

Minutes of the 4th meeting of Research Council

The Member Secretary and Director Research Prof. Rakesh Rao welcomed all the members of Research Council, invitees and scientists at the outset of the meeting. After brief introduction of Research Council he requested Hon'ble Vice-Chancellor Prof. Col. (Dr.) A.K. Gahlot for opening remarks and sought permission to start proceedings.

Hon'ble Vice-Chancellor and Chairman Research Council welcomed the delegates and informed the House about number of research projects being undertaken at RAJUVAS and thanked all the Principal Investigator, Co-Principal Investigator and Officer Incharges of LRSs' for their hard work in establishing the philosophy of RAJUVAS mandate and success in leaving impact on livestock breeders in particular and the State in general.

The Chairman informed that since the inception of RAJUVAS in the past seven years the scientific input provided by its scientists has led to a quantum jump in the various aspects of animal husbandry of the state. It is well evident from the data, as the state milk production of has increased by 160%, whereas production of eggs has increased by approximately 218% and that of meat by 170%. Sheep and goat production has also increased during last couple of years. Further, there has been a significant increase in quality animals of indigenous breeds, whereas the population of cross bred has decreased by 516%. The state is also emphasising buffaloe rearing and the population of the buffaloes has increased by 314% in the state.

He further informed the house that RAJUVAS itself has set example by scientifically improving upon the indigenous breeds of the state and is the only university in the country that is maintain large number of breeds of different animals i.e. Rathi, Tharparkar, Sahiwal, Gir, Kankrej and Malvi breeds of cattle and Surti breed of buffaloe, Sirohi and Marwari breeds of goat and Chokla and Sonadi breeds of sheep. Rearing of indigenous cattle by RAJUVAs attracts attention the attention of other states of the country. On demand RAJUVAS is continuously supplying indigenous breeds of cattle to different states of India. Till date it has supplied indigenous breeds of cattle to Uttarakhand, Uttar Pradesh, Punjab, Tamil Nadu, Kerala, Maharashtra and Chhattisgarh. Our germplasm has also been given to Andhra Pradesh and Telangana. Further, Neeti Ayog is also now stressing the need to do more research work on animal husbandry for doubling the income of farmers by 2020. National Dairy Development Board has come with RAJUVAS for collective effort in the

field of embryo transfer on Tharparkar cattle at our Livestock Research Station, Beechwal. J.K. Trust has also approached our University to work on in-vitro-fertilization in indigenous breed looking to the quality of pure indigenous breed maintained by us except Malvi cattle from September.

Hon'ble Vice-Chancellor informed the House that a project on Murrah buffalo is shortly going to be taken up at LRS, Nohar with the collaboration of CIRB Hisar financed by NABARD under GCF scheme of United Nations.

The RACP on Sirohi Goat is performing better than as envisaged. World Bank representative Dr. Helen visited LRS Chittorgarh and saw the facilities and sites. She conveyed telephonically that excellent work is being done under RACP on this breed. A project proposal of ten crores has been chalked out and formulated for improvement and dissemination of Sirohi breed. The research work on Sirohi goat has also been initiated at Dholpur beside other ICAR, AICRP. Looking to the emergence of RAJUVAS as a big player in the research on goats, the ICAR has considered and given place to RAJUVAS while formulating its plans and policies for goat improvement at national level.

The Hon'ble Vice-Chancellor drew the attention of the House that the Government is discontinuing funding under Rashtriya Krishi Vikas Yojana which will directly affect the feasibility of running ongoing and new projects under this scheme. Speaking on this particular matter, Hon'ble Chairman asked the researchers to find out alternate source of funding for research projects and also directed the Officer Incharges to increase the farm income that can be used in the research in near future.

Looking to the paucity of time, the Chairman requested the scientists to make their presentation in brief and eloquent.

AI-01/RC-04/RAJUVAS/2016-17: To confirm the minutes of 3rd Research Council meeting.

The minutes of 3rd Research Council meeting were confirmed and annual report for the year 2016-17 was approved by the House.

AI-02/RC-04/RAJUVAS/2016-17: To review the progress of ongoing research projects

Hon'ble Vice-Chancellor asked Principal Investigators to start their presentation one by one.

field of embryo transfer on Tharparkar cattle at our Livestock Research Station, Beechwal. J.K. Trust has also approached our University to work on in-vitro-fertilization in indigenous breed looking to the quality of pure indigenous breed maintained by us except Malvi cattle from September.

Hon'ble Vice-Chancellor informed the House that a project on Murrah buffalo is shortly going to be taken up at LRS, Nohar with the collaboration of CIRB Hisar financed by NABARD under GCF scheme of United Nations.

The RACP on Sirohi Goat is performing better than as envisaged. World Bank representative Dr. Helen visited LRS Chittorgarh and saw the facilities and sites. She conveyed telephonically that excellent work is being done under RACP on this breed. A project proposal of ten crores has been chalked out and formulated for improvement and dissemination of Sirohi breed. The research work on Sirohi goat has also been initiated at Dholpur beside other ICAR, AICRP. Looking to the emergence of RAJUVAS as a big player in the research on goats, the ICAR has considered and given place to RAJUVAS while formulating its plans and policies for goat improvement at national level.

The Hon'ble Vice-Chancellor drew the attention of the House that the Government is discontinuing funding under Rashtriya Krishi Vikas Yojana which will directly affect the feasibility of running ongoing and new projects under this scheme. Speaking on this particular matter, Hon'ble Chairman asked the researchers to find out alternate source of funding for research projects and also directed the Officer Incharges to increase the farm income that can be used in the research in near future.

Looking to the paucity of time, the Chairman requested the scientists to make their presentation in brief and eloquent.

AI-01/RC-04/RAJUVAS/2016-17: To confirm the minutes of 3rd Research Council meeting.

The minutes of 3rd Research Council meeting were confirmed and annual report for the year 2016-17 was approved by the House.

AI-02/RC-04/RAJUVAS/2016-17: To review the progress of ongoing research projects

Hon'ble Vice-Chancellor asked Principal Investigators to start their presentation one by one.

“Establishment of Microbiological and Biotechnological Information System Network (Bioinformatics and Chemoinformatics) Centre for exploring interconnections for Molecular Biological Applications in the field of Veterinary and Animal Sciences”

Dr. S.K. Kashyap presented the work done under the project and informed about the procurement of equipments, floating of tenders for scanning electron microscope, 2.D Gel electrophoresis system and Hypoxia workstation etc. Technical demonstration for next generation sequencing system, Vitak-MS system, Vitak-2 system, Myla server and API kit based detection of microorganism has been successfully completed to researchers and students of the department. Bacterial cultures from different sources have been identified using Vitak-MS system. Very interesting results with high confidence level have been obtained.

Apex Centre for Animal Disease Investigation, Monitoring and Surveillance:

Dr. A.K. Kataria presented the report and informed the work done under the project like laboratory work, field work, research work, monitoring of animal diseases, monthly disease forecast bulletin, consultancy etc. Various clinical and morbid samples collected by Apex Centre or submitted to Apex Centre by different hospitals of Department of Animal Husbandry, Central Government departments and private owners were processed. Dr. Kataria informed that during the period two outbreaks were attended by Apex Centre team in different species of animals in village Jaituron Ki Dhani Solankiyon Ki Dhani, Girirajsar of Bikaner.

Centre for Excellence for use of Space- based Technology in Animal Science

Dr. A.K. Kataria informed the House that data on disease outbreaks, disease prevalence, GIS mapping of University and livestock research stations located at various places and data on raptors to and from Jorbeer, Bikaner were collected.

Centre for Studies on wildlife Management and Health

Dr. A.K. Kataria presented the mandate of his project and informed the work on migration pattern of native wild bird to and from in Jorbeer. Population of and type of various species of wild birds were recorded. During the period, 17 species of wild birds were spotted. He reported *E. coli* as the main causative agent for enteritis, urinary tract infection, meningitis and septicaemia in wild animals.

Establishment of Rathi cattle Breeding Farm/ Conservation, Evaluation and Improvement of Rathi cattle Through Breeding: Dr. Rajeev Joshi presented the report for the year 2016-17 on different aspects of the farm and informed the house about increase in the wet average of the farm. After the presentation Hon'ble Vice Chancellor suggested to the Director Research to ask all the PIs to give comparative report on different productive and reproductive aspects for the last five years such that proper information about the farm is presented in the annual report so that progress of the farm and its practices can be judged scientifically. (Action: All LRSs)

Centre for Animal Product Technology: Dr. Vijay Kumar, Co-PI presented the progress report of the project. He informed about the organic farming is being encouraged in this project. Many farmers have been convinced for adopting organic farming. Further, farmers are being advised through different electronic media, RAJUVAS helpline and WhatsApp such that problems raised by the farmers can be instantly addressed to. On this Hon'ble Vice-Chancellor suggested to prepare the list of farmers using organic farming and then to prepare a WhatsApp group such that the ideas of different farmers and scientific advice being given can be shared by all the likeminded farmers. The Co-PI informed the House that a laboratory has been established under the project and they have purchased Rapid One Step Assey (ROSA) for detection of antibiotics in the samples of milk.

Establishment of Live Demonstration Models of Diversified Livestock Production Systems for Motivating Adaption to Enhancing Agricultural Income: Dr. Basant Bains presented the progress of the project and informed the House about the income generated in the project. Hon'ble Vice-Chancellor expressed his concern as to how to continue the project in future since the funding under RKVY is going to stop. Therefore, the Chairman suggested Dr. Bains to generate income from their own sources and increase the production by increasing the number of chick and birds so that more income may be obtained to run the project in future. To increase the outreach of the project and income help from VUTRC may be taken. (Action:PI)

Assessment of occurrence of various diseases in camel (*Camelus dromedarius*) prevailing in arid and semi- arid region of Rajasthan state using pathological diagnostic tools and development of field based diagnostic/sampling techniques for identification of camel diseases: Dr. Hemant Dadhich, PI presented the work done under the project. After the presentation Hon'ble Vice-Chancellor suggested PI to prepare a

document for Animal husbandry department about the diseases found in camels and also give clear cut suggestions for the Vets and Paravets such that they can approach the diseases of camels more efficiently based upon his work in the project.(Action: PI)

Genetic Improvement of Sirohi Goats in Farmer's Flocks: The Chairman expressed his satisfaction on the progress of the project.

Network Project on Buffalo Improvement: The Chairman expressed his satisfaction on the progress of the project.

Centre for Conservation of Animal Biodiversity: Dr. S.C. Goswami, Principal Investigator presented the progress of the project and informed the House about the training imparted to the farmers and livestock breeders. Dr. Goswami also informed the House about the Biodiversity Museum and Web Portal established under the project and made the project as knowledge centre for farmers, livestock breeders, line departments and individuals related to veterinary and animal science profession. The Chairman suggested to make SOP and enquired about any new technology which we can show. (Action: PI)

Centre for Disaster Management Technology for Animals:

Dr. S.K. Jhirwal presented the progress report of the project. Hon'ble Vice-Chancellor enquired about if they have developed any new technology in the field of disaster management and suggested to prepare a document on proper management of disasters in animals. Dr. S.K. Sharma from CVAS, Navania suggested using ORS in disaster management prepared by their centre. (Action: PIs)

Livestock Research Station, Beechwal: Dr. C.S. Saraswat presented the report of LRS, Beechwal and informed the House about the work on embryo transfer technology done at the station. The ETT work has been done for the first time on Tharparkar cows with the collaboration of NDDB. The embryos were collected from Tharparkar cows and the recipients were Kankrej animals. Six Kankrej heifers have been confirmed for pregnancy. He presented some photographs of the same. While appreciating the work Hon'ble Vice-Chancellor suggested that photographs of animals should be aesthetically good in future. Utmost care should be taken while taking the photographs of animals and professional attitude of ICAR institutes should be applied at the time of photography.

Livestock Research Station, Kodamdesar: Dr. Sitaram Gupta presented the progress of the station. Hon'ble Vice-Chancellor expressed satisfaction on the progress made at the station including civil work.

Conservation, evaluation and improvement of Kankrej cattle through breeding: Dr. Sitaram Gupta presented progress of the project. He informed about the performance of the Kankrej with age at first calving 1262 days, peak yield 22.00 kg. And lactation yield 3411.7 kg.

Conservation, evaluation and improvement of Sahiwal cattle through breeding: The Principal Investigator presented the performance of Sahiwal cattle. The age at first calving was reported to be 34 months and average milk production per lactation to be 1913 kg. He also informed that best performance was in animal number S-8 with 4961 kg milk in one lactation with peak yield of 26.4 kg. Chairman suggested to improve upon the average yield as Sahiwal is a good milk yielder. (Action: PI)

Sewan grass development and green fodder production along with fodder conservation for sustainable livestock production in arid region of Rajasthan: Dr. Sitaram Gupta informed the house that five diggis are under construction and will be completed very soon. The Comptroller suggested that till the construction of diggi and khala (canal) is completed, kutchha khala may be made so that water can be drawn to irrigate the crops. Hon'ble Vice-Chancellor enquired as to how much land has been proposed for production of crop and how much land is under crop and rate of survival of the crop. On which Dr. Sitaram replied that a total of 450 bigha of land has been proposed for production of crop and at present 100 bigha land was cultivated of which grass on 50% of the area cultivated survived.

Capacity building for detection of newer synthetic ingredients, highly pathogenic microbial presence, drugs, pesticides residues and pollutants etc.” by establishment high end milk quality testing research laboratory at Jaipur: Dr. Sanjita Sharma presented the progress of the project and informed that collection of different milk samples were made from different districts of Rajasthan State according to agro-climatic zone. A total of 2327 samples were analysed for nutritional quantity, adulteration, pesticide, antibiotic residue, microbial contamination, molecular identification of highly pathogenic bacteria and heavy metal analysis. The Hon'ble Vice-Chancellor suggested that survey of whole state should be done. Vice-Chancellor also suggested to do testing and analysis of the

samples brought by farmers, livestock breeders and common people at minimal cost. He also suggested to device ways and means to make this project self sufficient. (Action: PI)

Mega Sheep Seed Project : Hon'ble Vice-Chancellor expressed his satisfaction with the progress made in the project.

Establishment of State level feed and Fodder Analysis Laboratory for Quality Assurance in Feeding of Animals for Sustainable Animal Production in Rajasthan: Dr. Rajesh Nehra presented the progress of the project and informed the House that under " State level feed and fodder analysis laboratory" a mobile app for Android version has been prepared in Hindi language for farmers. Hon'ble Vice-Chancellor asked Dr. Nehra device ways to carry on the project since the funding of the project is going to stop and suggested to chalk out the plan to carry on work in the situation of stoppage of funding. (Action: PI)

Establishment of Tharparkar Cattle Breeding Farm: Dr. R.S. Pal, Principal Investigator presented the progress of the project, achievement, income and herd strength. Dr. Pal also informed the House that this year distribution of germplasm has increased. Milk production and income has increased which is good sign for the centre.

Animal Bio – Medical Waste Disposal Technology Centre: Dr. Rakesh Rao, Principal Investigator presented the progress report of the centre and informed the House and informed about the purchase of equipments done during this year and also informed about the different modules such as information leaflets and short films prepared for educating the masses one of the major part of the project.

Establishment of Veterinary Clinical Complex for Advanced Animal Disease, Diagnosis, Treatment, Surveillance and Monitoring: The Hon'ble Vice-Chancellor expressed his satisfaction with the progress made in the project.

Engineering and Technology Centre, RAJUVAS, Bikaner: Ms. Sumitra Goswami, Project Associate briefed about the activities and work done under the mandate and objective of the centre. She informed the work done so far. The Hon'ble Vice-Chancellor enquired about the time taken for the completion of civil work pertaining to AZOLLA project and suggested that the same may be completed in time so that the project work may come in full swing. (Action: PI)

Experiential Learning Pet (Pups) Production Unit: Dr. Deepak Sharma presented the progress of the project. Hon'ble Vice-Chancellor enquired about production and sale of pups and also enquired about the name of breeds on which work has been initiated. In reply to Hon'ble Vice-Chancellor's enquiry, Dr. Sharma replied that so far three pups have been sold and they are maintaining three breeds i.e. German Shepherd, Labrador and Pug. Hon'ble Vice-Chancellor suggested that students may be actively involved in this initiative to which Dr. Deepak replied they are already involving students and in future more students will be involved. (Action: PI)

National Mission for Protein Supplement (NMPS) Demonstration and Dissemination of More Remunerative Sirohi Goat Farming System: The NMPS on Sirohi goat is being run at LRS, Bojunda, Chittorgarh. Dr. Deepak Sharma presented the progress of the project and briefed about the salient achievements of the project. Hon'ble Vice-Chancellor enquired about the flock strength to which Dr. Sharma informed the House that about 484 animals are being maintained at the station.

Livestock Feed Resource Management and Technology Centre, RAJUVAS, Bikaner : Dr. R.K. Dhuria, Principal Investigator of the project presented the progress report of the project and informed the House about the training imparted and book, manual and pamphlets, published under the project. Hon'ble Vice-Chancellor expressed satisfaction on the progress made in the project.

Increased production of green Fodder through hydroponics technology for sustainable livestock production in arid Rajasthan: Dr. R.K. Dhuria, Principal Investigator of the project presented the progress report of the project undertaken at CVAS, Bikaner, CVAS, Navania and PGIVER, Jaipur and briefed the House about the achievement made under the project. Hon'ble Vice-Chancellor expressed satisfaction on the progress made in the project.

All India Network Programme on Diagnostic Imaging and Management of Surgical Conditions in Animals: Dr. Sakar Palecha briefed about the project, Chairman expressed his satisfaction on the project.

Malvi Cattle Breeding Farm Project: Dr. M.C. Sharma presented the report. Chairman asked about the A.I. and strength of herd, it was informed that A.I. facilities with superior Malvi semen has started through already established A.I. Centre in Malvi breeding tract. Total herd strength is 119 including 85 females.

RKVY Project Establishment of Goat Breeding Farm for Demonstration of remunerative Goat Farming System at Dholpur: Dr. D.S. Meena , P. I. reported that civil work is in progress and expected to be completed in the month of October. Chairman asked Director Works about the completion; it was informed that it will be completed as proposed. The infrastructure creation is in full swing and the amount received has been spent on creation of infrastructure. Dr. Meena also informed the House that goats will be purchased after completion of civil work. (Action: PI)

Centre for Diagnosis, Surveillance and Response of Zoonotic diseases: Dr. D.S. Meena, Principal Investigator of the project informed that Rs.20 lac have been spent on development of infrastructure. The work on construction of laboratory has been taken up. Hon'ble Vice-Chancellor suggested that samples should be sent to Department of Microbiology and Biotechnology CVAS, Bikaner till the construction work is completed. (Action: PI)

Pilot Project on Alternate Energy Generation through Biogas Based Electricity Production at CVAS, Navania, Udaipur Campus: Dr. Deepak Kumar Sharma presented the project report and informed about the construction of five biogas plant. Complete dome has been constructed. Biogas generator has been purchased. Tender have been floated by Director (Works) for biogas plant.

Epidemiological Mapping of Antimicrobial Resistance and its Underlying Genetic Mechanisms for Improvement in Health of Livestock Poultry Sector: Dr. Sandeep Kumar Sharma presented the report of the project. Hon'ble Vice-Chancellor suggested sending of the samples to the department of Veterinary Microbiology and Biotechnology, CVAS Bikaner for analysis until infrastructure at Jaipur is completed. (Action: PI)

Centre for Ethno- Veterinary and Practices and Alternative Medicines: Dr. Ashok Gaur, Co-PI presented the progress of the project. Dr. Gaur informed about the work done on Panchgavya. He also informed the House that review of literature has been done on which Hon'ble Vice-Chancellor enquired about scientific publication brought out in the project. Dr. Gaur informed that clinical trial will be conducted on cattle on which Chairman asked that how will he carryout trail in ruminants.

RFP on Preservation and Articulation of Bones of Different Species of Animals to Enhance the Teaching Quality of Veterinary Education: Dr. Balwant Meshram presented the project report and informed the House that production work has started. Two skeletons have been completed.

Proposal for Establishment of Advanced Training Centre in the Field of Animal Husbandry (TSP) : Reports have been presented in the House.

Proposal for Production and Dissemination of Preservation Technologies of Important Fodder Crops to Youth and Farm Women of Tribal Area of Southern Rajasthan (TSP): Reports have been presented in the House.

Proposal for Mobile Ambulatory & Mobile Diagnostic Services for Tribal Area in Southern Districts of Rajasthan (TSP) : Reports have been presented in the House.

Establishment of Gir Cattle Breeding farm : Presented the report

Establishment of Centre for Human Resource Development in the field of Veterinary Science in Southern Rajasthan : Presented the report in the House.

Establishment of specialized Human Resource Development (HRD) Center of Veterinary & Animal Sciences at Jaipur : Presented the report in the House.

AI-03/RC-04/RAJUVAS/2016-17: To establish a demonstrative buffalo farm unit under "Climate resilient buffalo based production system" under green climate fund (GCF) of United Nations :

Looking to the importance of the project, it was unanimously resolved by the House that demonstration buffalo farm unit under Green Climate Fund of United Nations may be established at LRS, Nohar on the land which is being used for fodder production and animal rearing. (Action: DR)

AI-04/RC-04/RAJUVAS/2016-17: Replacement of sheep unit maintained under Revolving Fund with Goat Unit at LRS, Beechwal:

Looking to the increase in cultivated area at the farm of LRS, Beechwal which reduced grazing area for sheep it was resolved to replace the sheep unit maintained under revolving fund with goat unit as trees and bushes suitable for goats are available at the farm. (Action: OI LRS Beechwal)

AI-05/RC-04/RAJUVAS/2016-17: To make separate budget provision and also creating staff strength for running the constituent Animal Husbandry Diploma Institutes at LRS(s) for smooth functioning:

The matter was discussed in the House. Since there is no separate budget provision for AHDP institutes it was resolved that there should be separate budget for functioning of AHDP institutes. (Action: Comptroller).

AI-06/RC-04/RAJUVAS/2016-17: Permission to transfer of unproductive animals from the Livestock Research Station(s) Farms to constituent Veterinary Colleges:

As per MSVE 2016 of VCI it is mandatory to maintain Livestock Farm Complex (LFC) for clinical and para-clinical teaching purposes. Therefore, it was resolved that all the LRS(s) having surplus animals of different breeds may be transferred to the constituent colleges as per their needs. For other institutes the surplus animals may be given on book value. (Action: DR)

AI-07/RC-04/RAJUVAS/2016-17: Any other item with the permission of Chair:

1. To decide modus operandi for farm operations: Chairman suggested that:

- i. Rathi cattle farm at Bikaner, Tharparkar cattle farm at Beechwal and poultry farms being maintained at Bikaner be made as instructional farm for educational purpose.
- ii. Sahiwal and Kankrej breed farms will function in State Plan.
- iii. Gir cattle farm at Navania be made as instructional farm for educational purpose.
- iv. Since Chandan farm and Nohar farm were originally transferred from GOR therefore, they may be maintained under State Plan.
- v. Malvi cattle are already being maintained under State Plan.

- 2. Regarding Office order No. F()/DR/Tech/2017/312 Dated 22.05.2017 in reference to Agenda item AI-08/RC-03/RAJUVAS/2015-16:** In reference to the above cited order the Chairman suggested constituting an Expert Committee to devise performance evaluation methods. The members of the committee suggested by the Chairman are as follows:
- i. Retd. Prof. A.P. Vyas, Ex. Director Extension - Chairman
 - ii. Retd. Prof. B.K. Beniwal, Ex. Dean, CVAS, Bikaner - External Member
 - iii. Director Research, RAJUVAS
- (Action: DR)
- 3. IVF programme in collaboration with J.K. Trust:** A proposal for collaborative research work has been offered by J.K. Trust through mail for IVF programme in Gir, Tharparkar, Kankrej, Sahiwal and Rathi. In this project donor cows will be provided by University and Oocyst aspiration will be done by J.K. Trust for which Trust will bear the cost. After that aspirated Oocyst will be brought to J.K. Trust IVF lab for production of embryos. The produced embryos will be shared on 50:50 bases. J.K. Trust will also perform the fresh embryo transfer free of cost at the University farms provided University arranges suitable recipients at their farms. Required medicine for oestrous synchronization will be provided by the university. The proposal has been accepted by the house.
- 4. ETT programme in collaboration with NDDB:** A MoU was signed between RAJUVAS and NDDB for the collaborative work on embryo transfer technology (ETT). In this project initial trial has been initiated in which embryos were collected from Tharparkar and inseminated in Kankrej heifers. Out of 10 six heifers are positive for pregnancy. In this project, the male calves will be given to NDDB and female calves will be retained at University.
- 5. Collaboration with Biopttica India, LLC in association with VVPL – Bovine Products and Services:** An offer letter has been received from Biopttica India in which they proposed to demonstrate their technologies regarding pregnancy detection viral infections, clinical mastitis, feed additives for calf scours, 45 minute animal DNA and RNA testing, radio frequency identification chip and cloud based

ownership, migration and medical records. They would like to run a pilot project with RAJUVAS to demonstrate their technologies. Two scientists as suggested in the offer letter may be invited by RAJUVAS to demonstrate/utilize their technologies so that it can be assured that their bovine testing services, treatments and products perform as promised. They further want to extend their services to Goshalsa etc. It was resolved to invite the two proposed scientists for demonstration and if their technologies are found suitable for implementation further MoU may be signed.

The meeting ended with vote of thanks to the Chair.


18/6/17

**DIRECTOR RESEARCH
MEMBER SECRETARY**

List of participants

1. Prof. Dr. Col. A.K. Gahlot, Hon'ble Vice-Chancellor
2. Sh. Agya Ram Singh, Progressive Livestock Breeder
3. Sh. Srigopal Upadhyay, Progressive Livestock Breeder
4. Dr. Govind Narain Mathur, Addl. Director Extension (Retd.)
5. Dr. K.R. Godara, Representative, RCDF
6. Sh. B.R. Meena, Registrar, RAJUVAS, Bikaner
7. Sh. Arvind Bishnoi, Comptroller, RAJUVAS, Bikaner
8. Prof. R.K. Dhuria, Director Extension Education and PI, VURTC
9. Prof. G.S. Manohar, Dean PGS & Head. Deptt. of Parasitology, CVAS, Bikaner
10. Er. M. Ram, Director Works, RAJUVAS, Bikaner
11. Prof. S.S. Soni, COE, RAJUVAS, Bikaner
12. Prof. Vishnu Sharma, Dean & PI, Capacity Building (RKVY), PGIVER, Jaipur
13. Prof. S.K. Kashyap, Dean, PGS & Head. Deptt. of Microbiology, CVAS, Bikaner
14. Prof. C.S. Vaishnav, PI, Gir Cattle Breeding Farm, CVAS, Navania
15. Prof. S.C. Goswami, DSW & Head, Deptt. of LPM, CVAS, Bikaner
16. Prof. A.A. Gauri, Directorate of Research (VAS), Bikaner
17. Dr. U.K. Bissa, Retd. Sr. Scientist, Directorate of Research, Bikaner
18. Prof. Nalini Kataria, Head, Deptt. of Physiology, CVAS, Bikaner
19. Prof. Hemant Dadhich, Head, Deptt. of Pathology, CVAS, Bikaner
20. Prof. A.K. Kataria, Officer Incharge, Apex Centre, CVAS, Bikaner
21. Prof. G.C. Gahlot, PI, AICRP on Marwari Goat, CVAS, Bikaner
22. Prof. Basant Bais, Head & PI, Live Demonstration Model, CVAS, Bikaner
23. Prof. R.K. Joshi, Officer Incharge, LRS, Bikaner, Nohar & PI, RKVY, Rathu Cattle
24. Prof. Sanjita Sharma, PI, MOTS, PGIVER, Jaipur
25. Dr. S.K. Sharma, PI, TVCC, CVAS, Navania
26. Dr. Kuldeep Nehra, O/I, LRS, Nohar
27. Dr. R.S. Pal, Officer Incharge, LRS, Chandan & PI, RKVY, Tharparkar Cattle
28. Dr. Praveen Bishnoi, Assoc. Prof., PI, CDMT, Deptt. of Surgery & Radiology, CVAS, Bikaner
29. Dr. D.S. Meena, Assoc. Prof., PGIVER, Jaipur
30. Dr. Balwant Meshram, Assoc. Prof., CVAS, Navania
31. Dr. P.C. Sharma, PI, MSSP/NPBI, CVAS, Navania, Vallabhnagar
32. Dr. M.C. Sharma, Asstt. Professor, Co-PI, NMPS, LRS, Bojunda
33. Dr. Rajani Joshi, Asstt. Professor, Vet. Public Health, CVAS, Bikaner
34. Dr. Sita Ram Gupta, Asstt. Prof. LRS, Kodamdesar
35. Dr. Rajesh Nehra, Asstt. Professor, Deptt. of Animal Nutrition, CVAS, Bikaner
36. Dr. Ashok Gaur, Asstt. Professor & Co-PI, CEVPAM, RAJUVAS, Bikaner
37. Dr. Ashok Dangi, Asstt. Prof., & Incharge, IUMS, RAJUVAS, Bikaner
38. Dr. Sakar Palecha, Asstt. Prof., Vet. Surgery & Radiology, CVAS, Bikaner
39. Dr. S.K. Jhirwal, Asstt. Prof., Vet. Surgery & Radiology, CVAS, Bikaner
40. Dr. Deepak Kumar Sharma, Asstt. Prof., CVAS, Navania
41. Dr. C.S. Saraswat, Asstt. Prof., CVAS, Navania
42. Dr. Sumit Prakash Yadav, Asstt. Prof., LRS, Kodamdesar
43. Sh. Dinesh Chandra Saxena, PRO, PRC, RAJUVAS
44. Dr. Manohar Sain, Asstt. Prof., LRS, Nohar
45. Dr. Sandeep Kumar Sharma, Asstt. Prof. PGIVER, Jaipur
46. Dr. Virendra Kumar, Asstt. Prof., LRS, Kodamdesar
47. Dr. M.L. Chaudhary, Asstt. Prof., CCAB, CVAS, Bikaner
48. Dr. Vijay Kumar Bishnoi, Co-PI, COAPT, CVAS, Bikaner
49. Dr. Pradeep Kumar, Project Associate, RKVY Rathu, CVAS, Bikaner
50. Prof. Rakesh Rao, Director Research, RAJUVAS, Bikaner

- In the Chair

Director Research & Member Secretary

Copy to:

1. P.S. to Vice-Chancellor, RAJUVAS for kind perusal of Hon'ble Vice-Chancellor
2. The Director, Directorate of Animal Husbandry, Jaipur
3. The Director, Directorate of Fisheries, Jaipur
4. The Managing Director, RCDF Ltd., Jaipur
5. Director Research, S.K. Raj.Agricultural University, Bikaner
6. Directors/Deans/COE,RAJUVAS, Bikaner
7. Registrar, RAJUVAS, Bikaner
8. Comptroller, RAJUVAS, Bikaner
9. Sh. Agya Ram Singh, Progressive Livestock Breeder, Kirti Stambh, Near Municipal Corporation, Bikaner
10. Sh. Srigopal Upadhyay, Progressive Livestock Breeder, Inside Eidgah Bari, Dharmnagar, Bikaner
11. OSD (VC), Jaipur
12. Principal Investigator/ HOD, OI, LRS(s)
13. Prof. B.N. Shringi, Deptt.of Microbiology & Biotechnology, CVAS, Bikaner
14. Meeting Section, RAJUVAS, Bikaner
15. Technical Section, Directorate of Research, RAJUVAS, Bikaner


18/6/17

Director Research & Member Secretary