on 13<sup>th</sup> Feb, 2021. Total 133 livestock owners have provided information about method of spread, identification and prevention of FMD and H.S diseases.

#### Fourth Convocation of RAJUVAS:

The fourth virtual convocation of the RAJUVAS was held on 25<sup>th</sup> Feb. 2021. Hon'ble Governor and Chancellor Shri Kalraj Mishra read the Preamble of the Constitution and the original clause which was reiterated by all the participants in the beginning of the ceremony. Total 557students have awarded B.V.Sc &







A.H. degree, 158 MVSc and 41 studets awarded Ph.D degree for the year 2018-19 and 2019-20 session. Total 25 gold medals and 2 chancellors gold medals were awarded at the fourth virtual convocation. Hon'ble Minister of Agriculture and Animal Husbandry, Sh. Lalchand Kataria, said that livestock is the lifeline of farmers associated with the prosperity and prosperity of Rajasthan. Director General, ICAR and Secretary DARE, New Delhi, Dr. Trilochan Mohapatra said that RAJUVAS has made unprecedented progress.

#### Expert session by Placement Cell:

An expert session on "Entrepreneurial Prospects and Entrepreneurial Ideas in Veterinarian Sector" was organized by Placement Cell, RAJUVAS on 25<sup>th</sup> Feb. 2021. Distinguished Guest Mr. Harsh Vardhan Agrawal, IPS, Expressing his views and said that animal husbandry has a huge contribution in the development of the country and there are immense possibilities of employment in this area and the future of the students is golden. Keynote speaker Dr. Pallavi Chaudhary provide detailed information about entrepreneurship, startup and incubation to the students.



#### Orientation Program for Internee Students:

Online orientation Program for Internee students of session 2020-21 on 17.03.2021. Hon'ble Vice-Chancellor Prof. Vishnu Sharma chaired the session and addressed the students on this occasion. Deans from all three campuses also shared their views to students. Total 171 students were present in the



function via offline mode at CVAS, Bikaner and online from PGIVER, Jaipur and CVAS, Navania.

#### Interaction Session for Mysc & Phd Students:

Interaction session for First year MVSc& PhD students was held on 19.03.2021. Hon'ble Vice Chancellor Prof. (Dr.) Vishnu Sharma interacted the students and sensitize them for various avenues of veterinary profession. Students from CVAS, Navania were connected online for this.

#### Training Camp of 1st Raj R&V NCC SQN:

Annual training camp of 1st Raj R&V NCC SQN was organized from 3rd to 7th March 2021. During this camp, 139 cadets imparted training in personality development and social responsibility along with various activities like weapons training, drill, firing, obstacle, horse riding, disaster management, road safety, first aid treatment, yoga etc. The program was coordinated by Command Officer 1st Raj. R. & V. NCC SQN Colonel PPS Grewal.



#### **CORONA Vaccination Awareness Programme:**

CORONA Vaccination awareness programme was conducted on 09.03.2021 in collaboration of Medical and Health Department. Block Chief Medical Officer Dr. Anil Kumar Verma briefed about the vaccination and motivated all faculty members and students to vaccinate their near and dear ones.



#### International Happiness Day:

International Happiness Day was celebrated on 20.03.2021 connecting faculty from all campuses of RAJUVAS via online mode. Prof. Vishnu Sharma, Hon'ble Vice -Chancellor addressed the faculty members along with Deans & Directors of the University. He briefed about the motive of celebrating this day and motivated all to be happy and make happy others which will in turn increase the working efficiency of the person. He called faculty members to create happy environment around them along with teaching and research activities.

#### RCT of Dog's Teeth:

Training on post and core techniques of dental treatment in dogs was conducted on 20<sup>th</sup> March, 2021. Dr. Praveen Bishnoi, PI of the DIMSCA Project, told that



faculty members and PG students was demonstrated of the root canal treatment (RCT) of the teeth of the dog by the team of medical dental specialist Dr. Dhrupad Mathur.

#### Grand piping ceremony of Prof. Vishnu Sharma:

Prof. Vishnu Sharma, Hon'ble Vice-Chancellor, RAJUVAS, Bikaner was conferred Honorary Rank of Colonel by Director General NCC, Ministry of Defence, New Delhi. Pipping Ceremony was held on 26.03.2021 in auditorium. Col. Pratap Singh Rathore, Deputy Director General, NCC, Directorate Rajasthan and Col. M. S. Mahar, Group Commander, Group head Quarter, NCC, Jodhpur performed the pipping ceremony. NCC cadets of 1st Raj R& V NCC SQN presented Guard of Honour at this occasion.





CVAS, Bikaner



# 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.

#### Intake Capacity of College

S.No.	B.V.SC.&A.H.			M.V.Sc.			Ph.D.			AHDP	
	State	Payment	VCI	Total	State	Payment	Total	State	Payment	Total	
01	28	40	12	80	29	12	41	12	12	24	50

#### Student Strength of College

		В.\	/.Sc.	& A.H.			M.V.	Sc.			Ph.l	<b>)</b> .		AH	DP		
ı	II	III	IV	IV (Old Batch)	Intern	Total	ı	II	Total	ı	II	Ш	Total	ı	Ш	Total	Grand Total
80	0	83	67	63	59+2	354	23	27	50	0	1	4	5	47	44	91	500

#### Students selected for ICAR's All India Entrance Examination AIEEA(PG)

Sr. No.	Name	Rank	Subject & University	JRF (If any)
1.	Hitesh KumarBagri	51-(EWS-10)	NDRI, (Gynecology)	-
2.	Jayshree Jakhar	129 (OBC-50)	GB Pantnagar, (Pathology)	-
3.	Sachin Patidar	272- (OBC-101)	GB Pantnagar(Parasitology)	-
4.	Santosh	201 (OBC-77)	LUVAS, (Parasitology)	-
5.	Punam Chaudhary	277 (OBC-104)	Kamdhenu, (Public Health)	-
6.	Mohammed Idris Qureshi	61-(OBC-20)	IVRI, (AGB)	-
7.	Garima Rathore	18-General	IVRI, (LPT)	-
8.	Ritu Bugalia	141-(OBC-48)	IVRI, (Biostatics)	-
9.	Ankit Kumar	70 (OBC-26)	NDRI, (Nutrition)	-
10.	Priyanka Meena	237(ST-6)	NDRI, LPM	-
11.	Bhavana Salvi	341-(SC-26)	Kamdhenu, Nutrition	-
12.	Vimla Saran	165 (OBC-60)	GADVASU, Extension	-
13.	Gireesh Joshi	282 General	GADVASU, Physiology	-

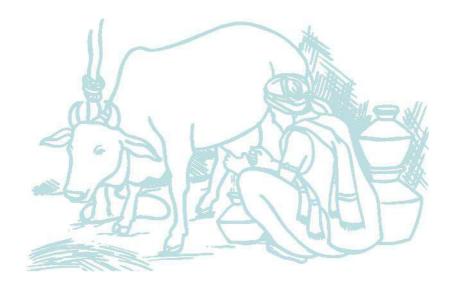


# Veterinary Clinical Complex Activities:

Total Cases (VCC):	6464
Diagnostic Lab Tests (VCC):	324
Vaccination Camp (Anti Rabies):	1 Awareness camp
Infertility Camp/Health Camp (No of Camp along with Cases):	Nil
Artificial Insemination (Cattle/Buffalo):	Being done by Buffalo project in the field

# Veterinary Diagnostic Laboratory: 2020-21

S.No.	Type of Sample	No. of Samples
1.	Blood	71
2.	Faecal	95
3.	Milk	52
4.	Urine	25
5.	Skin Scrapping	10
6.	Serum	71
	Total	253





# Number of case attended report (month wise):



# **Livestock Farm Complex Activities:**

The objective of this farm is to provide hands-on practical training to undergraduates, research facilities to postgraduates and PhD scholars and serve as a model demonstration farm for progressive farmers, women self-help group trainees, and rural unemployment youths. Another significant goal of this farm is to provide breeding stock, fodder seeds, are the important objectives of this farm.

# Different units of farm

The Instructional Livestock farm Complex consists of six sections:

- Dairy Unit (Buffaloes: Murrah, Jaffrabadi)
- Goat Unit (Sirohi
- Rabbit Unit (White Giant and Soviet Chinchilla)
- Fodder Unit
- Poultry Unit (Cob 450, BV300)
- Fishery Unit

### 1. Buffalo Unit

A buffalo unit is functioning with 21 she buffaloes (Murrah & Jaffrabadi) and 1 buffalo bull.



### 2. Goat Unit

Sirohi goats unit has 67 goats (46 Female and 21Male) raised in this unit on a semi-intensive grazing regime (8 hours per day) with concentrate supplementation. Periodic vaccinations include ETV, FMD (foot and mouth disease) and PPR. At the age of three months, the kids are weaned. Dipping takes place twice a year (March and September months).



### 3. Rabbit unit

A rabbit unit is having a New Zealand white (15 numbers). Hand mating is used, and the rabbits are



weaned on the 42<sup>nd</sup>day.

# 4. Fishery unit

Ornamental fish (gold fish) is reared at LFC for teaching and demonstration purposes for farmers.



# 5. Poultry Unit

Under this section poultry breeds of different strains 70 Broiler (Cobb 430 Strain) Layer 50 (BV300 Strain) are reared for commercial, teaching and demonstration purposes.



### 6. Fodder unit

Fodder section of this unit is another major unit which involved in cultivation of fodder under irrigation (2 acres). Crops like berseem, leucern and barley are grown for animal feeding throughout the year



### **Publications**

# Research papers in journals:

- Vishnu Kumar and R.K. Nagda (2020) Genetic Study on Growth Efficiency in Sirohi Goats Under Farm Condition. Journal of Entomology and Zoology Studies. 8(5): 702-705.
- Vishnu Kumar, R.K. Nagda, K.S. Nehra, M.L. Gurjar, M.C. Sharma, S.K. Sharma and R.K. Joshi (2020). Genetic Study on Relative Growth Rate in Sirohi Goats under Field Condition. International Journal of Current Microbiology and Applied Sciences. 9(9): 2602-2608.
- Gaurav Kumar Bansal, Vishnu Kumar, R.K. Nagda and Renuka Hada (2021) Genetic investigation on Kleiber ratio in Sonadi sheep. Journal of Entomology and Zoology Studies. 9(2): 1038-1041.
- Gajendra Singh, Hemant Joshi, Nishant Parmar, Devendra Saran and Balwant Meshram. (2020): Macroscopic analysis on the kidneys of guinea fowl (Numida meleagris), Journal of Entomology and Zoology Studies (2020): 8 (2): 938-940
- Gajendra Singh, Hemant Joshi and Balwant Meshram. (2020): Different histochemical observations on the kidney of guinea fowl (Numida meleagris), Journal of Entomology and Zoology (2020): Studies 8(2): 1716-1719
- Rachna Soan, Kajal Rai, Balwant Meshram, Gajendra Singh and Nishant Parmar (2020) Morphological studies of the atlas in ox and its comparison with the atlas of horse, dog, goat and sheep, Journal of Entomology and Zoology Studies, 8(3): 630-634
- Gajendra Singh, Hemant Joshi and Balwant Meshram (2020): Histological Study on the Kidney of Guinea Fowl (Numida meleagris), Online International Interdisciplinary Research Journal, 10 (3): 10-22
- Nishant Parmar, Hemant Joshi, Gajendra Singh and Balwant Meshram (2020): Macromorphological, histomorphological and histochemical studies of the spleen in guinea fowl (Numida meleagris), Journal of Entomology and Zoology Studies, 2020 8(3): 2029-2033
- Kajal Rai, Rachna Soan, Balwant Meshram,
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- Anatomical Studies of Axis (C2) in Ox and its Comparison with the Similar Bone in Horse, Dog, Sheep and Goat, EC Clinical and Experimental Anatomy 4.2 (2021): 01-07.
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- Devendra Saran, Balwant Meshram (2021): Histomorphological and Histochemical Studies on Proventriculus in Guinea Fowl (Numida meleagris), Indian Journal of Animal Research, Vol. 55 (7): 806-809
- Gajendra Singh, Balwant Meshram and Hemant Joshi (2020). Histomorphological and Histochemical Study of Macula Densa in Guinea Fowl (Numida meleagris) Kidney. Int. J. Curr. Microbiol. App. Sci, 9(11): 978-982.
- 13. Kajal Rai, Rachna Soan, Balwant Meshram, Gajendra Singh and Nishant Parmar (2021). Morphological Investigations on Epistropheus in Ox and the Comparison of it with Resembling Bone in Horse, Dog, Sheep and Goat. International Journal of Anatomy and Research, Int J. Anat. Res., 9(1.3):7896-7900.
- Abhishek choudhary, Shweta Anand, Sunil Boghia; Rahul Swarnkar and Devendra Singh (2020) Effect of Fenugreek against induced subacute thiacloprid toxicity in rats. Toxicology International, Vol 27(3&4), 113-124
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- Kamal Purohit, Sudeep Solanki, Goverdhan Singh and Shanmuga Sundaram Nagarajan (2020). Assessment of experimental pathogenicity of avian influenza virus H9N2 isolates by intravenous pathogenicity index (IVPI) test and histopathology. International Journal of Chemical Studies; 8(2): 764-770.



- 17. Sanweer Khatoon, Hakim Manzer Alam, Deepak Sharma, Kamal Purohit and Afroz Jahan. .(2021). Studies on prevalence of theileriosis and assessment of its risk factors among cattle in and around Udaipur, Rajasthan. Journal of Entomology and Zoology Studies; 9(2): 307-310.
- 18. Kamal Purohit, Sudeep Solanki, Goverdhan Singh and Shanmuga Sundaram Nagarajan. (2020). Assessment of experimental pathogenicity of avian influenza virus H9N2 isolates by intravenous pathogenicity index (IVPI) test and histopathology. International Journal of Chemical Studies; 8(2): 764-770.
- Saraswat, A., Sharma, D. K., Singathia, R., Joseph, B., Patidar, C., Suthar, P., & Singh, G. (2021). Molecular Survey of Enteric Viruses Associated with Poultry Enteritis in Southern Rajasthan, India. International Journal of Livestock Research, 11(1), 75-81. http://dx.doi.org/10.5455/ijlr.20200831062702
- 20. M. S. Meel, T. Sharma, Monika Joshi, M.L. Gurjar, S.K. Sharma and Mamta Kumari. (2021) Effect of Feeding Moringa oleifera Leaf Meal with Multienzyme on Performance, Carcass Characteristics and Economics of Production of Broiler Chicks. Asian Journal of Dairy and Food Research. 40(1): 118-122.
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- 22. Sarita Kumari, R. R. Kumar, S.K. Mendiratta, Dhananjay Kumar, Arun Kumar, Jyoti Jwala. Preeti Rana and Deepak Kumar. (2021) Development of loop mediated isothermal method and comparison with conventional PCR assay for rapid on spot identification of tissue of cattle origin. Journal of Food Science and Technology page 1-8
- 23. Anuj Kumar, Arun Kumar, Dinesh M Chavhan, Ramesh Chand Jat and Abhishek Sharma (2021) Effect of incorporation of pomegranate eel powder and essential oils on proximate and sensory qualities of goat meat balls. J. of Entomology and Zoology Studies 9(2): 332-335

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- 25. Best e-poster presentation award for presentation entitled "Development of rapid and sensitive loop-mediated isothermal assay for onsite visual identification of tissue origin of pig authored by Sarita Kumari, R. R. Kumar, S.K. Mendiratta, Anurag Mahala, Arun Kumar, Jyoti Jwala, Preeti Rana and Dhananjay Kumar in the Virtual International e-Conference on "Livestock Products and Food safety: Realities and Imperatives for Global Health" organized by department of LPT, VCRI, Thanjavur and department of LPT, Veterinary college, Bangalore on 24, 25 and 30th Nov. 2020.
- 26. Lokendra Singh, Umesh S Suradkar, Dinesh M Chavhan, Praveen Kumar, Krishma Rathore, Narendra Singh Rathore and Mukesh Sharma (2020). Standardization of technology for the preparation of goat milk paneer. J. of Entomology and Zoology Studies 8(3): 2052-2055
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- Successful Management by Adulthood Vaccination at Udaipur Region of Southern Rajasthan. International Journal of Livestock Research, 11(5), 11-16. https://doi.org/10.5455/ijlr.20201205063036
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- 43. Kamal Purohit, Sudeep Solanki, Goverdhan Singh and Shanmuga Sundaram Nagarajan. (2020). Assessment of experimental pathogenicity of avian influenza virus H9N2 isolates by intravenous pathogenicity index (IVPI) test and histopathology. International Journal of Chemical Studies; 8(2): 764-770.
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- 45. Mahendra Kumar Meena, Monika Joshi and Manish Nagar.(2021) Effect of feeding herb (Allium sativum) and probiotic (Saccharomyces cerevisiae) alone or in combination with ground



- nut straw based complete feed on haematobiochemical parameters of Sonadi sheep. The Pharma Innovation Journal 2021; SP-10(6): 277-280
- 46. Monika Joshi, Uma Ram and S.K. Sharma. (2021) Effect of Addition of Turmeric (Curcuma longa) and Ginger (Zingiber officinale)on Feed Intake and Growth Performance in Brioler. Ind J Vet and Biotech 17(2):68-71
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- 48. M. S. Meel, T. Sharma, Monika Joshi, M. L. Gurjar S.K. Sharma and Mamta Kumari.(2021) Effect of Feeding Moringa oleifera Leaf Meal with Multienzyme on performance, Carcass Characteristics and Economics of Performance of Broiler Chick. Asian Journal of dairy and Food Research.DOI:10.18805/ajdfr.DR-1612,1-5
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- 56. Hemant Kumar Jediya, Chandrashekhar Vaishnava, Rajesh Kumar Dhuria, Kavita Ajabrao Shende, and Yogesh Kumar Barolia. (2021) Effect of hydroponic maize fodder as partial substitute with concentrate mixture on nutrient intake of gir calves. Journal of Entomology and Zoology Studies. 9(2): 170-172.
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- 84. Mitesh Gaur, Dinesh Jhamb, Hemant Joshi, Vikash Kumar, Govind Narayan Purohit. 2021. Per vaginal delivery of syncephalus thoracopagus tetrabrachius tetrapus conjoined twins in a Surti buffalo. Buffalo Bulletin 40(2):383-388
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- 91. Ravta Ram, Tikam C. Goyal, Rohitash Kumar, Rahul Bajroliya, Aditya Kumari and Harshita Bhumra (2021). Personal characteristics of postgraduate students towards utilization of eresources of RAJUVAS Bikaner. The Pharma Innovation Journal; SP-10(3): 31-35.
- 92. Naresh Singh Kuntal, Seema Agarwal and Chauhan, R. S. 2020. An Experimental Study on Cell Mediated Immune Response in Nano Alumina (Aluminium oxide/Boehmite) Treated White Leghorn Chickens. Int.J.Curr.Microbiol. App.Sci. 9(10): 1895-1901.
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- 94. Om Prakash, Dinesh Jain, Tara Bothra, Bhupendra Kaswan, Umesh Kumar Prajapat and Nirmala Kumari Dhaka (2021). Effect of neem (Azadirachta indica) leaf powder and fruit powder as herbal feed additive on carcass characteristic of broiler chicks. Journal of Entomology and Zoology Studies. 9(1): 760-762

# Seminar/Symposium/workshop attended

 Dr. Kamal Purohit Attended Conference on "Paradigm shift in Animal Disease Diagnostics: Veracious path in Disease prevention and Control" Organised Department of Veterinary Microbiology and Department of Veterinary Public Health and Epidemiology, Veterinary

- College and Research Institute, Tirunelveli on 7-9 October 2020.
- Dr. Goverdhan Singh Attended Workshop on "An Insight To Research Proposals, Statistical Techniques And Intellectual Property Rights" Organised by College of Veterinary Science & Animal Husbandry, Rewa (M.P.) on 26-28 June 2020.
- Dr. Goverdhan Singh Attended E-Conference on "Alternative Animal Experimentation In Pharmacology" Organised by Department of Pharmacology, V.V. Institution of Pharmaceutical Sciences, Seshdri Rao Knowledge Village, Gudlavalleru, Post Krishna District, A.P. India on 03-04 September 2020.
- Dr. Mamta Kumari Attended International Workshop on "Scientific Writing" organized by ICAR-NDRI, Karnal Haryana on 23-24 june 2021.
- Dr. Mamta Kumari Attended International econference on "Paradigm Shift In Animal Disease Diagnostics; Veracious Path In Disease Prevention And Control" organized by Veterinary college and Research Institute, Tirunelveli, TANUVAS, Tamil Nadu from 7-9.10.2020
- Dr. Dinesh M. Chavhan, Dr. Ramesh Chand Jat, Dr. Kavita Ajabrao Shende, Dr Abhishek Gaurav, Dr. Anita Rathore, Dr. Arun Kumar attended 21 days training on "application of novel methods in preservation and control of zoonosis and ensure food safety" organized by CVAS, Jabalpur from 18th Feb. to 10th March 2021.
- successfully completed 21 days online training on "Application of Novel Methods in Prevention and control of zoonoses and ensuring food safety" organized by Dept. of VPH & E, CVSc & AH, NDVSU, Jabalpur (MP) on 18/02 to 10/03/2021
- Dr. Deepak Kumar Sharma, attended online training on Recent techniques in nucleic acid based diagnostics and cell culture in department of animal biotechnology, college of veterinary sciences lala lajpat raj university of veterinary and animal sciences Hisar from 11 Jan to 31 Jan 2021
- 9. Dr. Sudeep Solanki Attended Conference on "Paradigm shift in Animal Disease Diagnostics:



- Veracious path in Disease prevention and Control" OrganisedDepartment of Veterinary Microbiology and Department of Veterinary Public Health and Epidemiology, Veterinary College and Research Institute, Tirunelveli on 7-9 October 2020.
- Dr. M.S. Meel Attended National Conference of ISAPM and 27th Annual Convention organised by PGIVER, Jaipur on 4-6th February, 2020.
- Dr. Naveen Kumar Sharma attended National Online Training Programme on "Nutritional Interventions for Livestock and Poultry" organized jointly by Department of Animal Nutrition and Department of Poultry Science, Nagpur Veterinary College, Nagpur during April 6th to 8th, 2021.
- 12. Dr Abhishek Gaurav attended 21 days virtual workshop cum training programme on "Intellectual Property Rights in Agricultural Research & Education in India" organized by National Agricultural Higher Education Project (NAHEP) and Intellectual Property & Technology management (IP&TM) Unit of ICAR from 12-28 September 2020.
- 13. Dr. Sudesh Sharma attended International e-Symposium on 'One Health Concept: Opportunities and Perspectives in Present Scenario' & XVII Annual Conference of Indian Association of Veterinary Public Health Specialists (IAVPHS) Centre for One Health, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana (Punjab) on 28-29 May, 2021.
- 14. Dr. S.K Sharma attended five-day online Faculty Development Program between September 14, 2020 and September 18, 2020, on Startup Support, Innovation Management and Entrepreneurship Developmentin Educational Institutions organised by GUSEC, Gujarat University
- 15. Dr. Tarunpreet participated in the national virtual conference on Recent advances in management and Preventive health care of livestock in India held at college of Veterinary Science, PVNR Telangana Veterinary University, Rajendranagar,

- Hyderabad-30, Telangana from Dec.10th to 11th 2020.
- 16. Dr. Bhagat Singh Saini attended International E-conference on "Expanding horizons in Physio-Biochemical and Molecular approaches for improving livestock health and production" Organised by Department of Veterinary Physiology and Biochemistry , Veterinary College and Research Institute Orathanadu, Thanjavur, Tamil Nadu on 19.10.2020 to 20.10.2020.
- 17. Dr. Sunil Arora participated in online workshop on "An approach to wildlife anaesthesia, surgery and management" organised by College of Veterinary Science & A.H, Rewa (M.P.) on 11-13 July 2020
- 18. Dr. Saurabh Singh Singhal attended E-National Training on "Chemical Residues analysis" Organised by ICAR-NAHEP-CAAST Project entitled central of excellence for advanced research on animal food safety on 04.05.2021 to 06.05.2021.
- 19. Dr. Vikash Kumar Sharma attended International E-conference on "Expanding horizons in Physio-Biochemical and Molecular approaches for improving livestock health and production" Organised by Department of Veterinary Physiology and Biochemistry , Veterinary College and Research Institute Orathanadu, Thanjavur, Tamil Nadu on 19.10.2020 to 20.10.2020.
- 20. Dr. Tikam Goyal Attended Online national workshop on "Expedition in Veterinary Ophthalmology and its pathway to clinical application" conducted by Dept. of Vety. Surgery & Radiology, College of Veterinary Science & Animal Husbandry, Rewa (M.P.) on 23-24 February, 2021.
- 21. Dr. Sandhya Morwal participated / presented paper in the XVIth National Online Conference of IAWV-2020 on "Sustainable contribution of Atmanirbhar Women Veterinarians in Enrichment of Production Potential in Livestock through Applications of Modern Technologies" organized by College of Veterinary and Animal Sciences,

- Parbhani (MS) India, during 9 th -10th December, 2020.
- 22. Dr. Naresh Singh Kuntal attended International e-Symposium of Society for Immunology and Immunopathology on "Immunology in 21st century for improvising one-health", organized by College of Biotechnology, SVPUAT, Meerut during 7-8th August, 2020.
- 23. Dr. Naresh Singh Kuntal attended International e-Symposium of Society for Immunology and Immunopathology on "Emerging Focus on Immunology in Augmenting Animal and Human health" organized by the College of Biotechnology, GADVASU, Ludhiana, during 19-20 February, 2021.

### **Practical Manuals**

- Kamal Purohit, Anita Rathore, Goverdhan Singh and Mamta Kumari (2020). VPP- 4+2 Laboratory Manual on Veterinary Pathology.
- Rahul Swarnkar, Anita Rathore, Abhishek Choudhary and Devendra Singh, Practical manual of General Veterinary Pharmacology.
- Abhishek Choudhary, Anita Rathore, Rahul Swarnkar and Devendra Singh, Practical manual

- of ANS and CNS Pharmacology.
- Devendra Singh, Anita Rathore, Abhishek Choudhary and Rahul Swarnkar, Practical manual of Veterinary Chemotherapy and Toxicology,
- Mitesh Gaur, Dinesh Jhamb, Surendar Singh Nirwan and KalpeshPargi. Practical manual of Veterinary Gynaecology.
- Mitesh Gaur, Dinesh Jhamb, Surendar Singh Nirwan and KalpeshPargi. Practical manual of Veterinary Obstetrics.
- Mitesh Gaur, Dinesh Jhamb, Surendar Singh Nirwan and KalpeshPargi. Practical manual of Veterinary Andrology and assisted reproductive techniques.

# **Chapter in Books**

 Chapter in Effect of COVID-19 Pandemic on Agriculture and allied Sciences by Dr. Shishir Kumar Gangwar, Dr. Sanjeev Vema (2020) October. Sarjna Meena, Hemant Dadhich, Rohitash Dadhich, Dharm Singh Meena, Indu Vyas, and Anita Rathore. October 2020, ISBN: 9788193572887, Oura Prakashan and Book Distributors Pvt. Ltd., Lucknow, India.

### **Hostel Facilites:**

SN	Name of Hostel	Type of Hostel (Boys/Girls)	Wi-Fi	Accommo Number	Alternative Arrangements		
				Rooms	Beds	Total No. of allotted Beds	Beds
1.	Boys Hostel	Boys	Yes	99	237	84	
2.	Girls Hostel	Girls	Yes	94	198	125	No

# Residential Colony (Staff & Student)

Family Quarters (Type)	No. of Quarters	Family lives
Staff Quarters	04	04

# LIBRARY:

Sr.No.	Documents	Total
1.	General Books	6966
2.	Book-Bank Books	2500
3.	Social-Welfare Books	98
6.	Thesis	119
7.	Reports	100
8.	E-BOOKS	110
10.	Books CD	90
	Total	9983







### Mera Gaon Mera Gauray:

No. of Team of Scientists	No. of Scientists	No. of Villages	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
8	29	29	3	1	Conducted in all the 29 villages

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/ Goshthies	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				
	Total	1146	12771				

# Extra Curricular Activities:

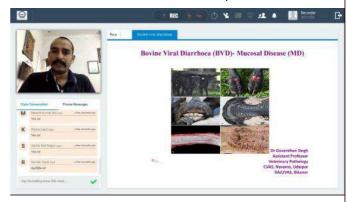
# International Yoga Day

6<sup>th</sup> International Yoga Day was organized on 21 June by using online virtual platform in order to keep the social distancing measures due to COVID-19 pandemic. The theme of this Year "Yoga for Health- Yoga At Home". NCC Cadets, NSS students, faculty and non faculty members performed yoga at home by joining together on virtual digital platform. Lt. Col, Thomas K. Thomas, CO, 2 Raj R&V Regiment, CVAS, Navania also joined the session.



# Online classes for AHDP

Online classes for AHDP, Undergraduate and postgraduate students were started on RAJUVAS Virtual class room. RAJUVAS Virtual class is platform provided by RAJUVAS, in which students can take the classes via online mode from their home and can clear their query during the classes itself. The recorded class is also available for students on this platform.



# **Decade year celebration**

A Decade year celebration was organized from 18-20<sup>th</sup> May 2020 on completion of glorious decade of by the RAJUVAS, Bikaner. A series of live webinar were organized in which various lectures were presented by







experts and final day a live online Pashuplak choupal was organized. All the faculty members and students of CVAS, Navania, Vallabhnagar, Udaipur participated online enthusiastically in the celebration.

# New Dean appoint CVAS, Navania

Prof (Dr.) Rajeev Joshi joined as Dean, CVAS, Navania, Vallabhnagar Udaipur on 13<sup>th</sup> June 2020. Dr. Joshi has taken charge from Dr. S.K.Sharma, Academic Coordinator.



# National Webinar Entitled Startup Entrepreneurship

Anational webinar entitled Startup Entrepreneurship was organized on 17<sup>th</sup> July 2020 by the Centre LIKES. National Coordinator of the NAHEP, ICAR, New Delhi, Dr. R B Sharma gave detailed information about the NAHEP run through the World Bank. The guest speaker Mr. Rajkumar Joshi, Vice President, Abelon Clean Energy Limited and Director Red Bricks Foundation, Ahmadabad, gave online presentation on Start-up entrepreneurship and incubator ecosystem Around 664 participants registered through the online platform.

# National Webinar on Entrepreneurship Opportunities

A National Webinar on Entrepreneurship Opportunities in Poultry Sector was organized by the Centre LIKES

on dated 28th August 2020. This webinar was chaired by Honourable Vice Chancellor, Prof. (Dr.) Vishnu Sharma. Guest speaker, Prof. (Dr.) P.K. Shukla, Registrar, DUVASU, Mathura and Former Joint Commissioner (Poultry) Government of India gave his online presentation on various opportunities and possibilities of entrepreneurship in Poultry sector. A total of 1587 participants participated in the event through online mode.

# 74<sup>th</sup> Independence Day

74<sup>th</sup> Independence Day' was celebrated at CVAS, Navania, Udaipur. Prof. (Dr.) Rajeev Kumar Joshi, Dean hoisted the tricolour national flag and paid homage to the freedom fighters. After the Independence Ceremony, intensive tree plantation was done by the faculty members and staff in the college campus under the clean and green week programme.



# Kargil Vijay Divas was celebrated

Kargil Vijay Divas was celebrated by the 2 Raj R&V NCC Regiment CVAS, Navania, Udaipur via organizing an online webinar on 26 July 2020. Commanding Officer Lt. Col. Thomas K. Thomas called upon the NCC cadets to serve the country, state and society. Various online competitions were successfully organized under the webinar.

# NAHEP and IP&TM Online Webinar

National Agricultural Higher Education Project (NAHEP) and Intellectual Property & Technology Management Unit (IP&TM) organized an online webinar series from 12-28 September 2020. Dr R. K. Joshi, Dean and Convenor IPR Cell (RAJUVAS) mentioned that around 250 scientists and teachers from various ICAR Institutes and State Agricultural and Veterinary Universities of the country participated in





this webinar. The objective of this webinar series was to train the teachers and scientists about the functioning of the IPR cell.

# National webinar for Bio-Energy Generation

A National webinar on "Entrepreneurship Opportunities in Bio-Energy Generation" was organized by Centre for LIKES on 10 October 2020. Member of Uttar Pradesh Bio-Energy Development Board, Shri P.S. Ojha provided detailed information on various models in bio energy with the success stories of its various community models emphasizing the need for bio-energy.

# 151<sup>st</sup> Birth anniversary of Father of the Nation Mahatma Gandhi

The 151<sup>st</sup> Birth anniversary of Father of the Nation Mahatma Gandhi was celebrated on 2<sup>nd</sup> October 2020. On this occasion, cleanliness was carried out around the college campus, Veterinary Clinical complex, hostels and staff quarters under the cleanliness drive. All the faculty members and staff of the college participated in this cleanliness program.



# Webinar on "Organic milk products

A webinar on "Organic milk products for farmers and livestock" was organized by the Centre for Organic Animal Products Technology, on 29<sup>th</sup> October 2020. Prof. (Dr.) Tribhuwan Sharma, Director Human Resources Development, RAJUVAS, Bikaner explained in detail about the importance and usefulness of organic milk and its beneficial for the livestock and environment. 41 Veterinarians and farmers participated in this webinar.

## Three-day online workshop

Three-day online workshop on topic "Entrepreneurial thinking and its paradoxes" was successfully organized

by LIKES from 6<sup>th</sup> to 8<sup>th</sup> November 2020. The main speaker of the workshop was Dr. Jayverdhan Tiwari, Lead Institution building, Policy and Planning, Ministry of Rural development, Govt. of India.

### E-Course on Postmortem examination

An E- Course on Postmortem examination in animal with special reference to Veterolegal cases was held from 21<sup>st</sup> -23<sup>rd</sup> December 2020. Aim of this course is to grind the participant's perception about post-mortem examination and make clear about the every aspect of post-mortem examination. Various Lectures from 7 experts were taken during the three days.

# Agriculture day celebration

Agriculture day was celebrated on 03<sup>rd</sup> December 2020 on the birth anniversary of Sh. Rajendra Prasad through online platform. The faculty members of the college, students and students of Government Higher Secondary School, Navania participated in the programme through digital media.

# **Swearing-in and Farewell Ceremony**

A swearing-in and farewell ceremony of newly graduated batch of students was organized on 21<sup>st</sup> December 2021 on completion of the compulsory sixmonth internship.

# Two Training Camp of Two-Days

Two training camp of two-days by TSP Cell of CVAS Navania Udaipur funded by the ATMA and in collaboration with ICICI Foundation, Udaipur were conducted on 6-7 and 12-13 January 2021. Dr. Ravindra Verma, Deputy Director Agriculture and Exofficio Project, ATMA, Udaipur gave detailed information about various schemes and activities. A total of about 60 Livestock owners participated from Udaipur.







# One-day Training And Seminar

One-day training and seminar under the Scheduled Castes Sub-Plan of ICAR, New Delhi was organized by National project on buffalo Improvement on 25<sup>th</sup> January 2021. The camp was attended by 20 livestock owners of Rundera village and Training manual, blankets, bags, masks and Saras Gold animal feed were distributed to all the participants.



# Annual Training Camp

A five-day annual training camp was organized from 18 - 22 February 2021 at 2 Raj R&V, Regiment, NCC CVAS, Navania, Udaipur. In this training camp, 54 NCC cadets of the college participated and undergone trainings in personality development and social responsibility along with various activities like weapons training, drill etc. On the closing day ceremony, the special guest was NCC Group Commander, Col. Vinod Bangarwa.



Three-day training by Surti Buffalo Project
Three-day training was organized by the Surti Buffalo



Project Unit under the Scheduled Castes Sub-Plan of the ICAR, New Delhi, from 04-06 march 2020 at the CVAS, Navania, Udaipur. About 100 livestock owners from the villages like Dhamaniya, Tarawat etc. participated in these camps. Training guides, wormy beds, steel tubs, milk cans, and azolla seeds were distributed to all the trainees.

# **Annual training camp of NCC**

Annual training camp of NCC was organized from 6<sup>th</sup> to 8<sup>th</sup> March 2020 at 2 Raj R&V Regiment NCC, CVAS, Navania, Udaipur. During this camp, cadets imparted training in personality development and social responsibility along with various activities like weapons training, drill etc. The chief guest of the closing ceremony was SDM, Vallabhnagar, Shri Shravan Singh Rathore.



# Master Trainers for Training by the State Level Nodal Agency (SNA)

Dr. Dinesh Manoharrao Chavan and Dr. Arun Kumar, Assistant Professors in the Department of Livestock

Products Technology CVAS, Navania, Udaipur, nominated as master trainers for training by the State Level Nodal Agency (SNA) of the Micro Food Processing Enterprises (PM-FME) scheme. The training was organized by ICAR-National Research Center on Meat, Hyderabad in collaboration with IIFPT, Thanjavur from 4 to 8 January 2021.

# 72<sup>nd</sup> Republic Day

The 72<sup>nd</sup> Republic day was celebrated at CVAS, Navania, Udaipur. Dean, Prof. Rajeev Kumar Joshi, hoisted the National Flag and addressed the gathering.



# National level online photography competition

National level online photography competition was Inaugurated on the subject of 'Wetland and Water'



under the joint aegis of Human Resource Directorate, Centre for Wildlife Management and Health Studies, RAJUVAS and WWF, Udaipur to commemorate 'World Wetland Day' at the College of Veterinary and Animal Sciences, Navania, Udaipur on 2<sup>nd</sup> February 2021.

# Dr. Hemant Joshi nominated member of the Zoological Advisory Committee

Dr. Hemant Joshi, Assistant Professor and CO-PI, CSWMH, College of Veterinary and Animal Sciences, Navania, Udaipur, has been nominated by the Research Directorate of RAJUVAS, Bikaner as a member of the Zoological Advisory Committee of Machia Biological Park, Jodhpur on 18 February 2021. Dr. Joshi will give expert health services to the wildlife of Machia Biological Park from time to time.



CVAS, Navania (Udaipur)



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

### Introduction

Post Graduate Institute of Veterinary Education & Research (PGIVER) is one of the premier institutes which have 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, New Delhi 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 12 academic departments, administrative block and library being functional, Veterinary Clinical Complex building with 4 clinical departments and OPD and IPD are functional and Livestock Farm Complex having dairy, sheep & goat and poultry unit has been 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.

# Intake Capacity of College

S.No.		B.V.SC.8	& A.H.			M.V.Sc.			AHDP		
	State Payment VCI Total				otal State Payment Total				State Payment Total		
01	28	40	12	80	10	18	28	3	5	8	50



# Student Strength of College

B.V.SC.&A.H.			Total	M.V	Sc.	Total	F	Ph.D.		Total	2 Ye Diplo A.	ma in	Total	G.Total		
	П	Ш	IV	V		I	Ш		I	Ш	Ш		ı	II		
81	74	73	69	49	346	28	28	56	1	2	13	16	46	36	82	500

# Scholarships and Endowments

Name of scholarship/allowance	No. of recipients
Social Welfare Dept.	Received-42, Due-20
Education Loan	95

# Students selected for ICAR's All India Entrance Examination AIEEA (PG)

Sr. No.	Name	Rank	Subject & University					
1	Pawan Kumar	98	LPM (NDRI, Karnal)					
2	Ghazal Chawla	127	Animal Nutrition (Bombay Veterinary College, MAFSU)					

# Veterinary Clinical Complex Activities:

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 cases (VCC):	7348
Diagnostic Lab Tests (VCC):	325
Artificial Insemination (Cattle/Buffalo):	54 (Cattle-36 + Buffalo-18)

# **Veterinary Diagnostic Laboratory: 2020-21**

S.No.	Type of Sample	No. of Samples
1	Blood	292
2	Faecal	19
3	Milk	04
4	Skin Scrapping	10
	Total	325









# Number of cases attended report (month wise)

	IATOT .Đ	125	490	521	498	533	829	601	415	992	825	946	662	7348
	СУИ	22	. 29	74	73	85	113	85	81	121	92	72	09	945 7
TOTAL	ยกร	43	148	197	159	177	276	230	128	227	222	228	208	2234
<b> -</b>	MED	09	280	250	266	278	440	286	206	418	208	646	531	4169
•	СУИ	0	0	-	0	0	0	-	-	7	0	7	4	1
OTHER	ยกร	4	6	14	2	15	19	20	16	11	2	10	7	139
	MED	0	2	11	18	15	21	11	12	29	30	12	16	180
	СУИ	0	4	0	5	1	-	-	2	0	0	9	7	32
SHEEP	AUS	0	0	0	~	-	ဖ	2	0	-	3	0	2	16
	MED	0	4	0	4	2	7	4	0	7	0	_	0	19
	СКИ	4	19	22	15	21	43	24	26	58	44	7	8	301
GOAT	AUS	7	33	42	32	28	44	73	24	33	64	53	27	470
	MED	4	20	28	36	73	87	51	44	09	20	62	48	563
	СУИ	£	17	20	37	31	93	30	31	31	34	48	53	349
900	สบร	23	06	114	9	94	182	121	78	156	112	159	155	1375
	MED	52	212	175	152	141	272	204	142	296	410	518	424	2998
ш	СУИ	0	2	0	4	0	-	0	-	0	0	7	7	12
HORSE	Aus	0	9	0	~	4	4	~	0	2	7	7	က	33
	MED	0	9	7	4	3	9	-	-	-	0	0	~	29
یا	СУИ	0	0	0	0	0	0	0	0	0	0	0	0	0
CAMEL	AUS	0	0	0	0	-	က	0	2	_	0	0	0	7
	MED	0	0	0	0	0	0	0	0	0	0	4	2	တ
9	СУИ	2	4	7	က	1	22	6	7	4	33	ဗ	2	82
BUFFALO	ษาย	9	က	-	3	-	8	က	2	3	14	2	80	22
<b>6</b>	MED	-	80	4	=	2	30	80	0	10	တ	21	12	126
щ	СУИ	5	16	24	ი	1	16	20	15	21	14	4	က	158
CATTLE	Aus	0	7	26	22	33	10	10	9	6	9	2	9	137
	MED	က	25	20	41	. 42	18	7	7	20	6	28	25	245
	Month	APR	MAY	JUN.	JU.	AUG.	SEP	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	Total

# Feed and Fodder Analysis and Consultancy:

 25 samples of feed were analysed for Nutritional Parameters and Proximate Principles.

# Livestock Farm Complex 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 farm 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.

# **Publications**

# Research Papers in Journals:

- Thanvi, P.K. and Joshi, S. (2020). Gross and scanning electron microscopic studies on oesophagus of camel (Camelus dromedarius). Journal of Camel Practice and Research, 27 (1): 135-138
- Kumari, M., Kumar, A. and Dhawal, K. (2020). Transformation of a lawyer into successful Dairy Entrepreneur: A success story. International Journal of Current Microbiology and Applied Sciences. 9 (6).
- Saini, A., Pandey, A., Sharma, S., Suradkar, U.S., Ambedkar, Y.R., Meena, P., Raman, R. and Gurjar, A.S. (2020). Assessment of antioxidant activity of rosemary (*Rosmarinus officinalis*) leaves extract. Journal of Pharmacognosy and Phytochemistry, 9 (3): 14-17.
- Saini, A., Pandey, A., Sharma, S., Suradkar, U.S., Ambedkar, Y.R., Meena, P., Raman, R. and Gurjar, A.S. (2020). Assessment of antioxidant activity of rosemary (*Rosmarinus officinalis*) and Betal (*Piper betel*) leaves extract combination. The Pharma Innovation Journal, 9 (5): 377-380.

- Gupta, B., Gottam, G.S., Bhatt, L., Mittal, P.K., Pandey, A.K., Jindal, S.K., Bilochi, D.R. and Mathur, A. (2020). Hematological Studies in Indian Elephants (*Elephas maximus*). Journal of Entomology and Zoology Studies, 8 (2): 1350-1352.
- Parashar, M.C., Singh, S., Singh, Y.P. and Kumar,
   V. (2020). End Threaded Intramedullary Pinning for the Management of Femoral Fracture in a Dog. Livestock Research International, 8 (1): 31-33.
- Chharang, D., Sharma, T., Karnani, M., Manju and Kumar, R. (2020). Effect of replacement of conventional feeds by *Prosopis juliflora* pods and *Citrullus lanatus* seed cake on haematobiochemical parameters in Marwari Goats. Indian Journal of Animal Nutrition, 37 (1): 21-25.
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- Sarswat, C.S., Sharma, S., Nehra, K., Sharma, P.K., Parashar, M.C. and Vaishanv, C.S. (2020). Effect of exogenous melatonin administration on testicular biometry of Sirohi buck during nonbreeding season in Southern Rajasthan. Journal of Entomology and Zoology Studies, 8 (4): 352-355.
- Sarswat, C.S., Sharma, S., Nehra, K., Sharma, P.K., Parashar, M.C. and Vaishanv, C.S. (2020). Effect of exogenous melatonin administration on freezability of Sirohi buck semen during nonbreeding season in Southern Rajasthan. The Pharma Innovation Journal, SP-9 (7): 23-28.
- Sarswat, C.S., Yadav, S.P., Yadava, C.L. and Kumar, V. (2020). A rare case of single pup syndrome and its management in Labrador bitch: A case report. Journal of Entomology and Zoology Studies, 8 (4): 1723-1724.
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# Seminar/Symposium/workshop attended

- Prof. Sheela Choudhary, Dr. Monika Karnani and Dr. Manju participated in Online National Seminar on "Feed Additives for Improving the Efficiency and Sustainability of Milk Production in Dairy Animals" held on 20-21 July, 2020.
- 2. Prof. Sheela Choudhary, Dr. Monika Karnani and Dr. Manju attended International e-conference on "Immunology in 21st century for improvising one health" on 7th-8th August, 2020.
- 3. Dr. Rohitash Dadhich, Dr. Vikas Galav, Dr. Manish Agrawal and Dr. Srajna Meena attended the International e-Conference on "Immunology in 21st Century for Improvising One Health", organized by Society of Immunology and Immunopathology (SIIPI) on 7th-8th August, 2020, organized by College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture & Technology (SVPUAT), Meerut (UP), India and DADF, Govt of India, New Delhi.
- 4. Dr. Sumit Prakash Yadav and Dr. C.S. Saraswat attended an e-workshop on "Veterinary Reproductive Ultrsonogrpahy" organized by Indian Society for Study Animal Reproduction (Maharashtra chapter) and Intas Animal Health from 8-10<sup>th</sup> August, 2020.
- Dr. Subhash Chand participated in online National Workshop on "Footprint of Ideal Research Methodology" conducted by College of Veterinary Science & A .H., Rewa (M .P.) during 11<sup>th</sup>-14<sup>th</sup> August, 2020.
- Prof. Sheela Choudhary and Dr. Monika Karnani attended National workshop on "Footprint of Ideal Research Methodology" held on 11<sup>th</sup> to 14<sup>th</sup> August





2020.

- Dr. Vikas Galav attended the two-day Workshop on "Role of Regulatory Toxicology and Good Laboratory Practice (GLP) in Drug Discovery and Development" organized by Department of Pharmacology & Toxicology, NIPER, Hyderabad, India on 27<sup>th</sup>—28<sup>th</sup> August, 2020,
- Dr. Subhash Chand attended online workshop on "Trade in F&V Products & Dairy" organized by Centre for Agricultural Market Intelligence, AAU, Anand on 15th September, 2020.
- Dr. Monika Karnani attended two days Online National Workshop on "Practical Approach to Livestock Framing, Animal Hygiene and Health" from 30<sup>th</sup> - 31<sup>st</sup> October, 2020.
- Dr. Hemant Joshi participated in International econference on "Recent Advances and Status of Wildlife Forensics commences" organized by LACONS, CCMB, Hyderabad from 3<sup>rd</sup>-5<sup>th</sup> November, 2020.
- Dr. Hemant Joshi participated in three days Workshop on "Entrepreneurial Thinking and related Paradoxes" organized by Livestock Innovation, Knowledge and Entrepreneurship Skill Centre, CVAS, Navania from 6<sup>th</sup>-8<sup>th</sup> November, 2020.
- Dr. Sumit Prakash Yadav participated in two days online workshop on "Wildlife health management" organized by College of Veterinary and Animal Husbandry, OUAT Bhubaneswar from 10<sup>th</sup>-11<sup>th</sup> November, 2020.
- 13. Dr. Anurag Pandey, Dr. Umesh S. Suradkar and Dr. Ashish Saini attended virtual International Conference on "Livestock Products and Food Safety: Realities and imperatives for Global Health" organized by Department of Livestock Products Technology, VCRI, Orathanadu & Veterinary College, Bangalore from 24<sup>th</sup>-26<sup>th</sup> November, 2020.
- 14. Dr. Surendra Singh Shekhawat attended virtual conference on "Livestock Products and Food Safety: Realities and Imperatives for Global Health" organized by Dept. of LPT, VCRI, Orathanadu, Thanjavur and Dept. of LPT, Veterinary College, Hebbel, Bangalore on 24,25 &

30 November, 2020.

- 15. Dr. Samita Saini participated in XVI<sup>th</sup> National Online Conference of IAWV-2020 on "Sustainable contribution of ATMANIRBHAR Women Veterinarians in Enrichment of Production Potential in Livestock through Applications of Modern Technologies" organized by College of Veterinary and Animal Sciences, Parbhani (MS) India, during 9-10<sup>th</sup> December, 2020.
- Prof. Sheela Choudhary, Dr. Monika Karnani, Dr. Manju,, Dr. Sumit Prakash Yadav Dr. Satyaveer Singh and Dr. Dharmendra Chharang attended online International Wildlife Conference "WILDCON 2020" held at Nagpur from December 18-20, 2020.
- 17. Dr. G. S. Gottam, Dr. Y.P. Singh, Dr. P.C. Sharma, Dr. Barkha Gupta, Dr. M.C. Parashar, Dr. Sumit Prakash Yadav, Dr. Monika Karnani, Dr. Manju, Dr. Desh Raj Bilochi andDr. Pavan Kumar Mittal successfully completed 21 days online International e-training cum Orientation programme on "Physio-biochemical and Biotechnological Approaches for Optimization of Health and Reproduction in Animals" organized by Department of Veterinary Physiology and Biochemistry, College of Veterinary Science and Animal Husbandry, Mhow during December 1-21, 2020.
- 18. Dr. Barkha Gupta participated in 2 days International e-Symposium on "Emerging Focus on Immunology in Augmenting Animal and Human Health" conducted by College of Animal Biotechnology, Guru Anand Dev Veterinary & Animal Sciences University, Ludhiana (Punjab) from 19<sup>th</sup>-20<sup>th</sup> February, 2021.
- 19. Dr. Surendra Singh Shekhawat, Dr. Vikas Galav, Dr. Manish Agrawal and Dr. Sarjna Meena attended 21 days online short term training programme on "Advances in Clinic-Pathological Diagnosis of Farm Animals Diseases: A Radical Approach in Doubling Farmers' Income" organized by Department of Veterinary Pathology, College of Veterinary & Animal Science, Rewa (M.P.) from 5th -25th February, 2021.
- 20. Dr. Ashok Baindha participated in International





- Conference on "Agricultural Extension and Advisory Services: Innovations to Impact" hosted by MANAGE (National Institute of Agricultural Extension Management) from 25<sup>th</sup>–27<sup>th</sup>, February, 2021.
- 21. Dr. Surendra Singh Shekhawat and Dr. Sumit Prakash Yadav attended 21 days online short term training Programme on "Application of Novel Methods in Prevention and Control of Zoonoses and Ensuring Food Safety" organized by Department of Veterinary Public Health & Epidemiology, Nanaji Deshmukh Veterinary Science University, Jabalpur (M.P.) from 18<sup>th</sup> February to 10<sup>th</sup> March, 2021.
- 22. Dr. Y.P. Singh and Dr. Jitendra Bargujar attended 2 days conference of Indian VETexpo-2021 organized by "Paws Learning & Research Council" held on 20<sup>th</sup> 21<sup>st</sup> March 2021 at New Delhi.
- 23. Dr. Samita Saini attended MOOC Phase-II on Information Handling Skills for Teaching, Learning and Research from 1-21 March, 2021 (21 days) organized by Professor Jayashankar Telangana State Agricultural University, Rajendranagar, Hyderabad, India under ICAR-National Agricultural Higher Education Project- Sub project National Knowledge Management Centre for Agricultural Education and Research.
- 24. Dr. Surendra Singh Shekhawat participated in two days online Workshop on "Capacity Building on Antibiotic Susceptibility Testing" organized by Department of Veterinary Microbiology and Centre for One Health, Guru Angad Dev Veterinary and Sciences University, Ludhiana, Punjab on 24<sup>th-</sup>25<sup>th</sup> March, 2021.
- 25. Dr. Sumit Prakash Yadav attended 21 days online training-cum-orientation programme on "Advances in Clinico-pathological Diagnosis of Farm Animals Diseases: A Radical Approach in Doubling Farmers Income" organized by Department of Veterinary Pathology, College of Veterinary Science and A. H., Rewa (M.P.) India from 05-25.02.2021.
- Dr. Y.P. Singh and Dr. Jitendra Bargujar attended 3 days conference of Indian VETopia-2021

organized by "National Veterinary Foundation" from 26<sup>th</sup> - 28<sup>th</sup> March, 2021 at Jaipur.

# Books/ Book Chapter/Training Manuals/any other Publication

### (I) Book Chapter:

 Sandeep Kumar Sharma, Farah Naz Faridi, Vikas Galav and Manish Agrawal (2020). Antibiotic Resistance Profiling of Animal Origin Escherichia coli Isolates Associated with Various Clinical Infections. In Book:- One health perspective on Antimicrobial resistance and some strategies for its mitigation ISBN:978-93-89934-16-8.Pp. 3-16.

# (II) Popular Article:

- Sharma, J.K., Karnani, M., Choudhary, S. and Manju (2020). Quality Control of Feed and Feed Ingredients. Pashudhan Prahree, June issue.
- Singh, D., Karnani, M., Choudhary, S. and Manju (2020). Feed Technologies for Sustainable Animal Production. *Pashusandesh*, June issue.
- Mittal, P.K., Gottam, G.S., Gupta, B. and Bilochi, D.R. (2020). Ek Janleva Bimari: Aafra. Krishak Bharti, June issue.
- Mittal, P.K., Dhakad, G.S., Gottam, G.S., Gupta,
   B., Bilochi, D.R. and Maruti, D. (2020). Dugdh
   Utpadan Badhane ka Saral aur Kifayati Tarika:
   Khanij Mishran. Harit Kranti, June issue.
- Nathiya, P., Rathore, P.S. and Sharma, S.K. (2020). Crimean Congo Hemorrhagic Fever (CCHF) - Crucial Zoonotic Disease. *Poultry Line*, June issue. 31-33.
- Gupta, B., Gottam, G.S. and Mittal, P.K. (2020).
   Usht Dugdh: Immunity Vardhak evam Aushadhiya
   Guno ka Bhandar, Pashudhan Prahari. November Issue.
- Gupta, B., Gottam, G.S. and Mittal, P.K. (2021).
   Registaan ka safed sona- untni ka doodh: Immunityvardhak evam aushadiya guno ka bhandaar. Ayurvet Pashu Swasthya Sansar, January, 2021.
- Singh, V., Karnani, M., Choudhary, S. and Manju.
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# **Hostel Facilities:**

S. No.	Name of	Type of Hostel	Wi-Fi	Acco	mmodatio Numl	Alternative Arrangements	
3. NO.	Hostel	(Boys/Girls)		Rooms	Beds	Total No. of allotted Beds	Beds
1	Boys Hostel	Boys	No	17	51	Nil	
2	Girls Hostel	Girls	No	17	51	Nil	

Further expansion for two more floors of both the hostels is under progress and is near to completion.

# Residential Colony (For Staff & Student)

Family Quarters (Type)	No. of Quarters	Family lives
3BHK	04	00

# Library:

Brief about Library: Well developed digitalized library with RFID and good number of books, journals, computer with internet facility and reading space.

Sr.No.	Documents	Total
1.	General Books	3488
2.	Book-Bank Books	3870
3.	Thesis	84
4.	Books CD	97
	Total	7539

# Mera Gaon Mera Gaurav

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)
PGIVER, Jaipur	03	16	16	03	01	16

S. No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	01	01
2.	Interface meeting/ Goshthies (Online)	07	46
3.	Training organized	1	
4.	Demonstrations conducted	-1	
5.	Mobile based advisories (No. of message)	43	351
6.	Literature support provided (No.) (Online)	06	724
7.	Awareness created (No.) (Online)	09	702
8.	Input support provided (q)		
	Total	66	1824





# Extra-Curricular Activities:

# Visit of Hon'ble Vice Chancellor, RAJUVAS at PGIVER, Jaipur

Prof. (Dr.) Vishnu Sharma, Hon'ble Vice Chancellor, visited PGIVER on 7<sup>th</sup> August, 2020. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur acquainted him about the different activities and progress of the institute during the visit. A plantation programme was organized in the VCC and LFC.



# "74<sup>th</sup> Independence Day Celebration" at PGIVER, Jaipur

"74" Independence Day Celebration" was organized. (Dr.) Sheela Choudhary, Head, Department of Animal Nutrition hoisted the national flag and addressed the august gathering. Aplantation drive was also organized on this occasion.



# "Plantation Programme" at PGIVER, Jaipur

A plantation programme was organized at PGIVER on 17<sup>th</sup> August, 2020 following COVID-19 guidelines like social distancing, wearing masks, use of sanpitizer etc. All the teaching and non-teaching staffs actively participated and planted different types of plants.



# National webinar on "Metabolic diseases of importance in dairy animals"

A National webinar on "Metabolic diseases of importance in dairy animals" was organized on 27<sup>th</sup> August, 2020 in collaboration with Veterinary Internal and Preventive Medicine Society and Intas Animal Health. Prof. A. Samad, Director Farms, MAFSU (Maharashtra) was the lead speaker of the webinar. In this webinar, more than 1300 professionals got registered.

# **National Webinar on New Education Policy**

PGIVER, Jaipur organized a National Webinar on "Blending local and global knowledge and innovation system: Translating NEP (New Education Policy) goals into practice" on 29<sup>th</sup> August, 2020. Padmashree Prof. Anil Kumar Gupta, Retd. Prof., IIM, Ahmadabad was the lead speaker of the webinar. He emphasized that our traditional knowledge of agriculture and animal husbandry should be blended with modern technology for better production and economic development of farmers. A total of 704 participants participated in this webinar.

# National Webinar on Pediatric Health Management of Dog and Cat

PGIVER, Jaipur organized a National Webinar on "Pediatric Health Management of Dog and Cats- Crux of Practical Approach" on 15<sup>th</sup> September, 2020. Prof. (Dr.) J.P. Varshney, Retd. Principal Scientist, IVRI was the lead speaker of the webinar. In this webinar, more than 1323 professionals got registered and more than 552 participants joined the live event.

# National Webinar on Career in Veterinary Domain

PGIVER, Jaipur organized a National Webinar on "How to Develop Yourself for Career (not Job) in Veterinary





and Animal Husbandry Domain" on 26<sup>th</sup> September, 2020. Dr. Rahul Srivastava, Vice-President, Hester Bio-Science Limited was the lead speaker of the webinar. He enlightened about the various avenues of veterinary profession and the secrets to get success in these fields.

# International Webinar on One Health Approach

RKVY Project "Centre of Diagnosis, Surveillance & Response of Zoonotic Diseases" (CDSRZ) at Department of Veterinary Medicine, PGIVER, Jaipur organized an International Webinar on "One Health Approach for the Prevention and Control of emerging zoonosis and Rabies in India" on 28th September, 2020. Dr. Nitish Bharadwaj was the Chief Guest of the webinar. ILRI South Asia Representative Dr. H. Rahman, WHO Representative Dr. Barnadette Abela Ridder. In this webinar, more than 1185 professionals got registered and more than 1010 participants joined the live event from ten different countries including England, USA, Sri Lanka, Bangladesh, Nepal etc.

# National Webinar on Embryo Transfer Technology

PGIVER, Jaipur organized a National Webinar on "Embryo Transfer Technology: New Dimensions in Veterinary Entrepreneurship" on 23<sup>rd</sup> October 2020. Dr. S.P. Singh, Head, NDDB Dairy Services, New Delhi was the lead speaker of the webinar. He briefly explained about the various technical aspects of ETT and the prospects of this as an entrepreneurship for veterinarians.

# **Embryo Transplantation in LFC**

For preservation and up gradation of indigenous cattle breeds, embryo transplantation in six indigenous cows was successfully carried out in the Livestock Farm



Complex (LFC) of PGIVER, Jaipur on 7<sup>th</sup> October, 2020. Embryos for transplantation were collected from Gir cows with superior genetic qualities after Artificial Insemination.

# Stone Laying Ceremony of Staff Quarters and RKVY Project

Stone Laying Ceremony of Staff Quarters and RKVY Project "Establishment of poultry germplasm multiplication unit for indigenous poultry" was held on 15<sup>th</sup> December, 2020 at PGIVER, Jaipur. Prof. (Dr.) Vishnu Sharma, Hon'ble Vice Chancellor, RAJUVAS, Bikaner and Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur laid the Foundation Stone for the two buildings.



# Workshop on "Wet Lab for Ophthalmic Surgery"

Four Days Workshop on "Wet Lab for Ophthalmic Surgery" was held in Surgery Section of VCC, PGIVER, Jaipur from 16<sup>th</sup>-19<sup>th</sup> December, 2020. Dr. S.K. Jhirwal, Assistant Professor, Department of Veterinary Surgery and Radiology, CAVS, Bikaner demonstrated the







Model Cataract Surgery Technique to the faculty and P.G. students in the workshop.

# "Farewell-cum-Oath Taking Ceremony" of first Undergraduate Batch

Farewell-cum-Oath Taking Ceremony of first undergraduate batch of PGIVER, Jaipur was organized on 21<sup>st</sup> December, 2020. All the students took the "Veterinarian's Oath" and pledged to serve the animals and the nation.



# Inauguration of Solar Plant

Prof. (Dr.) Vishnu Sharma, Hon'ble Vice Chancellor, RAJUVAS, Bikaner inaugurated the newly constructed Solar Plant at PGIVER, Jaipur on 1<sup>st</sup> January, 2021. He also unveiled the book entitled "Practical Veterinary Biochemistry" written by faculty of PGIVER, Jaipur and IOS (Apple) version of M-RAJUVAS.



# National Webinar on "Gender in Livestock Sector"

LIKES Centre of PGIVER, Jaipur organized a National Webinar on "Gender in Livestock Sector" on 12<sup>th</sup> January, 2021. Dr. Mamta Dhawan, International Advisor (Veterinary, Livestock and Livelihood Sector) was the lead speaker of the webinar. She enlightened about the various aspects of women in livestock sector.

# "72<sup>nd</sup> Republic Day Celebration"

72<sup>nd</sup> Republic Day was celebrated on 26<sup>th</sup> January 2021, Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur hoisted the National Flag and addressed the august gathering. Patriotic songs were presented by the faculty members. All teaching and non-teaching staffs participated in this programme.



# Second Phase of Embryo Transplantation in LFC

In second phase of ETT programme, 10 embryos of Gir breed were successfully implanted in indigenous cows on 21<sup>st</sup> January, 2021 in the Livestock Farm Complex, with collaboration with NDDB scientist.



# Four Days "Ophthalmic Diagnostic Camp" for canines

Department of Veterinary Surgery and Radiology, PGIVER, Jaipur organized four days 'Ophthalmic Diagnostic Camp' for canines in Surgery section of VCC, PGIVER, Jaipur from 3<sup>rd</sup>-6<sup>th</sup> February, 2021. Dr. Praveen Bishnoi and Dr. Suresh Kumar Jhirwal,





Department of Veterinary Surgery and Radiology, CVAS, Bikaner rendered their expert services for diagnosis of cataract in dogs in the camp.

# Orientation programme of newly admitted Ph.D. and M.V.Sc. students

Orientation programme of newly admitted Ph.D. and M.V.Sc. students of Session 2020-21 was organized on 1st February, 2021 at PGIVER, Jaipur.



# National Webinar on "Self-Management and Professionalism"

LIKES Centre of PGIVER organized a National Webinar on "Self-Management and Professionalism" on 17th February, 2021. Dr. Gaurav Bissa, Associate Professor, Management Studies, Govt. Engineering College, Bikaner was the lead speaker of the webinar. He enlightened about the various aspects of self-management and professionalism.

# Participation in Farmers Fair organized by SKNAU, Jobner

PGIVER, Jaipur represented RAJUVAS by exhibiting a stall in Farmers Fair organized by SKNAU, Jobner from 22<sup>nd</sup>-26<sup>th</sup> February, 2021. Dr. Ashok Baindha, Dr. Ashish Saini and Dr. Narendra Meena rendered their services in the Kisan Mela.

# Visit of Director and Joint Director, RKVY

Sh. Anand Krishan, Director, RKVY, Department of Agriculture, Cooperation & Farmers Welfare and Sh. K.C. Meena, Joint Director, RKVY, Department of Agriculture, Govt. of Rajasthan visited PGIVER, Jaipur on 27<sup>th</sup> February, 2021 for assessing the completion and progress of various RKVY Projects running in the institute. They praised the facility for accommodation of owners of animals in the Indoor Ward of the Veterinary



Clinical Complex. They also appreciated the laboratory setup with state of art facilities for diagnosis of zoonotic diseases under CDSRZ project and promised for helping further development of the project by providing grant for sophisticated instruments.

# Visit of Students to Modern Dairy and Piggery Farms

LIKES Centre of PGIVER, Jaipur organized an exposure visit for 49 students of post-graduation and faculty members under National Agricultural Higher Education Project (NAHEP) to Rajdarbar Dairy, Beelwari, Alwar and Jaipur Piggeries Pvt. Ltd., Bhanpur Kalan, Ghata Jaldhari, Jaipur on 19<sup>th</sup> of March 2021. During this visit, students got exposure of the essentials of production, processing, marketing and management of livestock industry.



# "World Water Day-2021" Celebration

PGIVER, Jaipur organized 'World Water Day 2021 – Valuing Water' for all students and teaching & non-teaching staff on 22<sup>nd</sup> March, 2021. Dr. Bincy Joseph delivered a seminar on importance of water and an essay competition on "No Water- No Life" was organized for students.





# Six Days Online Capacity Building Programme

LIKES Centre of PGIVER, Jaipur organized six days online Capacity Building Programme on "Design Thinking in Research and Education with Focus on Veterinary Sciences" from 22<sup>nd</sup> to 27<sup>th</sup> March, 2021 under NAHEP in collaboration with NAARM, Hyderabad. Various aspects of teaching and research

were covered during the training, such as, concept of design thinking, teaching management for quality veterinary education, communication skills for teaching effectiveness, research concept writer, log frame writer, analytic hierarchy process (AHP) analyzer, practical exercises on micro-teaching, positive thinking for academic excellence, climate change, etc. Total 28 faculty members from PGIVER participated in this training.





PGIVER, Jaipur



# 5. Research

# Directorate of Research for Veterinary and Animal Science, Bikaner

Directorate of Research governs the research activities at Nine Livestock Research Stations located at Chandan (Jaisalmer), Nohar (Hanumangarh), Beechwal (Bikaner), Vallabhnagar (Udaipur), Kodamdesar (Bikaner), CVAS Bikaner, Bojunda (Chittorgarh), Dag (Jhalawar), and Dholpur.

Institutional as well as project research in different disciplines of College of Veterinary and Animal Science, Bikaner, College of Veterinary and Animal Science, Navania, Vallabhnagar (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 farm based research is being conducted at all the LRS for improvement in performance traits and enhancement of livestock feed and fodder production.

# The Directorate is functioning with following mandate:

 To plan, initiate, guide, co-ordinate and monitor the production oriented research in the field of veterinary and animal sciences.

- To formulate veterinary and animal science research programmes and proposals, their effective implementation, co-ordination and progress monitoring.
- 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.
- 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.

Total research schemes during year 2020-21

(Rs. In Lakh)

Funding Agency	No of Schemes	Total cost of Projects	Amount Sanctioned in year 2020-21
ICAR	05	202.27	202.27
State	10	7900.00	7900.00
RKVY	08	393.41	393.41
Revolving Fund	10	98.62	
Total	33	8594.30	8495.68

### **ICAR Scheme:**

- a) AICRP on Genetic Improvement of Marwari Goats in Farmers' Flocks at CVAS, Bikaner, CVAS, Bikaner
- b) Network Project on Buffalo (Surti) Improvement at Livestock Research Station, Vallabhnagar, Udaipur
- c) AICRP on Genetic Improvement of Sirohi Goats in Farmers' Flocks at LRS, Vallabhnagar, Udaipur
- d) Mega Sheep Seed Project (Sonadi) at Livestock Research Station, Vallabhnagar, Udaipur

e) All India Network Programme on Diagnostic Imaging and Management of Surgical Affections in Animals at CVAS, Bikaner

# **State Plan Scheme:**

- a) Apex Centre for Animal Disease Investigation, Monitoring and Surveillance
- b) Centre for Etheno Veterinary Practice & Alternative Medicines
- c) Centre for Organic Animal Product Technology
- d) Centre for Excellence for use of Space based Technology in Animal Science



- e) Centre for Studies on Wild Life Management & Health
- f) Centre for Disaster Management Technology for Animal
- g) Vaccinology & Biological Product Research Centre
- h) Animal Bio Medical Waste Disposal Technology Centre
- i) Engineering and Technology Centre for Animal Science
- j) Livestock Feed Resource Management and Technology Centre

### **RKVY Schemes:**

- a) Genetic Improvement of Tharparkar Cattle to be implemented in Jaisalmer
- b) Centre for Diagnosis, Surveillance & Response of Zoonotic Diseases
- Optimizing the reproductive potential of Cows and Buffaloes of southern Rajasthan through on campus training of Government/ Private Para-vets
- d) Strengthening of Rathi cattle farm for organic dairy farm practices and Capacity Building
- e) 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
- f) Establishment of Poultry Germplasm Multiplication Unit for Indigenous Poultry
- g) Establishment of cattle feed processing units at various Livestock farms of the University
- h) Strengthening of Residential Accommodation at Post Graduate Institute of Veterinary Education & Farm Practices of Veterinary & Animal Science Students

### Revolving Fund Schemes:

- Increase the fodder and seed production through Revolving Fund at Livestock Research Station, Chandan, Jaisalmer
- b) Development and conservation of Marwari goat at Livestock Research Station, Chandan, Jaisalmer
- Preservation and articulation of bones of different species of animals to enhance the teaching quality of Veterinary Anatomy at CVAS, Navania, Udaipur
- Income generation through Farming activities at Livestock Research Station, Bojunda, Chittorgarh
- e) Preparation and supply of ORS for calves at CVAS, Navania, Udaipur

- f) Pilot Project on Alternate Energy Generation through Biogas based Electricity Production at CVAS, Navania, Udaipur
- g) Sirohi Goat Breeding Project at Livestock Research Station, Beechwal (Bikaner)
- h) Green Fodder & Seed Production at Livestock Research Station, Beechwal (Bikaner)
- i) Processing and marketing of Milk and Milk products at CVAS, Navania
- j) A Pilot project on production of indigenous milk products at CVAS, Bikaner

# Other Project:

 a) Android Educational Mobile Application for Veterinary & Animal Sciences and Kiosk Information System for Farmers / Livestock Owners at PGIVER, Jaipur (UDF Project).

### **Research Stations**

# On Campus Research Stations:

- Livestock Research Station Bikaner.
- Livestock Research Station Vallabhnagar (Udaipur).

# **Off Campus Research Stations:**

- Livestock Research Station Beechwal (Bikaner).
- Livestock Research Station Kodamdesar (Bikaner).
- Livestock Research Station Chandan (Jaisalmer).
- Livestock Research Station Nohar (Hanumangarh).
- Livestock Research Station Dholpur.
- Livestock Research Station Bojunda (Chittorgarh).
- Livestock Research Station Dag (Jhalawar).

### **Livestock Research Station:**

# 1. Livestock Research Station Bikaner

# **Evaluation and Improvement of Rathi Cattle through Breeding**

Rathi is a well-known cattle breed of North-Western desert of Rajasthan State. The purebreds are maintained in Bikaner, Shriganganagar and Hanumangarh districts. Rathi is moderate milch breed, which is well adapted to agro-climatically conditions of arid and semi-arid areas. With the onset of cross breeding programmes this pure bred indigenous germplasm of cattle was endangered. Therefore it has become necessary to conserve Rathi breed in its home tracts along with evaluation and improvement for



utilization in the field for upgrading and selective breeding. Livestock Research Station has been developed for undertaking improvement and conservation of Rathi cattle germplasm through selective breeding in closed herd system.

# **Objectives:-**

- To establish, strengthen and execute various livestock based research and development activities, schemes and projects etc.
- To conserve indigenous germplasm of livestock available in various parts of Rajasthan and its dissemination for breed improvement
- To conduct research work on scientific breeding,

- feeding, health and management aspect of livestock including fodder production.
- To generate revenue using available infrastructural facilities, land and livestock resources.
- To facilitate university students for education, research and training utilizing farm infrastructure.
- To demonstrate use of various technologies for the benefit of livestock breeders.
- To coordinate and liaison with government, various NGO's and development agencies for effective strengthening of farms.

# Herd strength of Rathi Cattle:

S.No	Category	Opening	Addition				Red			
S.NO Category		Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance
1.	Female	174	36	39	75	12	14	38	64	185
2.	Male	50	26	23	49	02	16	23	41	58
3.	Total	224	62	62	124	14	30	61	105	243

# Performance of Rathi Pure breed herd

S.No.	Production Trait	Average
1.	Total lactation yield (305 Days)	2102.53 lit
2.	lactation length	270.36 days
3.	Wet average	7.79 lit
4.	Herd average	4.70 lit
5.	Calving interval	407.62 Days
6.	Dry period	136.97 Days
7.	Age at first calving	1265 Days
8.	Age at first service	985 Days
9.	Service peroid	126.02 Days



# Income generated during year 2020-21 from various sources

S.N.	Source of Income	2020-21
1.	Sale of Milk	4071202
2.	Sale of Animal	3,93,020
3.	Sale of Manure	1,59,586
	Total Income	46,23,808



# 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. The progressive breeders purchased the cows, bulls and heifers on book value. During year of 2020-21 total 30 Rathi animals including 16 male and 14 females were distributed.

# A Pilot project on production of indigenous milk products at CVAS, Bikaner (Revolving Fund)

# Objective:

- To generate the revenue through selling of various milk products.
- Encourage students for self-employment generation in processing and development of indigenous milk products.
- To explore entrepreneur skill among veterinary students.

### Achievement:

- Different milk products like Paneer, Lassi, ghee, skimmed milk were prepared and sold.
- Farmers and students were visited milk parlour to get knowledge regarding various milk products.
- Prosper entrepreneur skill in students, farmers and NGO's.
- Revenue generation from the sale of milk and various milk products sell.
- Progress during the year 2020-21:-

❖ Milk - 1,14702.5 lit.
 ❖ Paneer - 2780 pkt.
 ❖ Lassi - 8891 lit.
 ❖ Ghee - 359.75 lit.

Skimmed milk - 23158.88 lit.

### **RAJUVAS Milk Parlour:**

 A Automatic Milk Vending machine have been installed at the parlour and clean and good quality milk of indigenous Rathi cattle is being distributed to students, staff members and other consumers at parlour.





 Different milk products like Paneer, Shri khand, Full cream lassi and chhach of indegenous Rathi cattle is being prepared and distributed to the consumers at parlour.

# 2. Livestock Research Station, Nohar Conservation, Evaluation and improvement of Rathi cattle through breeding

Rathi breed is an integral part of natural heritage, culture & ecosystem of North Rajasthan. To sustain the long term economic soundness of animal owners and genetic security of this breed conservation of its germplasm is the urgent need of current scenario. Production of A2 milk from indigenous cattle is also a charming reason for its conservation.

# **Objective**

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





# Herd strength of Rathi Cattle:

				Addition			Redu	ıction		Clasina	
S.No.	Category	Opening Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance	
1.	Female	187	43	169	399	06	41	167	214	185	
2.	Male	65	40	123	228	5	9	149	163	65	
3.	Total	252	83	292	627	11	50	316	377	250	

# Performance of Rathi Pure breed herd

S.N	Production Trait	Average
1.	Lactation yield Elite cow (305 Days)	2511.97 Lit
2.	Lactation yield (305 Days)	2005.24 Lit
3.	Lactation length	273.46 Day
4.	Wet average	7.61 Lit
5.	Herd average	3.98 Lit
6.	Calving interval	451.62 Days
7.	Dry period	209.42 Days
8.	Age at first calving	46.66 Month
9.	Mortality rate	4.245%
10.	Service period	176.5 Days

Revenue generated in LRS, Nohar Rathi cattle breeding farm upto 31/03/2021: 93.201 lakh.



Herd of Rathi Cows



Water Diggi at 27 NTR

# 3. Livestock Research Station Chandan, Jaisalmer

- I. Genetic Improvement of Tharparkar Cattle (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 scare feed resources. As per the central and state Government cattle breeding policy, this Native germplasm 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.



# **Objective:**

- Evaluation, Improvement and Conservation of Tharparkar cattle germ plasm.
- Distribution/Sale of improved Tharparkar cattle germ plasm 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 Opening			Addition			Reduction				
3.140.	Category	Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance
1.	Female	252	54	208	514	09	61	208	278	236
2.	Male	45	55	87	187	03	46	87	136	51
3.	Total	297	109	295	701	12	107	295	414	287

# Performance of Tharparkar cattle

S.No.	Production Trait	Average			
1.	Milk production	2043.5 kg.			
2.	Lactation length	282.6 Days			
3.	Milk production 305 days	2005.0 kg.			
4.	Wet Average	4.81 kg.			
5.	Herd Average	7.26 kg.			
6.	Dry period	109.3 Days			
7.	Calving interval	398.8 Days			
8.	Age at first calving	1344 Days			
9.	Mortality rate	1.71 Percent			

- Total 107 animals were supplied to various Government Department, NGO's and Private Sectors in present years.
- Revenue generated in LRS, Chandan, Jaisalmer Tharparkar cattle breeding farm upto 31/03/2021: 103.92 lakh.





Rajasthan University of Veterinary and Animal Sciences, Bikaner



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

The Marwari goat is a dual purpose breed and rose for meat and milk production both. It is a basically desert goat breed and well known for its tolerance of dry and hot climate. This breed is also known for its capabilities of disease resistance and capabilities of thriving in very harsh nutritional conditions. The breed derives its name after the 'Marwari 'region of Rajasthan, which is its natural habitat.

# **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.

# Herd strength of Marwari Goats:

S.No.	Category	Opening Balance	Addition			Reduction				Closing
3.NO.   C			Birth	Transfer	Total	Death	Sales	Transfer	Total	Balance
1.	Female	180	107	<b>2</b> 82	569	27	05	282	314	255
2.	Male	64	88	201	353	05	57	201	263	90
3.	Total	244	195	483	922	32	62	483	577	345

### Summary:

 ر	•	
1.	Increase the Flock Strength	244 to 345 (Goat 104, Female kids 151, Male kids 90)
2.	Generate the Income	Rs. 4.10 lacs
3.	Improved Germ plasm supplied	62 (Female – 05 & Male - 57)
4.	Total birth recorded during the year	195 (Female – 107 & Male - 88)
5.	Total Death	32 (Female – 27 & Male - 05)
6.	Mortality rate	3.47 percent
7.	Average age of first Kidding	17 months
8.	Average kidding intervals	07 months
9.	Average age of maturity	12 months

### IV. Fodder and Fodder Seed Production

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 maximizes 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 650 Qt. green fodder produced during this year
- Dry fodder: total 55 Qt. dry fodder produced during this year
- Fodder seed production: total 1Qt. fodder seed produced during this year
- Total income: Rs. 156391.00 (One Lac Fifty Six Thousand Three Hundred Ninety One Rupees) incomes were generated from green fodder.





### 4. Livestock Research Station Beechwal

Livestock Research Station, Beechwal was established in the year 2000 on 233 ha land allotted to it. This new LRS was created as per recommendation of the World Bank under ADP to undertake research activities pertaining to Veterinary and Animal Sciences. Presently, out of 233 ha irrigated land 75, 25 and 30 ha land is being utilized by National Seed Project, Krishi Vigyan Kendra, and ARS, Bikaner of SK Rajasthan Agriculture University Bikaner, respectively.

This station has shown its capabilities in propagation and distribution of superior germplasm of Tharparkar cattle and Sirohi goats, to produce seed of crops useful for livestock feed and fodder besides earning of handsome revenue.

# Three Project running under this centre:

I. Conservation, Evaluation, Improvement Tharparkar Cattle Farm (State Plan)

# Objectives of project

- To increase population of upgraded and improved Tharparkar germplasm through selective breeding.
- Distribution and sale of improve Tharparkar germplasm to the farmers and development agencies for upgradation of animals in field.
- Transfer of production technology at grass-root level.

# Herd strength of Tharparkar Cattle:

			Addition			Reduction				
S.No.	Category	Opening Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance
1.	Female	121	27	85	112	04	39	85	128	105
2.	Male	39	27	70	97	04	29	70	103	33+01 (Camel)
	Total	160	54	155	209	08	68	155	231	138+01 (Camel)

 During year of 2020-21 total 68 Tharparkar animals including 29 male and 39 females were distributed to Rajasthan and other states.

# Performance of Tharparkar cattle

S.No.	Production trait	Average
1.	Total milk production	111068.5 lit.
2.	Lactation length	287
3.	Milk production in 305 days	2229.22
4.	Average wet	7.96
5.	Average herd	5.31
6.	Dry period	116.18 days
7.	Calving interval	396.16 days
8.	Age at first calving	3.59 years





## **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
- During this year 94.38 Qtl. RAJUVAS mineral mixture was manufactured and sale to various LRS of RAJUVAS and progressive farmers.





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

A Sirohi 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 socioeconomic status under arid region. The maintenance of goat flock is being met from revolving fund sanctioned earlier for cultivation work at LRS, Beechwal.



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



# Flock Strength Sirohi Goat 2020-21

O.N.	Oppoping		Addition		F	Closing		
S.No.	Category	Opening Balance	Birth	Total	Death	Sales	Total	Balance
1.	Female	92	18	110	05	18	23	87
2.	Male	44	17	61	05	32	37	24
3.	Total	136	35	171	10	50	60	111

# Sale of superior germplasm

A total of 50 animals (32 ram and 18 doe) rams were sold to ARC, CSWRI, Bikaner, KVK Gudamalani, and progressive farmers on book value during 2020-21.



# III. Green Fodder & Seed Production (Revolving Fund Project).

In 2010 after establishment of RAJUVAS, 110 hectare land was allotted to this LRS under umbrella of RAJUVAS. The crops (cash and fodder) 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. Recently Sewan and Napier grasses (prepared at nursery of LFRMTC) has also introduced at LRS, Beechwal for animals under revolving fund. This station has shown its capabilities to produce seed of crops useful for livestock feed and fodder besides earning of handsome revenue.

# Seed and Grain production during financial year 2020-21

S. No	Particulars		Production (Qtl.)		
1	Green fodder		3421.10 (687.60 Qtls. sold other Unit of RAJUVAS)		
		Groundnut Fodder	510.00		
2	Dry Fodder	Wheat straw	375.00		
		Guar/Moth/Methi Fodder	20.00		
		Total	905.00		
3	Wheat Grain		182.60		
4	Groundnut		282.20		
5	Guar		18.37		
6	Moth		0.93		
7	Methi		12.36		

## Revenue Generation

The income generated in the project during 2020-21 by different sources is shown in the table given below.

S No.	Revenue Head	Total Revenue Generated
		State Plan
1	Sale of Milk	3461098.00
2	Sale of animals	1260200.00
Total-A		4721298.00
		Revolving Fund
3	Sale of seed/Grains	1845324.00
4	Sale of Fodder (Green/Dry)	1668852.00
5	Mineral Mixture	687900.00
6	Goat Unit	629475.00
7	Moth ,Methi and Guar	136640.00
8	Other (RF & Bank Interest)	115936.00
Total-B		5084127.00
Grant T	otal	9805425.00

# 5. Livestock Research Station Kodamdesar

The project started from the year 2009-10 at Livestock Research Station Kodemdesar, Bikaner. Aim of project is to undertake improvement and conservation of Kankrej cattle germplasm through selective breeding in closed herd system. The evaluation, conservation and scientific breed improvement has shown encouraging results. One cow has produced 4033.7 kg milk in a single lactation. Peak yield of 22.00 kg in 55 days has been achieved. Efforts are made to make available superior Kankrej germplasm with farmers. Semen collection have also started from bulls of Kankrej transferred at CVAS, Navania, Vallabhnagar and is being distributed to the farmers at natural breeding tract. Bulls of Kankrej breed with good dam's yield are provided to the farmers as an integral part of this breed

improvement programme. Efforts are being made to identify the farmers in the breeding tract who are maintaining Kankrei breed.

# Three Projects are running under this centre: 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:

			Addition								
	S.No.	Category	Opening Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance
	1.	Female	117	27	08	152	04	02	08	14	138
	2.	Male	44	24	00	66	01	06	00	07	61
Ī	3.	Total	161	51	08	218	05	08	08	21	199

# Production Performance of Kankrej cattle

S. No.	Production Trait	Average		
1.	Cows in Milk	30		
2.	Lactation Yield 305 Days	1717 lit		
3.	Total Milk production	78958.8 lit		
4.	Wet average	7.51 kg		
5.	Herd Average	4.12 kg		
6.	Peak Yield	10.3 kg		
7.	Age at First Calving	1508 days		
8.	Calving Interval	394 days		
9.	Dry Period	138 days		
10.	Lactation Length	248 days		



# Distribution of germplasm of Kankrej cattle

A total of 8 animals (6 bull calves and 2 female calves/heifers) were distributed and sold to different gaushalas /farmers/developementalagencies during this financial year.

## Revenue generation

Revenue generated in LRS Kodamdesar fund during 2020-21

Source of Income	Amount (Rs.)
Sale of Milk	2597403
Agriculture land contract	7251000
Sale of animals	30030
Miscellaneous	240383
Total	10118816



# 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 20 male animals (Ram) were sold to different farmers /institute/NGOs.



# Flock Strength of Magra sheep

			Age C		Grand		
Particulars	Sex	0-3 month	3-6 month	6-12 month	adult	Total	total
Opening Balance	Male	11	14	23	37	85	244
(01/04/2020)	Female	10	16	19	114	159	244
Closing Balance	Male	4	19	26	50	99	269
(31/03/2021)	Female	8	5	16	141	170	209

# Conservation, evaluation and improvement of Sahiwal cattle through breeding

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/gausalas/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:

Addition									
Category	Opening Balance	Birth	Transfer	Total	Death	Sales	Transfer	Total	Closing Balance
Female	193	46	26	72	06	00	26	32	233
Male	56	52	00	52	04	25	00	29	79
Total	249	98	26	124	10	25	26	61	312

### **Production Performance**

S.No.	Production trait	Average
1.	Cows in Milk	64
2.	Lactation Yield 305 Days	2191.7
3.	Total Milk production (kg)	192222.4
4.	Wet average	8.26
5.	Herd Average	5.35
6.	Peak Yield	11.8
7.	Age at First Calving	1307
8.	Calving Interval	396
9.	Dry Period	112
10.	Lactation Length	291

# Distribution of superior germplasm

A total 25 male animals were distributed and sold during the present financial year.

# Revenue generation

The income generated in the project during 2020-21 by different sources is shown in the table given below.

1	S. No.	Source of Income	Amount (Rs.)
ı	1	Sale of milk	4042355.00
	2	Sale of animals	49190.00
)	3	Miscellaneous	167498.00
•	4	Total	4259043.00



# 6. Livestock Research Station Vallabhnagar

# Three Projects are running under this centre:

# I. Gir Cattle Breeding Farm (RKVY).

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.



# Herd strength

S	Category	Opening	Additions			Reduction				Closing
No		Balance	Birth	Transfer	Total	Death	Sale	Transfer	Total	Balance
1.	Female	101	21	24	146	6	5	24	35	111
2.	Male	43	17	17	77	2	23	17	42	35
Gra	nd Total	144	38	41	223	8	28	41	77	146

# **Production Performance of Gir cattle**

S. No.	Production trait	Average		
1.	Cows in Milk	35		
2.	Total Milk production	77412 kg		
3.	Wet average	6.6 kg		
4.	Herd Average	4.4 kg		
5.	Peak Yield	9.6 lit		
6.	Age at First Calving	1915 Days		
7.	Service Period	193 Days		
8.	Calving Interval	460 Days		
9.	Lactation Length	323 Days		
10.	Dry Period	186 Days		
11.	Lactation Yield 305 Days	2194 kg		

# II. AICRP Sirohi field Unit (ICAR).

AICRP on goat improvement (Sirohi field unit) project came in to financial existence on 1<sup>st</sup> January 2001, with the main objective to bring about the improvement in the farmers flock.

# **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 62 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 2333.
- The overall population growth was 78.81%.
- The overall average lactation yield and lactation length was 99.61±4.27 lit. and 152.47±1.03 days, respectively.
- 71.64 per cent breeding efficiency were observed on basis of does available, during report period.

- Kidding rate (1.10) was observed during the report period
- The overall mortality was 4.04 %.
- 48 semen doses of improve Sirohi buck were preserve.
- The 50 Sirohi goats maintained as a nucleus herd.
- Flock strength of nucleus herd was 91.
- During report period deworming of 5358 animals and 7299 animals were treated to control ectoparasite, 2251 and 1286 animals were vaccinated against ET and PPR, respectively
- The major diseases observed in the registered animals were enteritis and pneumonia.
- 696 animals were sold during report period. Out of which 638 (91.67%) animals were sold for breeding purpose.

# III. Network project on buffalo improvement (ICAR)

# **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			Disp	СВ	
		ОВ	B/P	Т	D	Т	СВ
1	Female	84	24	38	3	38	105
2 Male		42	21	41	1	41	62
Grand Total		126	45	79	4	79	167

OB = Opening Balance, D = Deaths, B / P = Birth / Purchase, T = Transfer, CB = Closing Balance

## Revenue generated (Rs.)

S. No.	Source	Income
1.	Milk sale	17,23,334
2.	Semen sale	675
3. FYM sale		2,21,616
	19,45,625	





## **Production Performance**

S. No.	Production trait	Average
1.	Lact. Yield	1633.00 ± 55.51 kg
2.	Lactation Yield 305 Days	1557.53 ± 41.34 kg
3.	Wet average	5.14 kg
4.	Herd average	2.95 kg
5.	Peak Yield	9.56 ± 0.31 kg
6.	Age at First Calving	46.07 ± 4.10 Month
7.	Service Period	145.26 ±11.13 Days
8.	Calving Interval	431.92 ± 9.90 Days
9.	Lactation Length	327.46 ± 14.12 Days
10.	Dry Period	154.83 ± 8.93 Days

# 7. Livestock Research Station Dag, Jhalawar

Livestock Research Station, Dag, Jhalawar is established in the year 2015. Government of Rajasthan allotted 269 Bigha land. RKVY sanctioned a project entitled "Establishment of Malvi Cattle Breeding Farm and setting up of an institute for starting diploma in animal husbandry (AHDP)" in year 2015-16.

# Project running under this centre:

Establishment of Malvi Cattle Breeding Farm and setting up of an institute for starting diploma in animal husbandry (AHDP).

# **Objective**

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 31.3.2021 was 488. During report period addition in the herd strength due to 132 births. During report period only 12 animals were died in different age and sex group. The details of herd strength as on 31.3.2021 was as follows:

### **Herd Strength of Malvi Cattle**

S.No	Category	Opening	Additions			Reduction				Closing
		Balance	Birth	Transfer	Total	Death	Sale	Transfer	Total	Balance
1.	Female	311	63	329	392	10	-	329	339	364
2.	Male	84	69	171	240	02	27	171	200	124
Grand	Total	395	132	500	632	12	27	500	539	488



# Production Performance of Malvi cattle

S. No.	Production Trait	Average
1.	Cows in milk	65.81
2.	Total Milk Production	59684.04 kg
3.	Wet Average	2.48 kg
4.	Herd Average	1.16 kg
5.	Lactation Length	193.72 Days
6.	Lactation Yield	467.03 Kg
7.	Dry Period	219.63 Days
8.	Calving Interval	388.54 Days
9.	Age at First Calving	44.95 Month

# Revenue

S. No.	Revenue Head	Revenue Generated during present year (in Lakh)		
1	Sale of Milk	11.85		
2	Sale of animals	0.054		
3	Sale of seed/Grains	7.81		
4	Sale of waste wood	-		
5	Other	0.0382		
	Total	19.75		





# 8. Livestock Research Station Bojunda, Chittorgarh

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

# Project running under this centre:

- Demonstration and Dissemination of More Remunerative Sirohi Goat Farming System funded by NMPS on Goat (RKVY) completed on 31 March 2018.
- AHDPProgramme (UDF).
- Revolving Fund Project (UDF).
- RACP Goat Project (World Bank up to Feb. 2018).



# Flock Statics 2020-21:

Category	Opening Balance	Addition			Reduction				Closing Balance
	1-4-2020	Birth	Draft	Total	Death	Sold	Draft	Total	31.03.2021
Male	67	65	197	329	13	68	197	278	51
Female	280	70	267	617	72	5	267	344	273
Grant Total	347	135	464	946	85	73	464	622	324

# Production Performance Sirohi goat

S. No.	Production trait	Average
1.	Total Milk Production	11689.50 kg
2.	Lactation Length	161.39±0.05 Days
3.	Lactation Yield	64.10±0.18 kg
4.	Dry Period	309.59±0.26 Days
5.	kidding Interval	482.18±3.77 Days
6.	Service Period	331.91±0.26 Days

Total income generated by sale of milk was 225157.80 lakh.

Total 68 breeding buck were distributed to NGO, Government and Farmers.

# II. Revolving Fund Project (Agriculture Farm Section)

# **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.

### Farm Production 2020-21

S.No.	Name of Item	Production (QtI)						
1.	Green fodder	1085.53						
2.	Dry Fodder	823.0						
3.	Grain Production	856.94						



Organic Barley Crop Production

# 9. Livestock Research Station Dholpur

# Project running under this centre:

 Establishment of Goat Breeding Farm for Demonstration and Dissemination of Remunerative Goat Farming System as Multipurpose Goat Development Centre (MGDC).

# Objective:

- Breed improvement in goat for the milk and meat purpose.
- Conservation of indigenous breed of goats.
- Increase animal protein availability to fulfil 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.
- To utilize goat as a tool for economic and social development and gender equity.

# Physical Achievements

- 25 Hectare land has been allotted by the Govt. of Rajasthan at Angai, Sarmathura, Dholpur. The land is located on the NH-11B and further divided by Kachhpura road in two parts.
- Organic Certification of Farm Livestock, Livestock Products and Farm vegetation (Agricultural Products) done
  by Authority of Organic Certification, Rajasthan State Organic Certification Agency (RSOCA), Pant Krishi
  Bhawan, Jaipur. Auditor from the concern Agency audited the Farm for the same.
- Trainings for farmers to enhance their livelihood with goat farming.





# State Plan Projects:

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

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. Six disease outbreaks reported to Apex Centre in birds, poultry and cattle were attended by Apex Centre team at different locations of which one was diagnosed due to Avian botulism in migratory birds, one due to Hemorrhagic Septicemia in cattle, one in cattle due to acidosis, one due to Botulism in cattle, one due to Marek's disease in poultry and one in poultry due to Newcastle disease.

Various clinical and morbid samples collected by or submitted to Apex Centre by different hospitals of Department of Animal Husbandry, and private owners were processed in the Apex Centre laboratory to determine the etiology of the ailment, to confirm the disease, to suggest suitable treatment or preventive measures etc. The samples from VCC, RAJUVAS, Bikaner collected from patients which were presented to clinics and submitted to Apex centre. During the year various samples were processed in the laboratory for different tests viz. bacterial infections, culture and antibiotic sensitivity, parasitic infections, brucellosis antibody detection, urine biochemical test, gram staining etc.

A vigil is constantly kept over the livestock and poultry population by Apex Centre in order to identify any emerging disease in the state. Surveillance and monitoring of various diseases are done to know about the health status of the livestock in the state.

The Centre is providing telephonic consultancies extensively to field vets and paravets as and when it is required by them on various issues related to veterinary and animal science. Throughout the year various field veterinary officers, para veterinary staff, other officers and farmers from state and outside state were provided consultancy (in person as well as on mobile phone) in regards to disease diagnosis, sampling, preventive measures, vaccination strategies etc.

# **Objective:**

- 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.

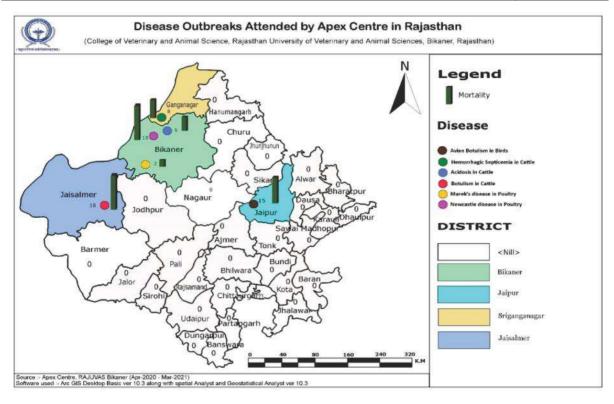
## Disease outbreaks attended

S.No.	Date	Species affected	No. of deaths	Place	Diagnosis
1.	09.05.2020	Birds	15	Sambhar, Jaipur	Avian Botulism
2.	08.12.2020	Cattle	8	Suratgarh, Sri Ganganagar	Hemorrhagic Septicemia
3.	18.12.2020	Cattle	6	Beechwal, Bikaner	Acidosis
4.	04.03.2021	Cattle	18	Ramdeora, Jaisalmer	Botulism
5.	16.03.2021	Poultry	3	Bikaner	Marek's disease
6.	18.03.2021	Poultry	18	Kanasar, Biakner	Newcastle Disease



# AT A GLANCE: TOTAL WORK DONE

Work Done	Number
Samples Analysed in laboratory	
Bacterial infections including Culture and antibiotic sensitivity (Blood, Milk, Urine, Pus, Faeces, Impression smear, Swab, Aspiratory fluid)	98
Urine microscopy and biochemical examination	15
Brucellosis testing	56
Total samples analysed	169
Outbreaks attended in field	6
Post-mortem examination done	6



# **Marek's Disease Outbreak Pictures**







# Centre for Etheno Veterinary Practice and Alternative Medicines, CVAS, Bikaner

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.

# Objective:

- 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 farm of Ethno-Veterinary drugs in extract form or otherwise as prophylactic/therapeutic/supplementary agent by clinicians and or livestock owners

### Work done

- CEVPAM has developed research based herbal products like herbal soap, hand wash, hand sanitizer, liquid supplement beneficial in improving digestion, herbal powder against impaction, herbal powder helpful in mastitis, herbal anti-diarrheal bolus.
- The centre has extended technical/ laboratory support and help for the 1 masters and 1 doctoral research work entitled Therapeutic studies on Holarrhena antidysenterica in colibacillosis affected calves, Studies on therapeutic efficacy of Holarrhena antidysenterica in neonatal calf diarrhoea with special reference to E. coli and Salmonella.





# Centre for Conservation of Animal Biodiversity, CVAS, Bikaner

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

### Objective and Achievement:

- Conservation of selected threatened species and to initiate and execute their reintroduction as well as restocking.
- To impart education and training for communities, NGO's, wild life workers and officers of line departments.
- To initiate research activities in respect with conservation of animal biodiversity of the state.
- To take up activities like in situ conservation, species recovery efforts etc.
- To develop and use tools to cost- effectively gather vast quantum of genetic, physiological and economic data



and its extrapolation using creative way of integration and analysis of this information.

- To develop biodiversity inventories and natural resource-use assessment.
- To determine distribution of species threatened by one or more a biotic and biotic disturbance.
- To assess the cause of population decline and the magnitude of problems as well as to develop mitigation strategies as joint effort with other scientists working at centre.
- To execute innovative and applied research to foster public awareness of the challenges facing as well as to build capacity for conservation of biodiversity in the state.

### Work done:

- Whattsapp group of farmers is very beneficial for disseminate the knowledge among farmers and other concern person. Message related to seasonal disease and their cure, vaccine schedule and feeding behaviour etc. Are sent to the farmers to create awareness.
- A biodiversity and its conservation based demonstration model is in process for given a message about how and why should we conserve biodiversity.
- Health care camp Three health care camp were organized in different villages like Ratnisarand Nathwana (Total 53 farmers/pashupalak and 526 animals were benefited in these camp.)
- Different kinds of publication were distributed to the farmers for information regarding conservation of animal biodiversity.
- A facebook page for conservation of animal biodiversity RAJUVAS is created, till date more than 350 members were joined this group.
- 6. A digital information kiosk was established under the centre for conservation of animal biodiversity.

# 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 biomedical waste as this is the most neglected aspect of health care centers 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**

- Prepared a Lab manual on "Bio Medical Waste Management" in Hindi language.
- ➤ A first hand on training was organized by the centre on 05<sup>th</sup> February 2021. Total 29 personals were trained during this training.
- ➤ E-Certificate Course on "Management and Disposal of Animal Biomedical Waste" was organized by the centre on 03/03/2021 to 05/03/2021. Total 92 personals were trained during this training.
- A webinar on "Awareness regarding management and disposal of animal biomedical waste" was organized by the centre on 05/09/2020 to Vets. and Paravets.
- Awareness campaign in different hospitals, PHCs, Clinics, veterinary hospitals, Labs and Institutions by distributing posters and pamphlets.

# Centre for Organic Animal Product Technology, CVAS, Bikaner

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.

### **Objective:**

- 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:-

Organic certification process for land and animal at different centers by One cert International and Rajasthan State Organic Certification Agency have been completed and now the centers have certified as a organic Individual Producer for next year. List of the Centers for Information about Organic Certification are as follows:-

S.No.	Name of Centre	Livestock		Land	Certification Agency
0.1101	Name of Centre	Туре	Number	(Ha.)	octanounon Agency
1.	LRS, Beechwaal	Goat	137	103	One cert International
2.	LRS, Kodamdesar	ı	-	65	Rajasthan State Organic Certification Agency
3.	LRS, Chandan	Goat	50	100	Rajasthan State Organic Certification Agency
4.	LRS, Vallabhnagar	Goat	39	25	Rajasthan State Organic Certification Agency
		Cow	25		
5.	LRS, Bojunda	Goat	361	15	Rajasthan State Organic Certification Agency
6.	MGDC, Sarmathura, Dholpur	Goat	88	25	Rajasthan State Organic Certification Agency
7.	PGIVER Farm, Kho-Nagorian, Jaipur	ı	-	5.69	Rajasthan State Organic Certification Agency

- Organic certification process for land and animal at LRS, Dug, Jhalawar and Poultry Unit, CVAS, RAJUVAS, Bikaner is under pipeline. Entire relevant documents have been submitted to Rajasthan State Organic Certification Agency for further process.
- Two days on-campus training on 'भारतीय कृषि अनुसंधान परिषद, नई दिल्ली अनुसूचित जाति उपयोजना के अन्तर्गत जैविक पशुपालन प्रशिक्षण' on dated 26 27 October 2020 organized under Centre for Organic Animal Product Technology, RAJUVAS, Bikaner in which 28 farmers were participated awareness created and promoted them to adopt organic animal production to enhance organic animal production in the states, literatures were also distributed.







# Centre for Disaster Management Technologies for Animals, CVAS, Bikaner

The Centre for Disaster Management Technology for Animals was established by RAJUVAS, Bikaner in January 2013.

# Objective:

- 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.

### Achievement:

- Total 3 trainings organised by centre in which about 120 farmers were benefitted.
- This centre attended an emergency at Dholerafanta, Jamsar village, Bikaner on 30th March 2021 where a fire
  incident took place in Chak 6KHM, Dholera Fanta, Jamsar. The team of the centre provided the first aid and after
  proper treatment cattle were shifted in disaster management air-conditioned ward of CDMTA, RAJUVAS,
  Bikaner.
- Total 11 livestock of heat stroke and burn cases were treated in air condition ward.





### Engineering and Technology Centre for Animal Science, CVAS, Bikaner

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. This department also has been engaged in research work in the field of veterinary and animal sciences.

## Objective:

- To identify the areas which need mechanization for wellbeing of animal husbandry and for benefit of livestock owners.
- To undertake basic and applied research in association with engineering in the livestock sector covering production, processing, economics and management.



- To undertaken the development of dairy farming systems for different agro climatic zone and demonstration of models for transfer of technology.
- To organize and conduct programmers at UG and PG levels in various branches of Veterinary and Animal Sciences.
- To organize short-term specialized training programmers and vocational courses.
- To collaborate with national and International agencies for livestock research and development.



Prototype of phantom box

### Achievement:

- Developed a new prototype of steel made phantom box which is being used in the Gynecology department.
- Developed snake catcher and snake hook.
- Developed a new prototype of external skeletal fixation for cattle to be used when its legs and joints are facture.
- Developed a prototype of dog wheel chair which is useful for handicap dogs or small animals.

# Centre for Excellence for Use of Space-based Technology

Centre for Excellence for Use of Space-Based Technology in Animal Science, RAJUVAS is now a Network Centre of IIRS-ISRO. The GIS mapping of 2 LRS, 3 ILFC, 14 Pashu Vigyan Kendra (PVK) and 2 colleges campus Jaipur and Udaipur was done. Data on migratory wild birds (raptors) were collected three times every month along with environmental temperature, humidity, wind direction and wind velocity and analyzed in order to see the effect of these parameters on the migration of wild raptors.

# 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.
- This centre has become a Network Centre of IIRS-ISRO. The live and interactive courses are available through internet without any cost to the users.
- Four Online Certificate course are conducted by experts from IIRS-ISRO and coordinated by this centre, RS & GIS Application (2-20 November 2020), Remote Sensing of Land Degradation (1-7 December 2020), Advance in SAR-Polarimetry & Interferometry (14-18 December 2020), Satellite based Navigation a Journey from GPS to Mobile Phone Platform (1-12 March 2021).
- The centre has conducted one online workshop on Space Technology and its Applications (11 January 2021).

# Centre for Studies on Wildlife Management and Health

Centre for Studies on Wildlife Management and Health (CSWMH) is a state government project sanctioned in 2012. The centre is working for improving health and management of wild animals, protection and conservation.

### Mandate:

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

### **Work Done:**

- This centre organised Five Days Online Training for Veterinary Officers entitled "Management Practices for Combating Avian Health Emergencies in Wetland Ecosystem in Rajasthan" 5<sup>th</sup> to 9<sup>th</sup> January, 2021.
- Three-day RAJUVAS E-certificate course was organized on Wildlife: Rescue Technique and Care for Veterinarians, Biologists and Forest staff. Total 123 participants attended the course.
- The centre has actively participated in the animal treatment camp organized by forest department, Govt. of Rajasthan from 25.01.2021 to 01.02.2021 to treat wild and village animals and birds. During this camp approximately 61 animals and wild birds were treated in collaboration with the Bikaner Zoo.

# Study of Migration Pattern of native wild birds at Jorbeer Conservation Reserve, Bikaner

During the reporting period, 17 different kinds of wild birds were seen in the reserve. Egyptian vulture, Cattle egret, House crow, Black Ibis, Imperial eagle, Long-legged buzzard, Punjab raven, Indian roller, Lagger falcon, Whiterumped vulture, Black-headed Ibis, Black-winged kite, Eurasian thick-knee, Common Kestrel, A Cuckoo, and Booted eagle were among the species.



# Livestock Feed Resource Management and Technology Centre Objective:

- Analysis and interpretation of feed resource availability so as to derive strategy for optimum use of available feed
  resource.
- The 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:-**

- Establishment of a "Golden Jubilee Forage Garden" at RAJUVAS was completed in year 2020. More than fifty
  improved fodder crop varieties were sown in Kharif and Rabi season and seeds of these varieties were also
  collected.
- A total of 109 Feed & fodder samples were analysed. To promote non-conventional feed resource such as Azola
  production as a highly nutritive feed for improved animal production, its culture was provided to 117 livestock
  owners.
- LFRMTC, Bikaner released a quarterly Hindi bulletin "Pashu Aahar Evam Chara Bulletin" for farmers' community.
- LFRMTC conducted seven on Campus farmer's training for livestock holders, progressive farmers and females Pashu Shakhi worker of NLRM, Bikaner. Total 210 persons were benefited in these trainings.







# Vaccinology & Biological Product Research Centre Objective:

- Evaluation of the effectiveness of commonly used vaccine candidates.
- Analyse new generation veterinary vaccines for their immunogenic potential.
- To devise strategies in the field of DIVA (differentiation of infected and vaccinated animals).
- To maintain a stock of bacterial type cultures for use in veterinary biological.
- Human resource development for use and maintenance of veterinary biological.
- To develop models of estimation of Vaccine Impact in animal population of Rajasthan.
- To formulate policy, communication and ethical issues related to vaccine production and their application.

### **Achievements:**

- Two complete specifications for patent were filed which is entitled "Novel primer sets for amplification of BLG gene", and "Novel primer sets, rapid test kit for detecting point mutation in booroola fecundity gene".
- CRISPR CAS9 mediated gene editing of pathogenic and genes involved in biofilm formation by Pseudomonas aeruginosa.
- A total of 56 pre- & post-vaccination serum samples were collected from Bikaner city for the evaluating efficacy of FMD vaccine.
- Examination of purity of poultry vaccine using Newcastle disease virus, Avian Infectious Bronchitis virus, chicken Adenovirus and chicken Astro virus specific primers.
- A total stock of 18 bacterial type cultures of E. coli, P. aeromonas, Brucella, Streptococcus for use in veterinary biologicals were maintained.

# 3. RKVY Projects:

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

### Objective:

- Developing Nodal Command Center for providing expert opinion, consultancy & recommendations on matters relating to Zoonotic diseases.
- Collection & analysis of field samples for investing zoonotic diseases.
- Area specific monitoring of zoonoses& its transmission etiology.
- Procurement of resources, chemicals, labwares etc.

### Achievement:

- CDSRZ, PGIVER, Jaipur providing expert opinion, consultancy & recommendations on matters relating to Zoonotic diseases.
- Field sampling done from various parts of Jaipur, Udaipur & Bikaner districts and were processed for the diagnosis of Brucellosis, T.B. & Para-T.B.
- An international webinar was conducted on one health approach for prevention & control of emerging zoonoses
   & rabies in India on the occasion of World Rabies Day.
- 3 days hands on training program has been conducted at CDSRZ for PG and PhD students under Azadi ka Amrit Mahotsav on molecular diagnostics techniques in which 25 students has been participated.
- 1 day hands on training has been conducted at CDSRZ for LSAs in which 30 LSAs has been participated.

# Establishment of Poultry Germplasm Multiplication Unit for Indigenous Poultry Objective:

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

# Progress:

- Civil works for establishment of germplasm multiplication unit near completion but not handed over by Director Works.
- Purchase of equipments and instruments is under process.

# Establishment of cattle feed processing units at various Livestock farms of the University Objective:

- To strengthen the existing livestock farms by providing consistent good quality of feed.
- To work as a local hub to address issues related to cattle feed processing.
- To demonstrate cattle feed processing to farmers to enhance entrepreneurship skills in cattle feed processing.

### Achievement:

Establishment of Mineral mixture plant and Cattle Feed Processing plant are under progress.

# Strengthening of Residential Accommodation at PGIVER

The construction work of I<sup>st</sup> Floor of Boys & Girls Hostel are completed and remaining works i.e boundary wall etc. is in progress. An amount of Rs. 11.31 Lacs expenditure of during financial year 2021-22 for purchases of Furniture and student amenities for these hostels and remaining amount of Rs. 28.69 Lacs are in Process.

# 2. ICAR Projects:

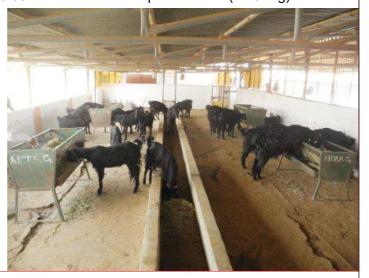
# AICRP on Genetic Improvement of Marwari Goats in Farmers' Flocks

## Objective:

- To assess the production performance of goat breeds in farmers flocks under village management system and improve the germplasm through selection.
- To evaluate the socio-economic status of goat breeders and the economics of goat production in farmers flock.
- To disseminate the pro-poor goat based technologies under field conditions and assessment of their impact on goat production.

### Achievement:

- 1750 adult does were registered from 76 goat farmers and covered 6 clusters of Marwari goats in breeding tract
  of this breed.
- Identification, pedigree and performance recording was done for all the animals.
- Twenty eight (28) 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 (2.62 kg) was improved by 16.08% over the baseline performance (2.257 kg).
- The mortality was reduced up to 1.52% in the registered flocks. The first kidding interval showed improved pattern and kidding rate was stable.
- Capacity building of 52 farmers in goat rearing has been carried out in three training.
- Around 34381 goats were covered under health coverage which included both prophylactics (55.32%) and curative (44.68%) measures during this financial year (2020).
- 30 Lunch box, 19 water bottles, 26 umbrellas, 99 mineral mixture and 19 measuring tapes were provided as a centric incentives to the registered goat keepers.





# All India Network Programme on Diagnostic Imaging and Management of Surgical Affections in Animals

# Objective:

- To develop devices, joint and limb prosthesis and surgical techniques for animals with orthopedic affections and paraplegia.
- To develop minimally invasive techniques and biomaterials for management of surgical affections in animals.
- To develop anaesthetic protocols for critically ill and high surgical risk patients.
- To develop tele-imaging diagnostic platform for Research, teaching and consultation.
- To develop e-resource and impart hands on training to field veterinarians and university teachers in the areas of diagnostic imaging and advanced surgical techniques.

## Achievement:

- Orthopaedic affections in 132 small animals were treated by internal fixation technique like SOP plating, elastic nailing, Intramedullary Pinning, Bone Plating, Interlocking Nailing and external fixation techniques like Splints, circular ESF, and linear ESF etc.
- Orthopaedic affections in 202 large animals were treated by Interlocking Nailing, Lag screw, indigenously
  fabricated splints, walker splints, POP/Fibercast, Linear and circular ESF.
- Orthopaedic affections in 15 wild animals and birds were treated by internal fixation technique and external fixation techniques.
- Cases of spinal injury in 12 canines were managed by rehabilitation by Dog Cart and 49 downer large animals by orthopaedic rehabilitation with slings and "Downer Animal Bay"
- Minimum invasive surgery (Ovariectomy) using Laparoscopy was done in 12 canines.
- Minimum invasive soft tissue surgery by diode LASER in canines was done for various surgical affections in 59
  cases.
- Minimum invasive soft tissue surgery by CO<sub>2</sub> LASER in canines was done for various surgical affections in 55 cases.
- Computed Tomography (CT scan) examination was performed in 24 clinical cases in dogs and cats affected with various disorders involving various regions of body.
- Ophthalmic affections were recorded and treated in 47 small and large animals for various ailments of eye
- Cataract surgery was performed in 7 cases using Phacoemulsification and extra capsular lens extraction technique.
- Electroretinography (ERG) was done in 10 canine cases of cataract, corneal ulcers, and opacities.
- Five days Online e-certificate course on "Diagnostic Imaging" was organised from July 20-24, 2020 in which total 121 participants were registered.
- Five days Online e-certificate course on, "Veterinary Orthopaedics" was organised from August 03-07 2020 in which total 81 participants were registered. Five days Online e-certificate course on, "Fundamentals of Veterinary Ophthalmology" was organised from March 15-19, 2021 in which total 100 participants were registered.



# Computed Tomography (CT scan)

Objective-Evaluation of CT imaging techniques in canines

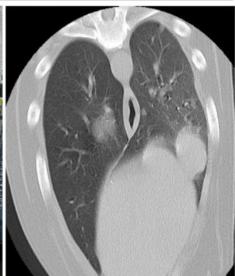
CT examination of different anatomical regions in dog

REGION	NO OF CASES
Head	04
Spine	03
Thorax	01
Extremities	03
Pelvis	07
Thoraco-Abdomen	06
Total	24

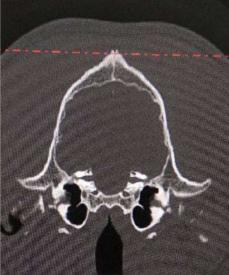














Section: Minimum Invasive Surgery



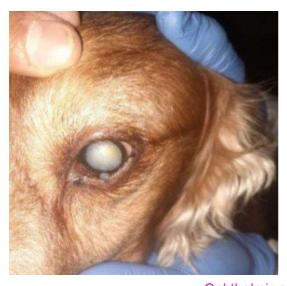
# A Clinical Study on Use of Diode LASER and Carbon Dioxide LASER for Various Soft Tissue Surgeries in Dogs

S. No.	LASER surgery removal/ resection	No. of Cases LASER
1.	Tumours/ warts	31
2.	Aural haematoma	8
3.	Testicles (Castration)	20
4.	Vasectomy	
5.	Uterus and ovaries (Ovario-hysterectomy and pyometra), By right flank method (Ovario-hysterectomy)	29
6.	Carpal hygroma	13
7.	Inter-digital tumour	
8.	Epulis	2
9.	Cystotomy	10
10.	Peri-anal fistula	1
	Total	114

# Section: Ophthalmology

Evaluation of diverse ophthalmic disorders for possible treatment

- 47 cases of various ophthalmic affections in small and large animals were recorded.
- Cataract surgery was performed in 07 cases either by Phacoemulsification (05 cases) or by extra capsular lens extraction (02 cases).
- Electroretinography was performed in 10 canine patients.





Ophthalmic affections in Dog



# Diverse ophthalmic disorders in different species of animals

Animal	Cattle	Buffalo		Dog	Cat	Horse	Camel	Rabbit	Birds	Total
Ophthalmological Affection			Sheep							
Blepharitis				2					1	3
Blindness of Unknown origin				2						2
Cataract				7						7
Chemosis	2	1								3
Cherry eye				3	1					4
Congenital Blindness									2	2
Conjunctivitis			1	5	1	2				9
Corneal Laceration							1			1
Corneal Opacity	1		3					1		5
Corneal Ulcer			1	3						4
Dermoid	1			1						2
Eyelid laceration	1		1	1						3
Glaucoma				1						1
Iris prolapse										
Keratitis/corneal edema			1							1
Total	5	1	7	25	2	2	1	1	3	47

# Orthopaedic Section

# Diagnosis and management of Orthopaedic affections in Small and Large Animals Orthopaedic Affections

Bone Species	Humerus	Radius & ulna	Meta carpal	Femur	Tibia & fibula	Meta tarsal	Phalanx	Mandible	Others	Total
Cattle	4	4	13	12	14	14	3	3	4	71
Buffalo	1		3	17	5	5			2	33
Sheep & Goat		6	38	4	12	14	15		3	92
Camel		1		1				4		6
Dog	16	21	7	38	21		1	3	9	116
Cat				5				1	1	7
Horse			1	2	3	1	1		1	9
Rabbit		1		2	2		1		3	9
Birds		2	1	1	1	1			1	7
Wild Animals	1		4		2				1	8
Total	22	35	67	82	60	35	21	11	25	358







# 1. Revolving Fund Project

# Preservation and articulation of bones of different species of animals to enhance the teaching quality of Veterinary Education

# Objective:

- Creating the interest and generosity in learning the anatomical structures among the students.
- Students are to be instigated for involvement for anatomical studies.
- Enrichment of Department of Anatomy and Histology, College of Veterinary and Animal Science, Navania at the cost of this project.

### Achievement:

- Supplied the produce costing of Rs. 2,24,991.00 from following clients:
  - Animal Husbandry Polytechnic, Hassan (Karanatka).
  - LRS, Dug and Bojunda.
  - AHDP Institutions of Rajasthan State
  - Apollo Veterinary College & PGIVER, Jaipur.
  - Animal Husbandry Polytechnic, Chamarajnagar (Karanatka).
  - Mewar University F/o Vety. Sciences, Chittourgarh
  - SubhadraVidyapeeth, Ganwada, Sidhhpur, Gujrat-384110
  - . Bihar Animal Sciences University, Patna (Bihar).
  - Khalsa College of Veterinary and Animal Sciences, Amritsar (Punjab).



# Preparation and Supply of ORS for Animals

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

## **Achievement**

Income generated during 2020-21 was 9500 rupees.

### Pilot Project on Alternate Energy Generation through Biogas based Electricity Production

This project 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 conservation of it in to bio-energy and bio-fertilizer.

### Objective:

- 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 greenhouse 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 biowaste.
- To meet the hand with clean India campaign by effective system of bio-waste disposal in college campus.

## **Achievement:**

- Cooking gas supply to girl's hostel and College department's laboratories.
- Electricity production of 30 kva electricity with two hrs continuous power backup for three departments and hostels of the college.



- Green fodder production during period was 2 tons.
- Nine trainings (total 270 farmers) on scientific manure management have been conducted.
- Income generation in the financial year-

S. No.	Item	quantity	Income (Rs in lakh)
1	Vermi compost	50 tons	2.74014
2	Agriculture produce	-	1.13284
3	Electricity	646 KWH	.05071
	Total	3.92369	





Vermi compost unit

Fodder Cultivation

Animal Science students

# Processing and marketing of Milk and Milk products, CVAS, Navania, Vallabhnagar, Udaipur Objective:

- 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 youth.

## **Achievements:**

Income generated during 2020-21 was 29022 rupees.

## 1. Any other project

# Android Educational Mobile Application for Veterinary & Animal Sciences and Kiosk Information System for Farmers / Livestock Owners (M-RAJUVAS)

M-RAJUVAS is the first Android Educational Mobile Application in India for both Veterinary Students and Livestock owners and is available for free download at the (Google) Play store. Application has been downloaded by more than 5000 people plus (5K+) till now and having current rating 4.9.





# Objective and Achievement:

- Developed the IOS version (Apple) of M-RAJUVAS educational mobile application in year 2020-21.
- Dignitaries Visits:

S.No.	Name of Dignities	Designation
1	Dr. Indrajit Mathur,	Ex. Director Extension & Coordinator-ATIC, MPUAT, Udaipur
2	Sh. Pathan Salim Khan	Bh. Municipal School, Jamalpur, Ahemdabad
3	Shri Chandrabhan Singh Akya	MLA, Chittorgarh
4	Dr. R.K.Joshi	Dean, CVAS, Navania, Vallabhnagar
5	Shri Indra Singh Sancheti	Deputy Director, ATMA, Chittorgarh
6	Shri Badri Lal Jat	Chairman, Saras Dairy, Chittorgarh
7	Dr. Balwant Meshram	Associate Professor, Dept. of Vet. Anatomy, CVAS, Navania, Vallabhnagar
8	Dr. PradeepAabusariya	Assistant Professor, Dept. of Vet. Surgery, CVAS, Navania, Vallabhnagar
9	Dr. P.C. Bhatnagar	Sr. Subject Matter Specialist, AH, VBKVK, Badgaon, Udaipur
10	Sh. Ashok Kumar Poonia	NSC, Chittorgarh
11	Ms. MainaKumariTaili	Seed Programme Inspection Officer
12	Chief General Manager, General Manager and District level officers	NABARD

 Revenue Generation by Directorate of Research through LRS: 18.04 Crore.



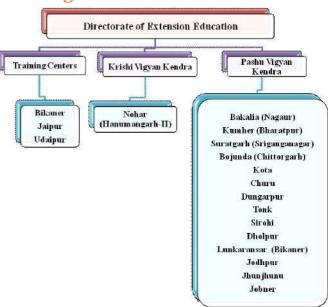


# 6. Extension Education

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 livestock and poultry related technologies, providing scientific trainings, advisories and forecasting of disease outbreaks and their prevention for the benefit of farmers. There are three main activities of Rajasthan University of Veterinary and Animal Sciences, Bikaner that is education, research and extension. Out of these, Extension Education helps farmers to increase livestock productivity through adoption of innovations for better economy. Extension Education is one of the pillar of the University and working for the technology transfer to the farming communities through its various programmes. The main function of Directorate of Extension Education is to plan, coordinate, organize and guide the extension education programmes in the University and to ensure efficient working of the extension education activities in close coordination with the development departments, voluntary and private organizations. Moreover, this Directorate encourages, guides and supports the extension education centers of the University to organize different extension education activities for the benefit of the farming community. Under the aegis of Directorate of Extension Education, the work of the field extension is mainly carried out through University's colleges, Krishi Vighyan Kendra (KVK), Pashu Vigyan Kendras (PVKs) and centres sanctioned under State plan for the livestock, dairy, poultry and fish farmers. These centers imparting skill based training for strengthening the entrepreneurial activities in the rural areas.

Therefore, the role of Directorate is two folds, i.e. transfer of technologies from scientists to the ultimate users, i.e. farmers through field functioneries and to find out the problems of the field to be passed on to various research divisions of University for solutions. 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

# Organizational Structure



organisations. Use of traditional and modern technology transfer for effective outreach is the prime objective of the University.

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, are training, advisory and communication.

Directorate Extension Education organized 613 online trainings, 88 ATMA or other offline trainings and 70 trainings of SC SP of ICAR, New Dehli during this year through DEE, PVK and KVK. Total 17393 farmers were participated and benefited. 45 trainings were also organized by other centres of University and 1281 farmers were participated and benefited.

# **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

- Pashu Vigyan Kendra have been functional at Bakalia (Nagaur), Suratgarh (Sri Ganganagar), Kumher (Bharatpur), Bojunda (Chittorgarh), Malpura (Tonk), Dungarpur, Sirohi, Kota, Ajmer, Churu, Dholpur, Loonkaransar (Bikaner), Jodhpur, Jhunjhunu and Jhalawar and Jalore are under construction.
- A Krishi Vigyan Kendra (KVK) at Nohar (Hanumangarh-II) has been established and functional.
- Radio Programme "Dhine Re Batyaa" for livestock farmers form 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, PVKs and KVK.
- DEE regularly organizes e -Pashupalak choupal for benefit of farming community.
- Animal treatment camps on tacking infertility are organizing regularly.
- DEE is regularly brining out monthly publication "PashuPalanNayeAaayam".
- 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 (Hunumangarh) 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, kisan mela, kisan gosthi, 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 knowledge and new technologies to the farmers besides updating their skill and competence.

# **Objectives:-**

- Organize front line demonstrations on proven technologies to generate production data and feedback information.
- Conducting on farm testing for identifying technologies in terms of location specific sustainable land use system.
- Organize short term and long term vocational training courses in agricultural and allied sectors for farmers and rural youths with the emphasis on learning by doing for higher production on farms and generating self employment.
- Organize trainings to update the extension personnel with emerging advances in agricultural research on regular basis.
- Work as resource and knowledge centre of agricultural technology for supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district.

# Pashu Vigyan Kendras:

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 the ageis of the Principal Investigator, 15 Pashu Vigyan Kendras are working in different districts of Rajasthan. PVK 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. Pashu Vigyan kendras should create not only a bridge between livestock owners and scientists at the university but it rather should be able to become a very much accessible and very responsive and modern 'livestock knowledge exchange'- amongst livestock owners, livestock entrepreneurs, other stakeholders, state government departments and agencies with various organs of the 'Directorate of Extension Education'. 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. Pashu Vigyan Kendra has been implemented to promote the direct interface of a scientist with the farmers to hasten the Lab to the Land transfer of latest technologies. 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.

PVKs imparting skill based trainings for strengthening the entrepreneurial activities in the rural areas. The PVKs 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. 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. PVKs are also providing constultancy 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 PVKs laboratory.

Thus, four principal functional areas of the PVKs are trainings, advisory services, transfer of technologies and diagnostic facilities. The Pashu Vigyan Kendras are headed by the Principal Investigator, PVK, RAJUVAS, Bikaner.

Pashu Vigyan Kendra at Bakalia (Nagaur), Suratgarh (Sriganganagar), Kumher (Bharatpur), Bojunda (Chittorgarh), Churu, Avikanagar (Tonk), Dungarpur, Sirohi, Kota, Ajmer, Dholpur, Lunkaranser (Bikaner), Jodhpur, Jhunjunu and Jobner have become operational and Jhalawar and Jalore are under construction.



### **Mandate**

The mandate of Pashu Vigyan Kendras (PVK) 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.

# Organization of training programmes by DEE, PVK and KVK

# 1. Training Programmes by Directorate of Extension Education

Directorate of Extension Education organized three training on "Organic Animal Production" under Scheduled Caste Sub Plan (SC-SP) of ICAR, New Delhi. Total 90 farmers of University Social Responsibility adopted village Jaimalsar were participated and benefitted.



The trainings are regularly imparted as an extension service to the farmers on all aspects of agriculture, horticulture, home science and animal husbandry. Total 57 training programmes were organized by KVK and 1887 farmers participated and benefited.



Particulars	No. of Courses	Male	Female	Total participants
Farmers & farm women	32	525	209	734
Rural youths	3	76	1	77
Sponsored Training	5	91	59	150
Online programme	14	724	52	776
Total	54	1416	321	1737

### 3. Training Programmes by Pashu Vigyan Kendras:

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. In present scenario of COVID-19, University has changed its mode of training and now University is organizing training programmes via digital mode. Total 599 online, 53 ATMA sponsored and 62 trainings of SC-SP



scheme of ICAR, New Dehli were organized and 15566 farmers were participated and benefited.



# A. Online Training Programmes organized by Pashu Vigyan Kendras

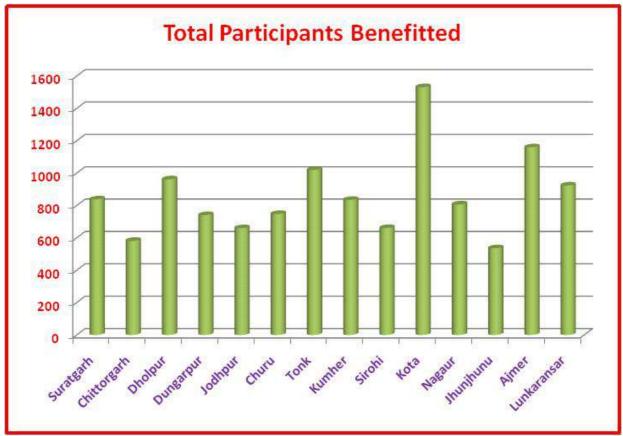
							No. c	of Partio	cipants	5		
S. No.	Pashu Vigyan Kendra	Online Training		Male		Female			Total			Grand
			sc	ST	Other	sc	ST	Other	sc	ST	Other	Total
1	Suratgarh	37	56	2	754	7	0	19	63	2	773	838
2	Chittorgarh	39	72	16	479	7	0	8	79	16	487	582
3	Dholpur	47	0	0	959	0	0	3	0	0	962	962
4	Dungarpur	38	86	204	427	6	4	14	92	208	441	741
5	Jodhpur	38	15	2	592	3	0	48	18	2	640	660
6	Churu	36	292	0	455	0	0	1	292	0	456	748
7	Tonk	38	11	2	732	5	1	99	46	7	967	1020
8	Kumher	47	112	4	702	0	0	17	112	4	719	835
9	Sirohi	39	142	139	369	2	2	7	144	141	376	661
10	Kota	63	52	52	1321	0	8	99	52	60	1420	1532
11	Nagaur	45	358	0	416	1	0	32	359	0	448	807
12	Jhunjhunu	31	35	19	463	5	2	12	40	21	475	536
13	Ajmer	58	90	5	649	18	6	143	132	19	1009	1160
14	Lunkaransar	43	39	0	878	0	0	7	39	0	885	924
	Total	599	1360	445	9196	54	23	509	1468	480	10058	12006

**Online Training Programmes organized by PVKs** 





# Participants Benefitted by Online Trainings organized by PVKs



# B. ATMA SponoredTrainings organized by PVK:

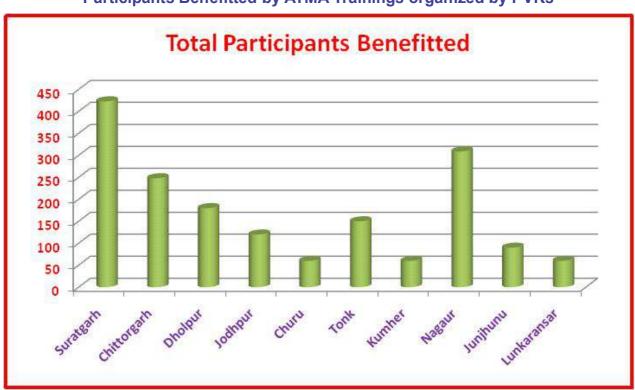
				No. of Participants									
S. No.	Pashu Vigyan Kendra	No. of Training		Male			Female			Total			
		9	SC	ST	Other	SC	ST	Other	SC	ST	Other	Total	
1	Suratgarh	10	93	0	235	77	0	18	170	0	253	423	
2	Chittorgarh	9	90	20	46	57	19	16	147	39	62	248	
3	Dholpur	6	22	0	78	49	0	31	71	0	109	180	
4	Jodhpur	4	0	0	84	0	0	36	0	0	120	120	
5	Churu	2	25	0	15	15	0	5	40	0	20	60	
6	Tonk	5	49	6	95	0	0	0	49	6	95	150	
7	Kumher	2	21	0	39	0	0	0	21	0	39	60	
8	Nagaur	10	165	0	129	5	0	10	170	0	139	309	
9	Junjhunu	3	0	0	90	0	0	0	0	0	90	90	
10	Lunkaransar	2	0	0	34	0	0	26	0	0	60	60	
	Total	53	467	26	857	203	19	142	670	45	999	1700	







Participants Benefitted by ATMA Trainings organized by PVKs





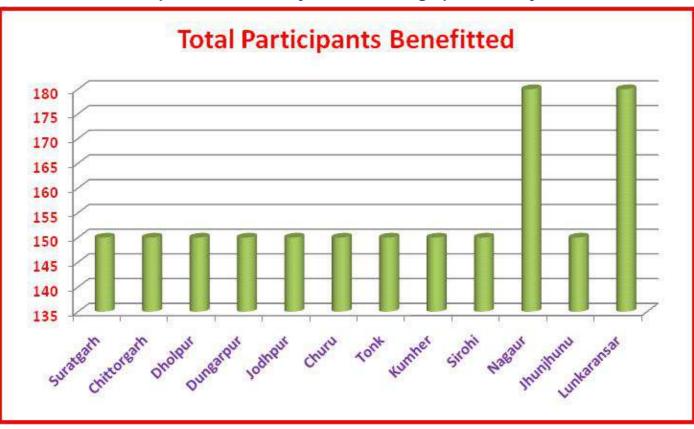
# C. SC-SP Trainings Sponsored by ICAR:

	- · · · · · · ·	00.00					No. of F	Participa	nts			
S. No.	Pashu Vigyan Kendra	SC-SP Training	Male			Female			Total			Grand
145.	rtenara	Hummig	SC	ST	Other	SC	ST	Other	SC	ST	Other	Total
1	Suratgarh	5	63	0	0	87	0	0	150	0	0	150
2	Chittorgarh	5	90	0	2	30	0	28	120	0	30	150
3	Dholpur	5	<b>7</b> 9	0	0	71	0	0	150	0	0	150
4	Dungarpur	5	79	0	0	71	0	0	150	0	0	150
5	Jodhpur	5	0	0	70	0	0	80	0	0	150	150
6	Churu	5	110	0	40	0	0	0	110	0	40	150
7	Tonk	5	82	0	0	68	0	0	150	0	0	150
8	Kumher	5	122	0	0	28	0	0	150	0	0	150
9	Sirohi	5	122	0	0	28	0	0	150	0	0	150
10	Nagaur	6	154	0	0	26	0	0	180	0	0	180
11	Jhunjhunu	5	0	0	113	0	0	37	0	0	150	150
12	Lunkaransar	6	0	0	95	0	0	85	0	0	180	180
	Total	62	901	0	320	409	0	230	1310	0	550	1860

**SC-SP Training Sponsored by ICAR** 



#### Participants Benefitted by SC-SP Training Sponsored by ICAR



#### 4. Training programmes organized by other Centers of RAJUVAS:

A total of 45 training were organized by various state plan centres and Livestock Research Station, Bikaner in year. Total 1281 participants benefitted.

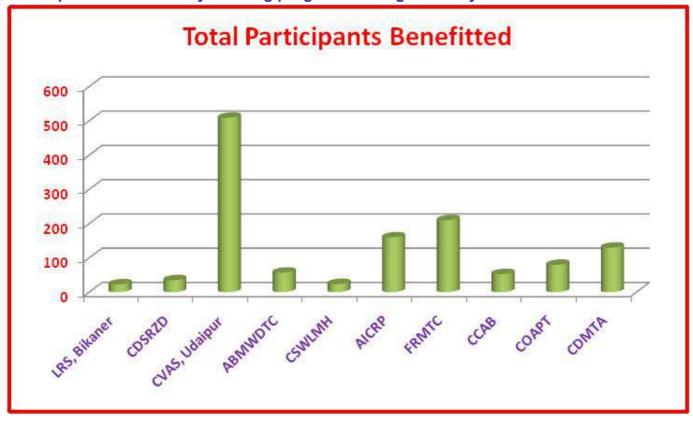
	No. of	Partic	cipants	<b>-</b>
Centre/Scheme/Project		Male	Female	Total
Livestock Research Station, Bikaner	1	23	0	23
Centre for Diagnosis, Surveillance & Response of Zoonotic Diseases	2	0	0	35
College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur	16	356	153	509
Animal Biomedical Waste Disposal Technology Centre, Bikaner	2	0	0	57
Centre for Studies on Wild Life Management & Health	1	22	2	24
AICRP on Goat Improvement, Livestock Research Station, Vallabhnagar	5	83	<b>7</b> 7	160
Livestock Feed Resource Management and Technology Centre, Bikaner	7	0	0	210
Centre for Conservation of Animal Biodiversity, Bikaner	2	0	0	53
Centre For Organic Animal Production Technology, Bikaner	3	0	0	80
Center for Disaster Management Technology for Animals, Bikaner	6	0	0	130
Total	45	484	232	1281







Participants Benefitted by Training programmes organized by other Centers of RAJUVAS



#### 5. Disease Diagnosis Facilities:-

To provide services for animal disease diagnosis and treatment, testing of feed & fodder as well as animal products Lab facilities was established at all Pashuvighyan Kendras. Total 896 samples were analysed and 624 farmers were benfitted during the year.

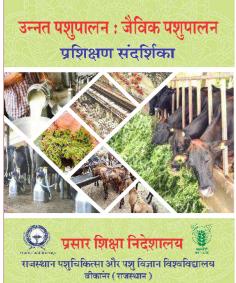
Laboratory Diagnosis	Total Sample	Total Beneficiaries
Blood Sample	137	137
Milk Sample	306	223
Faecal Sample	341	190
Urine Sample	44	44
Skin Scrapping	68	30
Total	896	624

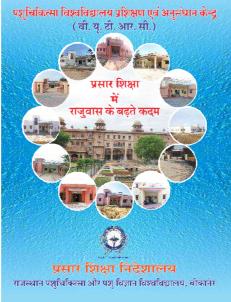
#### **Publication of Monthly Hindi Bulletin**

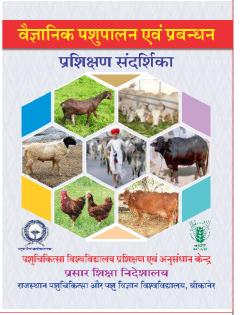
#### "Pashu Palan Naye Aayaam":

"Pashu Palan Naye Aayaam" 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 of animal husbandry and agriculture sector, disease fore-casting 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 1000 copies are 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. Two training manuals were also published by DEE, RAJUVAS, Biakner on Unnat pashupalan-Javaik pashupalan and scientific animal husbandary and management.









#### Exhibitions:

Two exhibitions were organized by Pashu Vighyan Kendra, Kota at Veterinary Poyclinic, Kota and Village-Arjunpura during Pashu Kalyan Pakhwara 14-31 January, 2021 and Progressive Farmers' Training Programme (in collaboration with AHD and Reliance Foundation), respectively.

S. No.	Event	Place	Date
1.	Pashu Kalyan Pakhwara 14-31 January, 2021	Veterinary Poyclinic, Kota	30.01.2021
2.	Progressive Farmers' Training Programme (in collaboration with AHD and Reliance Foundation)	Village-Arjunpura	12.03.2021





#### Important meeting/Seminar/Council

#### A. Seventh Meeting of Extension Education Council:

The 7<sup>th</sup> meeting of Extension Education Council was held on 23 March, 2021 under the Chairmanship of Vice-Chancellor Prof. Vishnu Sharma. Prof. R.K. Dhuria, Director Extension Education presented the agenda of the 7<sup>th</sup> Extension Council Meeting and also presented the major achievements of the Pashu Vigyan Kendra during the year 2019-20 and 2020-21. University Deans-Directors, all the member of Extension Education Council, Invitees and nominated members attended the meeting. Several agendas related to extension activities in the state were discussed and resolved in the meeting.



7<sup>th</sup> Scientific Advisory Committee Meeting of KVK, Nohar, was organized under the Chairmanship of Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS, Bikaner on 14<sup>th</sup> December, 2020. In this meeting, Annual Progress Report of KVK was presented and annual action plan was discussed.

C. An online workshop on cleanliness action plan under the joint aegis of MGNRC, DHRD, GOI and Social Development and Participation





Cell of RAJUVAS

An online workshop on cleanliness action plan was organized on 31 July, 2020. Vice-Chancellor Prof. Vishnu

Sharma emphasized that the universities covering all aspects of greenery, water conservation, sanitation and



solid waste management, energy conservation and solar energy utilization. MGNREC Officer P. Sudhir Kumar gave detailed outline of the work of the work to be done under the cleanliness action plan.

#### D. Rashtriya Go Samriddhi Sammelan

Atwo day Rashtriya Gau Samridhi Sammelan organised on 26–27 December 2020 through virtual mode under the joint aegis of the Social Development and Participation Cell, RAJUVAS, Bikaner and Rajasthan Gau Seva Parisad. In the meeting, useful dialogue was made on the importance of cow breeding, manufacture



and marketing of organic manure and pesticides from cow dung and cow urine. This programme also broadcasted live on Facebook page of RAJUVAS and more than 4000 people viewed the programme.

#### E. Interactive Meeting of District Managers of NABARD and Scientists of various Institutes

Interactive meeting of scientists of RAJUVAS and ICAR Institutes with District Development Managers of NABARD of Rajasthan was conducted on 12 February 2021 at RAJUVAS, Bikaner on Animal Husbandry and Rural Development. In the meeting, various measures for linking NABARD schemes for research and strengthening of animal husbandry in the state and increasing farmers income. It was discussed that NABARD can play an important role in entrepreneurship development by capacity building in the multi-utility sectors of dairy, sheep and goat farming for livestock owners and students.

#### F. Webinar on Corona and Vaccination Awareness

A webinar on the topic "Don't hesitate: Vaccinate under Corona Vaccination Awareness programmes" was organized on 8 May, 2021. Dr. Sanjay Kochhar discussed on various aspects of corona outbreak, symptoms of infection, preventive measures, benefits of corona vaccination, etc.

#### G. Interaction on New Education Policy "Veterinary Education: Prospects and Possibilities"

To commemorate the completion of eleven years of the establishment of the Veterinary University, an online discussion was organized on 18 May, 2021, on the topic "New Education Policy, Veterinary Education: Scenario and Possibilities". "RAJUVAS E-Bulletin", "Animal Husbandry New Dimensions", "Animal Feed and Fodder Bulletin" and "P.G. Regulation-2021" were released. A short film on RAJUVAS's progress was also screened. This discussion was watched and heard by about 15000 people on University Facebook page.

#### H. Webinar on Combat Stress with Positivity

A webinar was organized on Combat Stress with Positivity on 2 June, 2021. Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS, Bikaner addressed the students and emphasized that teamwork, contribution to the society, mutual harmony and attachment towards the organization are essential in the present time. Dr. Gaurav Bissa Motivational Speaker was the keynote speaker of webinar.



#### Activities under MGMG

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 127 villages has been covered and activities carried out during the year 2020-21. Teams have conducted 56 visits to villages, 32 interface meetings, 4 demonstrations related to animal husbandry and 71 training programmes covering



animal nutrition, breeding, health care and reproduction, 3425 Mobile based advisories, 898 Literature support provided and 896 General Awareness created aspects in adopted villages. In these activities total 26127 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 impartarting the latest information on animal husbandry and agriculture to the farmers through

S. No.	Activity Name	No. of Activities Conducted	No. of Farmers Participated/Benefitted
1	Visit to village by teams	56	1150
2	Interface meeting/Gosthies	32	870
3	Trainings conducted	71	409
4	Demonstrations conducted	4	90
5	Mobile based advisories (No.)	3425	11951
6	Literature support provided	898	8820
7	General Awareness created	896	2813
8	Input Support provided	3	24
	Total	5385	26127





#### 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 is broadcasted from all the 17 Aakashwani Kendras of Rajasthan for half an hour from 5.30 PM to 6.00 PM on first Thursday of every month. The sponsored programme is entirely based 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 2020-21, total 10 programmes of "Dhine Re Batya" were broadcasted through 17 Aakashwani Kendra of Rajasthan.



S. No.	Radio Talk	Topics	Date
1	Prof. (Dr.) Vishnu Sharma, Vice-Chancellor, RAJUVAS, Bikaner	Rising Aspects of Animal Husbandry in the State	18-06-2020
2	Prof. R.K. Singh, Dean, CVAS, Bikaner	Opportunities in Veterinary Education	16-07-2020
3	Dr. H.K. Narula, I/c Head & Principal Scientist (Animal Genetic & Breeding), Arid Region Campus, Bikaner	More income by Scientific Sheep Farming	20-08-2020
4	Dr. Praveen Bishnoi CVAS, Bikaner	First aid in various diseases of animals	17-09-2020
5	Dr. Rajni Joshi CVAS, Bikaner	Zoonotic Disease from animal to humans	15-10-2020
6	Dr. Amit Choudhary CVAS, Bikaner	Postpartum diseases in animals and their treatment	19-11-2020
7	Dr. Mahendra Tanwar CVAS, Bikaner	Surgical disorders of stomach and treatment in Cattle & Buffalos	17-12-2020
8	Dr. B.N. Shringi CVAS, Bikaner	Major Avian diseases, causes & prevention	21-01-2021
9	Dr. Pramod Kumar CVAS, Bikaner	Effective ways to increase animal production through proper breeding management	18-02-2021
10	Dr. Deepika Dhuria CVAS, Bikaner	Clean milk production also prevents diseases	18-03-2021

#### **Any New Initiatives**

#### a. Contribution in Governor's Relief Fund

Rajasthan University of Veterinary and Animal Sciences, Bikaner contributed Rs. 51.00 Lakh for COVID-19 Prevention & Vaccination. This contributed voluntarily donated by Affiliated Veterinary Colleges, AHDP Institutes and University.



#### b. RAJUVAS e-Pashupalak Choupal

RAJUVAS e-Pashupalak Choupal for the livestock owners of the state was initiated by the Directorate of Extension Education on the occasion of 151 Birth Anniversary of Mahatma Gandhi. Total 11 e-Pashupal Choupals for the livestock owners of the state was organized by provide online guidance and suggestion to the farmers on foot and mouth disease in animals, mastitis in animals, artificial insemination, poultry farming as a profitable business, clean milk production, pica disease, advancement in sheep farming, silage: boon for dairy farming, throat disease, problem of repeat breeding and importance of green fodder. These e-Pashupalak Choupal was telecasted II<sup>nd</sup> and IV<sup>th</sup> Wednesday of every month on official facebook page of RAJUVAS & DEE and more than 45000 people viewed the programme.



#### c. Farmers Advisory through Whatsapp Groups

Pashu Vigyan Kendras (PVKs) located in various districts of Rajasthan initiated a unique programme by creation of Whatsapp Groups for providing livestock advisory to the farmers in Corona pandemic. Pashu Vigyan Kendra, created 84 Whatsapp groups and provided advisory among the farmers related to animal husbandry. More than 16000 farmers were got added in these groups and benefitted. Along with advisories through whatsapp group, telephonic consultancy was also provided to farmers.

#### d. Intensive Plantation Drive on Independence Day

An intensive plantation drive was organized in the University Bikaner Campus as well as Pashu Vigyan Kendras as per the directives of Hon'ble Chancellor and Governor of Rajasthan sh. Kalraj Mishra. Around 800 saplings of different species were planted in various Pashu Vigyan Kendras and Krishi Vigyan Kendra, Nohar (Hanumangarh-II) in Rajasthan.



KVK, Nohar (Hanumangarh-II)

# TIGH CICE NAME OF THE RESTREET OF THE RESTREET

Pashu Vigyan Kendra, Kota

# ACTIVITIES UNDER UNIVERSITY SOCIAL RESPONSIBILITY

The Hon'ble Governor of Rajasthan has taken up the initiative of adoption of a village by every State University in Rajasthan for developing Smart Village with the purpose of ensuring that it becomes a model village where all the schemes of Central Government and State Government are effectively implemented and dovetailed with innovative projects initiated by respective universities. In this regard, RAJUVAS,

Bikaner has adopted three villages of Bikaner district from 2015 to till date.

#### Diayan Village:

Establishment of Information centre and village library, Installation of Solar panels in School Building, Construction of Rain water harvesting system and water tank in school, Construction of hall in school with assistance of District Collector office, Construction of village pond with partial assistance of *Zila Parishad*, Bikaner, Establishment of Sub Centre by State





Department of Animal Husbandry, Electrification of the school building, Installation of the canal water pipe line by PHED were major infrastructural developments. 32 Gosthies, 19 Medical Health camps, 10 Training programmes, 4 Animal Health Camps, 03 Ayurvedic Medical Camps, 05 cleanliness awareness programmes and 03 plantation drives were organised.

#### Jaimalsar Village:

The second adopted village is Jaimalsar of Bikaner Tehsil. Establishment of Computer Literacy Centre, renovation of old pond, Sewan grass plantation, Skill development Programmes, Animal health camps, plantation, Ayurvedic Medical camps, Mask & Sanitizer distribution were major activities.



#### Organisation of Gosthies

Three goshties were organized on COVID-19 awareness, skill development and swachhata on 24/04/2020, 07/09/2020 and 20/10/2020 at adopted village Jaimalser, respectively. Total 38 farmers participated in these gosthies.

#### Training Programmes:

Four two days training programmes were organized under SC-SP scheme of ICAR, New Dehli on Unnat pashupalan-Javaik Pashupalan. Total 117 farmers were participated and benefited. Certificates were also distributed to the participants.





#### **Ayurvedic Health Camp**

An Ayurvedic Health Camp was organized on 18 June, 2020 at Gram Panchayat Bhawan of Jaimalsar village with proper COVID-19 guidelines. Ayurvedic Kadha was prepared and distributed amoung 500 villagers to boost up the immunity against COVID-19 and other infections. Buildings of Govt. Sr. Sec. School, Primary Health Centre, Gram Panchayat Bhawan and Choupal of village Jaimalsar were sanitized by spray of Sodium Hypochlorite solution, 150 Masks and 200 Soaps were also distributed among the rural people.



#### **Plantation Drive:**

A plantation drive was organized in village Jaimalsar on 28 July, 2020. 1001 plants were distributed among the villagers under "Ek Ghar-Ek Paudha Abhiyaan".





#### Renovation of pond in village Jaimalsar

An already established old pond in village Jaimalsar was renovated by the university with the assistance of local people and Gram Panchayat from 30 July, 2020 to 1 August, 2020. Local people, *Gram Panchayat* & MNREGA laborers actively participated in this activity.



#### Establishment of Computer Saksharta Kendra

A Computer Saksharta Kendra has been established in the Gram Panchayat Bhawan Campus at village Jaimalsar on 29 August, 2020. Initially forty eight school children have been enrolled and they will be made aware about computer literacy for minimum of fifteen days period.



#### Senior Citizen Campaign

The Senior Citizen campaign was organized in which forty senior citizens were made aware about



importance of cleanliness, hygienie and health measures especially in this era of COVID-19. Their oxygen saturation level, temperature and blood pressure were checked.

#### Distribution of Bucks and Vaccination Drive

Under skill development activity 6 bucks of pure Marwari breed were distributed by AICRP to registered goat breeders for breed improvement. Total 500 goats were vaccinated against Enterotoxaemia.

#### **Ayurvedic Health Camp:**

An Ayurvedic Health Camp was organized in collaboration with Department of Ayurveda, GoR, Bikaner on 29.12.2020. In this camp, 90 patients were treated and advised about various diseases. Ayurvedic Kadha was also prepared and distributed among 400 villagers to boost up the immunity against COVID-19 and seasonal infections.



#### **Adult Literacy Programme**

An Adult Literacy Programme was organized in collaboration with Govt. Senior Secondary School, Jaimalsar, Department of Education, GoR, Bikaner on 28 January, 2021. In this Programme, School teachers and students of class 12<sup>th</sup> were participated. All the students took resolution for eliminating illiteracy.







#### Cleanliness Drive:

A Swachhta Gosthies were organized on 27 February, 2021. In these Programmes, school teachers, post graduate students and students of class 9 & 11 were participated. Swachhta Awareness Rallies were also organised on these occasion to motivate and make aware the villagers about hygienic measures.



#### Nasha Mukti Sangosthi:

A Nasha Mukti Sangosthi was organised at Primary Health Centre of Jaimalsar village on 31 March, 2021. Villagers made aware about harmful effects of addiction on their health, family and society. A good number of villagers participated in the Sangosthi.



#### Garhwala Village:

The third adopted village is Garhwala of Bikaner Tehsil. Ayurvedic Medical camps, Mask & Sanitizer distribution, swachhta rally, De-addiction camp were major activities.

#### Cleanliness Drive

A Swachhta Gosthies was organized on 23 February 2021. In these Programmes, school teachers, post graduate students and students of class 8 to 10 were participated. Swachhta Awareness Rallies were also



organised on these occasion to motivate and make aware the villagers about hygienic measures.

# Coordination Committee Meeting of Garhwala village under USR

A meeting of the Coordination Committee was held on 16 March, 2021. All the Government departments have to contribute their specific role for overall development of Garhwala village. According to it, infrastructure development, zilla parishad, education, agriculture, health, PHED, sanitation, entrepreneurship development and self-employment programmes as well as public awareness works are required to be initiated according to the needs of the village.



#### Nasha Mukti Sangosthi

A Nasha Mukti Sangosthi was organised at Garhwala village on 27 March 2021. Villagers were made aware about harmful effects of addiction on their health, family and society. A good number of villagers participated in the Sangosthi.





## 7. Dignitaries Visit

# Excursion of MGSU Vice-Chancellor Prof. V.K. Singhat RAJUVAS

Prof. V. K. Singh, Vice-Chancellor of Maharaja Ganga Singh University visited RAJUVAS on 17<sup>th</sup> August, 2020. Vice-Chancellor Prof. Vishnu Sharma welcomed and informed about the organization, administration and teaching, research and extension activities carried out at RAJUVAS. Prof. V.K. Singh interacted with Dean-Directors of the RAJUVAS and made discussion on different aspects.



#### Visit of Group Commander at 1 Raj R&V, Sqn NCC, Bikaner

NCC Group Commander of Headquarters, Jodhpur Col. M.S. Mahar visited 1 Raj R&V, Sqn NCC, Bikaner on 11<sup>th</sup> September, 2020. Col. Mahar also honoured the cavalry cadets who joined the parade of New Delhi on Republic Day. The commanding officer of the squadron, Col. P.P.S. Grewal made the group commander aware of all the activities of the unit by giving a power point presentation. Col. Mahar also inspected the horse line, office and store and interacted with the NCC cadets. Lt. Dr. Sunita Chaudhary coordinated the inspection work.



#### DIG, BSF Bikaner Sector Visited RAJUVAS

DIG Border Security Force, Bikaner Sector, Mr. Pushpendra Singh Rathore have made formal visit at RAJUVAS on 18<sup>th</sup> September 2020. Vice-Chancellor Prof. Vishnu Sharma welcomed and informed about the teaching, research and extension activities carried out by the University in various districts of Rajasthan. Mr. Rathore also visited Centre for Disaster Management Technology for Animals and appreciated the facility and work of centre i.e. trainings, fire safety cattle hut and disaster management, air conditioned ward for heatstroke and burn cases.



#### Visit of NABARD Managers

The 25 District Managers of NABARD visited at dairy unit, poultry farm and clinic of RAJUVAS on 13<sup>th</sup> February2021. Prof. R.K. Dhuria, DEE, RAJUVAS said that under the leadership of NABARD General Managers T. Venkat Krishna and Kuldeep Singh and Deputy General Manager Indu Rathorea the NABARD team observed the milk production of processing, value addition and marketing works of Rathi Cattle at the





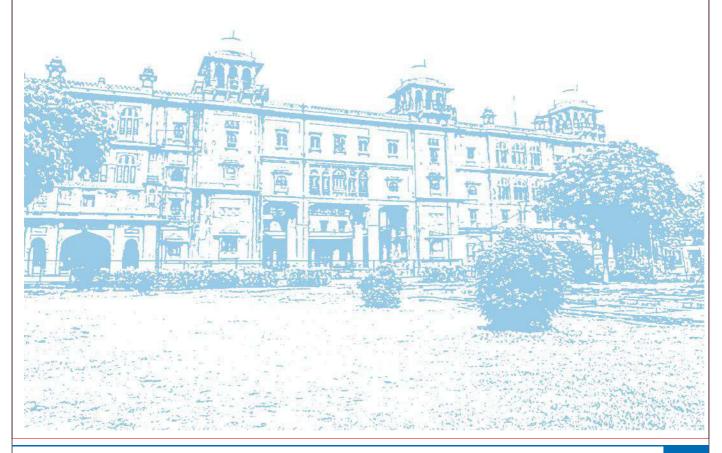
Livestock Research Center, Bikaner. Dr. Vijay Bishnoi gave information about the characteristics and usefulness of Rathi cattle. Dr. Mohan LalGodara informed the managers about chilling plant, production plant of buttermilk, curd, cheese and ghee and arrangements for marketing. NABARD managers also witnessed high quality animal surgery and clinical services at the Veterinary Clinic Complex of RAJUVAS. Dr. Praveen Bishnoi, made visit at small and large animal surgery rooms, air conditioned animal wards, critical care unit, CT scan unit. Dr. Arun Jhirwal, in charge of Poultry Farm, told about usefulness and training activities of duck, rabbit, Japanese quail, turkey farming including organic poultry farming.

#### Visit of Director and Joint Director, RKVY

Sh. Anand Krishan, Director, RKVY, Department of Agriculture, Cooperation & Farmers Welfare and Sh. K.C. Meena, Joint Director, RKVY, Department of Agriculture, Govt. of Rajasthan visited PGIVER, Jaipur on 27<sup>th</sup> February, 2021 for assessing the completion



and progress of various RKVY Projects running in the institute. They praised the facility for accommodation of owners of animals in the Indoor Ward of the Veterinary Clinical Complex. They also appreciated the laboratory setup with state of art facilities for diagnosis of zoonotic diseases under CDSRZ project and promised for helping further development of the project by providing grant for sophisticated instruments.





# 8. Memorandum of Understanding

S.No	Date of Start	MoU Between RAJUVAS	
1.	18/12/2015	MicroGram Social Development Foundation, Bengaloru	
2.	18/12/2015	Prakartik Trust Bengalore	
3.	28/12/2015	URMUL TRUST, Bikaner	
4.	25/04/2016	Mahavtar Babaji Kamdhenu Goshala, Kanak, Vrindava	
5.	08/02/2017	Agriculture Skill Council of India (ASCI)	
6.	29/04/2017	Indian Veterinary Research Institute Deemed University, Izatnagar- U.P.(IVRI)	
7.	25/05/2017	CCS National Institute of Animal healt, Baghpat (Post Graduate Training and Research)	
8.	05/08/2017	NATIONAL RESEARCH CENTRE ON CAMEL, BIKANER (NRCC)	
9.	18/05/2019	ICAR- Central Institute for Research on Buffaloes, Hisar	
10.	18/05/2019	ICAR- Central Institute for Research on Cattle (CIRC)	
11.	20/05/2019	Indian Oil Corporation Limited (IOCL)	
12.	05/07/2019	National Agri-Food Biotechnology Institute (NABI)	
13.	05/11/2019	Startup Oasia and Rajasthan Veterinary University, Bikaner	
14.	30/12/2019	Swami Keshwanand Rajasthan Agricultural University (SKRAU)	
15.	30/12/2019	Extension Ayutvet Limited	
16.	31/12/2019	Extension Sahaj Inclusive Opportunities (India) Pvt. Ltd. Jaipur	
17.	10/01/2020	Rajasthan Woollen Industries Association	
18.	16/01/2020	Umbrella ICAR	
19.	18/03/2020	Extension Reliance Industry Limited	
20.	19/06/2020	Maharan Pratap University of Agriculture and Technology, Udaipur(MPUAT)	
21.	30/06/2020	Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur	
22.	04/07/2020	ICAR-National Research Centre of Equines (NRCE), hisar	
23.	29/07/2020	Brooke Hospital for Animals (India)	
24.	13/07/2020	The University of Trans-Disciplinary Health Sciences And Technologyh (TDU), Bengaluru, Karnataka	
25.	08/09/2020	Kamdhenu University (KU) Gandhinagar, Gujarat	
26.	23/10/2020	Rahuri Semen Station NDDB Dairy	
27.	01/01/2021	U.P. Pt. Deen Dayal Upadhyay Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan, Mathura (DUVASU)	
28.	19/01/2021	ICAR- National Bureau of Animal Genetic Resources Karnal	
29.	04/03/2021	Nanaji Deshmukh Veterinary Science University Jabalpur, M.P.	



#### 9. Award

The following students of the University felicitated on appearing in the University merit list.

S.No.	Name	Rank	College
Revise	d First Year B.V.Sc. & AH - 2	2019	
1.	Bandi Preethi	I Rank	Mahatma Jyotiba Fule College of Veterinary and Animal Science, Chomu
2.	Kshitij Pareek	II Rank	Arawali Veterinary College, Sikar
3.	Anmol Singh	III Rank	Apollo College of Veterinary Medicine, Jaipur
4.	Koduru Eswar Sai	IV Rank	Mahatma Jyotiba Fule College of Veterinary and Animal Science, Chomu
5.	Jove Jacob	V Rank	Apollo College of Veterinary Medicine, Jaipur
Final Y	ear B.V.Sc. & A.H. 2020		
1.	Vishal Yadav	I Rank	Post Graduate Institute of veterinary Education and Research, Jaipur
2.	Keshav Gaur	II Rank	College of Veterinary and Animal Science, Bikaner
3.	Garima Rathore	II Rank	College of Veterinary and Animal Science, Navania, Udaipur
4.	Priya Darshika Shekhawat	III Rank	Post Graduate Institute of veterinary Education and Research, Jaipur
5.	Bhavneet Singh Wadhwa	IV Rank	Arawali Veterinary College, Sikar
6.	Ghazal Chawla	V Rank	Post Graduate Institute of veterinary Education and Research, Jaipur
First Ye	ear A.H.D.P 2019		
1.	Nisha	V Rank	Govt. Animal Husbandry Training Institute, Ratanada, Jodhpur

The following students of the University got prizes in 20<sup>th</sup> AGRIUNIFEST 2019-20 held at IGKV, Raipur will be felicitated on Independence Day (15<sup>th</sup> August, 2020).

#### Mime (Theatre Event)

Subhash Chander IV Year B.V.Sc. & AH, CVAS, Bikaner II Position in Mime
 Sonal Sharma IV Year B.V.Sc. & AH, CVAS, Bikaner II Position in Mime
 Satveer Mokharia IV Year B.V.Sc. & AH, CVAS, Bikaner II Position in Mime
 Jayant Swami IV Year B.V.Sc. & AH, PGIVER, Jaipur II Position in Mime
 Manish Meena III Year B.V.Sc. & AH, CVAS, Navania II Position in Mime
 Prashant Sharma IV Year B.V.Sc. & AH, CVAS, Navania II Position in Mime

#### Skit (Theatre Event)

Subhash Chander IV Year B.V.Sc. & AH, CVAS, Bikaner III Position in Skit
 Sonal Sharma IV Year B.V.Sc. & AH, CVAS, Bikaner III Position in Skit
 Satveer Mokharia IV Year B.V.Sc. & AH, CVAS, Bikaner III Position in Skit
 Jayant Swami IV Year B.V.Sc. & AH, PGIVER, Jaipur III Position in Skit
 Mayank Jain III Year B.V.Sc. & AH, PGIVER, Jaipur III Position in Skit
 Kalpana III Year B.V.Sc. & AH, CVAS, Navania III Position in Skit



The following NCC Cadet of the University felicitated for NCC award.

S. No	. Name of student	Class	Event	Place
1.		IV B.V.Sc. & A.H., CVAS, Bikaner		National Integration online Camp, Ek Bharat Shresht Bharat at Kasaragod, Kerala

The following NCC Cadet of the University felicitated for piloting.

S. No.	Name of student	Class
1.	Vikas Dhaka	III B.V.Sc. & A.H., CVAS, Bikaner
2.	Om Prakash Solanki	IV B.V.Sc. & A.H., CVAS, Bikaner
3.	Priyanka Bissu	IV B.V.Sc. & A.H., CVAS, Bikaner
4.	Bhawna Bhati	IV B.V.Sc. & A.H., CVAS, Bikaner
5.	Sanjana Saini	IV B.V.Sc. & A.H., CVAS, Bikaner
6.	Rajshree Agarwal	II B.V.Sc. & A.H., CVAS, Bikaner

#### Award received by CVAS, Bikaner (2020-21)

S. No.	Name of faculty/Student	Name of award	Awarding authority
1.	Dr. Taruna Bhati Asst. Professor	Adarsh Vidya Saraswati Rashtriya Puruskar (National award of excellence 2020)	Global Management council
2.	Dr. Taruna Bhati Asst. Professor	Received Best Poster award in International Conference on "Current Approaches in Agricultural, Animal Husbandry and Allied Sciences for Successful Entrepreneurship (CAAAHASSE-2021)"	Agro Environmental Development Society
3.	Dr. Taruna Bhati Asst. Professor	Received certificate of excellence in reviewing	Journal of advances in Microbiology in 2020
4.	Sudesh Kumar (M.V.Sc. Animal Biotechnology)	Best paper award on "Current challenges for Animal Biochemists and Biotechnologists for improving Animal Health and Production in Post COVID scenario", on March 24-25, 2021	Society of Veterinary Biochemists and Biotechnologists of India (SVBBI)
5.	Dr. A.P. Singh	Distinguished Scientist Award	VDGOOD Professional Association, Pondicherry
6.	Dr. J.P. Kachhawa	Certificate of Recognition	Pulsus Group 35 Ruddlesway, Windsor, Berkshire, SL4 5SF
7.	Dr. R.K. Dhuria	Fellow (FANA) of Animal Nutrition Association and conferred during centennial Symposium: 100 years of Animal Nutrition Research in India held at Izatnagar during 11-12, March 2021	Animal Nutrition Association
8.	Dr. R.K. Dhuria	Vice-Chancellor Award for OSD to VC for efficient management on Independence Day 15 <sup>th</sup> August, 2020.	Rajasthan University of Veterinary and Animal Sciences, Bikaner



S. No.	Name of faculty/Student	Name of award	Awarding authority
9	Dr. R.K. Dhuria	University Award for selecting fellow Animal Nutrition Society of India (FANSI) on Independence Day 15 <sup>th</sup> August, 2020.	Rajasthan University of Veterinary and Animal Sciences, Bikaner
10	Dr. R.K. Dhuria	University Award to Department of Animal Nutrition for excellent performance in PG education, CVAS, Bikaner on Independence Day 15 <sup>th</sup> August, 2020.	Rajasthan University of Veterinary and Animal Sciences, Bikaner
11	Dr. A.K. Jhirwal	Vice Chancellor's award on Republic Day, 2021 for establishment of hatchery for providing superior indigenous germplasm to farmer and effective management of Poultry Unit, LFC, LPM, CVAS, Bikaner.	RAJUVAS, Bikaner
12	Dr. M.L. Choudhary	Vice Chancellor's award on Republic Day,2021 for new initiatives on production of indigenous milk products	RAJUVAS, Bikaner
13	Dr. Tara Bothra	Vice Chancellor's award on Republic day,2020 for new initiative at centre for becoming Network institute of IIRS-ISRO and establishment of RAJUVAS Geo Portal under Centre for excellence for use of space Based Technology in Animal Science,	RAJUVAS, Bikaner
14	Dr. Sunita Pareek	3rd Prize in poster presentation XVI National Online Conference of IAWA	MAFSU, Parbhani
15	Dr. Sunita Pareek	Certificate of Excellence	Green revolution global certification program an initiative by International Center for Culture & Education (ICCE) to Educate, Inspire & Act against Climate Change. Cause supported by United Nations Framework Convention on Climate Change
16	Dr. Suresh Kumar Jhirwal	Felicitation by Hon'ble Vice Chancellor for getting Best Clinician award in 2019 ISVS Symposium.	RAJUVAS, Bikaner
17	Dr. Sakar Palecha	Vice Chancellor Award 2020 for Initiative for Qualitative Education	RAJUVAS, Bikaner
18	Dr. Ashok Dangi	Vice Chancellor Award 2020 for appreciable management of online education of University.	RAJUVAS, Bikaner
19	Dr. Ashok Kumar Asst. Professor. Deptt. of Vety. Gyn. & Obst. CVAS, Bikaner	Participated in International Conference 2020 held at New York (USA) organized by IETS Published Research Paper with NAAS rating 8.11	RAJUVAS, Bikaner



#### Award received by CVAS, Navania, Udaipur (2020-21)

S. No.	Name of faculty/Student	Name of award	Awarding authority
1	Prof. (Dr.) Rajeev K. Joshi	Adarsh Vidya Saraswati Rashtriya Puraskar	Global Managemant Council, Ahmedabad
2	Dr. Hina Ashraf Waiz	Adarsh Vidya Saraswati Rashtriya Puraskar	Global Managemant Council, Ahmedabad
3	Dr. Anita Rathore	Adarsh Vidya Saraswati Rashtriya Puraskar	Global Managemant Council, Ahmedabad
4	Dr. Anita Rathore	Outstanding Woman Researcher Award in Veterinary Pathology	Venus International Foundation, Chennai
5	Dr. Rajesh Singathia	University Award	RAJUVAS, Bikaner
6	Dr. Kamal Purohit	University Award	RAJUVAS, Bikaner
7	Dr. Sanweer Khatoon	University Award	RAJUVAS, Bikaner
8	Dr. Mamta Kumari	University Award	RAJUVAS, Bikaner
9	Dr. S.K. Sharma	University Award	RAJUVAS, Bikaner
10	Dr. Deepak Sharma	University Award	RAJUVAS, Bikaner
11	Dr. Sudeep Solanki	University Award	RAJUVAS, Bikaner
12	Dr. Mamta Kumari Assistant Professor CVAS, Navania	Published research paper in Poultry Science Journal having NAAS rating 8.03	RAJUVAS, Bikaner
13	Dr. Arun Kumar Asstt. Prof., VUTRC, Kumher (Bharatpur) RAJUVAS, Bikaner	Published Research Paper with NAAS rating of 8.41	RAJUVAS, Bikaner

#### Award received by PGIVER, Jaipur (2020-21)

S.No.	Name of faculty/Student	Name of award-details	Awarding authority
1	Prof. (Dr.) Sanjita Sharma	Vice-Chancellor's Award	RAJUVAS, Bikaner
2	Prof. (Dr.) Sanjita Sharma	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
3	Dr. Navav Singh	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
4	Dr. Dharm Singh Meena	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
5	Dr. Samita Saini	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
6	Dr. Satyaveer Singh	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
7	Dr. S.K. Sharma	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
8	Dr. S.K. Rewani	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner



S.No.	Name of faculty/Student	Name of award-details	Awarding authority
9	Dr. Ashok Baindha	Felicitated on the occasion of Independence Day, 2020	RAJUVAS, Bikaner
10	Dr. Barkha Gupta	Dr. C.M. Singh National Award of Excellence-2020	Pashudhan Prahree
11	Dr. Barkha Gupta	Vice-Chancellor's award	RAJUVAS, Bikaner
12	Dr. Jitendra Bargujar	Vice-Chancellor's award	RAJUVAS, Bikaner
13	Dr. Monika Karnani	Vice-Chancellor's award	RAJUVAS, Bikaner
14	Dr. Surendra Singh Shekhawat	Certificate of Appreciation and secured consolation position	Directorate of HRD, CSWMH RAJUVAS, Bikaner & World wide fund For Nature-India, Udaipur division
15	Dr. Manju	First Prize, Quiz competition of All India Sports e-Quiz Competition	Online Programme on Fitness & Self Defense for Students of Veterinary & Agricultural Universities
19	Dr. Monika Karnani	Second prize, Quiz competition of All India Sports e-Quiz Competition	Online Programme on Fitness & Self Defense for Students of Veterinary & Agricultural Universities
17	Dr. Manju	Adarsh Vidhya Saraswati Rashtriya Puraskar	Global Management Council, Ahmedabad
18	Dr. Y.P. Singh	Young Scientist Award	Indian VET expo-2021 organized, Paws Learning & Research Council
19	Dr. Jitendra Bargujar	Young Scientist Award	Indian VET expo-2021 organized, Paws Learning & Research Council
20	Dr. Samita Saini	Inspiring Lady Veterinarian Award-2021	Pashudhan Prahree
21	Dr. Samita Saini	Adarsh Vidya Saraswati Rashtriya Puraskar	Global Management Council, Ahmedabad





## 10. University Publications







