

CHAPTER - 3

ANIMAL HUSBANDRY, DAIRY AND FISHERIES

3.1 The Animal husbandry sector in Rajasthan is harboring a fabulous livestock wealth, having very significant role in providing subsidiary source of income to the large numbers of small farmers, marginal farmers, BPL families and agricultural laborers. Distribution of livestock wealth is more egalitarian compared to land. Marginal farmers constitute core livestock production centre. Over 50 per cent of all species are owned by marginal farmers. Livestock sector is extremely livelihood intensive and a major source of sustenance.

3.2 Dairy provides milk production as supplementary nutrition and generates income on regular basis. In Rajasthan there is shortage of water in most of the areas and the State faces famines/droughts almost every second or third year. This brings agriculture under threat and farmers become insecure. In such situations animal husbandry provides income and nutrition for their sustenance. Milch animals including goats are mainly looked after by women. Animal Husbandry provides not only recognition to them but also leads to their increased participation in the economy and the availability of cash income which help them for their socio- economic development. Livestock production in general and cattle and buffaloes in particular is highly women oriented.

3.3 In Rajasthan Animal Husbandry is not merely a subsidiary to Agriculture but it is a major economic activity specially in arid and semi-arid areas, thus providing the much needed insurance against prominently occurring scarcity conditions. Next to crop production Animal Husbandry is the most important activity in Rajasthan. Livestock Sector has also the highest potential for rural self-employment with the lowest possible investment and risk. Development of Livestock Sector therefore, is critical to rural prosperity.

3.4 As against twenty-five well defined breeds of cattle and seven buffaloes breeds in the country, the State is endowed with finest drought hardy milch breeds (Rathi, Gir and Tharparkar), dual purpose breeds (Kankrej and Haryana) and the famous drought breeds of Nagori and Malvi.

3.5 During last few years the State has focused on expansion of health and breeding services by creation/up-gradation of institutions and developing infrastructure. Veterinary Polyclinics have also been started in remaining 19 districts in the State. Department has also focused on awareness for breed improvement and disease control. Special efforts have also been made to combat the problem of infertility in cattle and buffaloes.

3.6 Rajasthan State is second highest milk producer in the country but average production is comparatively lower than other neighbouring states. It is due to large number of scrub bulls and low productive animals. Hence, efforts have been made for breed improvement through expansion of Artificial Insemination adopting different modes and distribution of improved quality bulls, bucks and rams of eminent indigenous breeds as per breeding policies and castration of scrub bulls.

3.7 State has also focused on conservation and development of Indigenous cattle breeds like Tharparkar, Gir, Kankaraj, Rathi and Sahiwal. For this purpose newly established University of Veterinary and Animal sciences, Bikaner has developed four cattle farms and developing fifth. For expansion of extension and training facilities, department has established new Pashupalak Training Institute in Jodhpur and strengthened State Livestock Management and Training Institute, Jaipur. Veterinary University, Bikaner is also establishing Research cum Training centers in ten districts with target to have such centers in each District.

3.8 The State faces frequent drought/famine, which results in shortage of fodder and decline in animal production. The gap between the production and actual requirement of dry as well as green fodder in the State is about 50 per cent. Hence, there is a need of integrated efforts for fodder and quality seed production.

3.9 State has established mobile veterinary units in every district and tehsil to provide services in outreach villages every month and in emergency. State has strengthened infrastructure facilities of veterinary health institutions and training institutions under centrally sponsored Establishment and Strengthening of Veterinary Hospitals and Dispensaries scheme, Rural Infrastructure Development Fund (RIDF) of National Bank for Agriculture & Rural Development (NABARD) and Rashtriya Krishi Vikas Yojana (RKVY). State has developed cold chain maintenance system for vaccines transport and storage to sustain quality of vaccine to develop proper immunity for prevention of contagious diseases.

3.10 To combat infertility in cattle and buffaloes, infertility camps are organized under RKVY, SCSP and TSP by selecting 50 animals for a camp. Under RKVY and State Plan, Veterinary University is also developing education, training, research and technology infrastructures. Under State Plan Fund, Veterinary University has been supported to have sufficient teaching and research manpower.

3.11 Efforts will be made to double the milk yields through breed improvement activities and better health practices in the State. Integrated Livestock Development (ILD) centers under Public Private Partnership (PPP) mode will be established to expand the outreach services in those areas where there is no institutional facility of the State

Government is available. For conservation and propagation of indigenous cattle like Sahiwal and Hariana in the State, departmental farms will be strengthened with the help of PPP. District/ Tehsil Mobile Veterinary Units, Insurance of Livestock as well as Livestock Breeders, Fodder Development activities will be strengthened. For increase in meat and wool production in the State a small Ruminant Development Cell (sheep and goat) will be established.

Objectives:

- Increase animal protein availability.
- Improvement of outreach services in remote areas having no veterinary health and breeding facilities.
- Enabling the small producer to have better forward and backward linkages specially marketing of livestock and products, participate in the process of Globalization, growth and modernization of the livestock sector.
- Development of fodder resources and to reduce cost of production and ensure sustainable production throughout the year.
- Improvement of quality assurance facilities.
- To utilize livestock sector as a tool for economic & social development and gender equity.

3.12 Major achievements in the first two years of Twelfth Five Year Plan are:

3.13 State Government has taken many decisions and initiatives for the development of the sector. It includes Free Medicine Programme for Livestock Breeders, Establishment of Mobile Veterinary Units in every district & tehsil, Veterinary Polyclinics in remaining districts, Establishment of 400 new Sub-Centers and Upgradation of 200 Veterinary Sub-Centers to Veterinary Hospitals, Establishment of Livestock Breeders Training Institute at Jodhpur and recruitment of 476 Veterinary Officers and 1701 Livestock Assistants. For Gaushala development separate directorate was established and a grant @ ₹ 32 per large animal per month and ₹ 16 per small animal per month for three months (April to June) and for disabled animals the grant at the same rate for throughout the year are being distributed during 2013-14.

Activities to be under taken for the development of the sector:

Development of Veterinary Polyclinics:

3.14 Including new polyclinics sanctioned in the year 2013-14, at present 34 polyclinics (including Gramin Polyclinic Hingonia, Jaipur) are in the State. At a polyclinic, specialized veterinary care is being provided under one roof. These polyclinics are equipped with diagnostic aids like x-ray, clinical laboratory and there is a facility to treat complex animal

disease & infertility problems by subject matter specialists. An outlay of ₹ 324.52 lakh is proposed for Annual Plan 2014-15 for the development of polyclinics.

Veterinary Hospital and Dispensary:

3.15 The State is lagging far behind the recommendation of one veterinary institute at every 5000 cattle heads as recommended by the National Commission on Agriculture. Therefore, it is necessary to increase and strengthen the existing veterinary health care facilities to take care of precious livestock.

3.16 An outlay of ₹ 2905.06 lakh is proposed for the Annual Plan 2014-15 for the strengthening of activities of Veterinary Health and Animal Husbandry at departmental veterinary institutes.

Veterinary Council:

3.17 State Veterinary Council has been constituted in 1988 under the provisions of Indian Veterinary Council Act, 1984. It regulates the veterinary practices in the State and skill and knowledge up-gradation of veterinarians. It is supported under Centrally Sponsored Scheme on 50:50 basis. An outlay of ₹ 40.00 lakh is proposed for the Annual Plan 2014-15 as state matching share for Professional Efficiency Development.

Institutional Arrangement of Supplies:

3.18 Rajasthan Livestock Development Board (RLDB) has been constituted in the 9th Five Year Plan for regular input supply to the departmental institutions and for breed improvement of livestock. RLDB is getting funds from Government of India for various livestock development programmes under National Project for Cattle and Buffalo Breeding (NPCBB) and cattle & buffalo insurance scheme. Grant is being provided under state plan to RLDB to meet out establishment expenses. An outlay of ₹ 70.00 lakh is proposed for the Annual Plan 2014-15.

Sample Survey for Estimation of Major Livestock Products:

3.19 A Centrally Sponsored Scheme involving 50 per cent contribution from the State, is being implemented for the estimation of Wool, Milk, Meat and Egg production in the State. An outlay of ₹ 265.81 lakh is proposed for the Annual Plan 2014-15 to meet out the salary of staff working to promote strengthening of integrated sample survey programme in the State.

Development of Cattle and Buffalo:

3.20 Under this scheme calf rallies, buck/bull distribution and organization of combat infertility camps are undertaken. An outlay of ₹ 171.96 lakh is proposed for the Annual Plan 2014-15.

Construction Works:

3.21 For new construction, repair and renovation of the departmental office buildings and veterinary institutions an outlay of ₹ 3100.00 lakh is proposed for the Annual Plan 2014-15.

Assistance to States for Control of Animal Diseases:

3.22 Under this Centrally Sponsored Scheme having 25 per cent contribution of the State, it is intended to fill up the critical gaps in terms of strengthening the laboratories and creating a disease management system, and to equip personnel by providing them training on various aspects of disease diagnosis, control and management. Under the scheme, the Biological Product Laboratory in the State as well as Regional Disease Diagnostic Laboratories are under the process of modernization/strengthening. The Biological Product Laboratory is having ISO 2001 certification. A tissue culture lab will be made operational as soon as the license is issued. Strengthening cold chain facilities throughout State will also be strengthened. An outlay of ₹ 324.18 lakh is proposed for the Annual Plan 2014-15 for strengthening of disease diagnostic activities in the State.

Free Medicine Programme:

3.23 A new innovative scheme for the livestock health has been launched from 15th August 2012. Essential medicines for veterinary services are being provided free of cost under the scheme. An outlay of ₹ 8045.50 lakh is proposed for the Annual Plan 2014-15 for the Free Medicine Programme.

Tehsil Level Mobile Veterinary Unit:

3.24 Tehsil level 288 Mobile Veterinary Units were started to improve doorstep services in outreach areas during 2013-14. These mobile units are providing services in those areas where presently departmental veterinary institutional facility is not available. An outlay of ₹ 1935.30 lakh is proposed for the Annual Plan 2014-15 for operational expenses of mobile units.

Livestock & Livestock Breeders Insurance

3.25 Livestock & Livestock Breeders Insurance is intend to cover all species of animals under risk with livestock insurance. 25% of total premium of insurance will be provided by the Central Government and the same 25% will be given by the State Government. An outlay of ₹ 121.99 lakh is proposed for the Annual Plan 2014-15.

National Livestock Health & Disease Control Programme

3.26 Rajasthan has been included first time for Foot and Mouth Disease Control Programme (FMD-CP) and PPR Control Programme. An outlay of ₹ 37.01 lakh for Rinder Pest Survey Programme, ₹ 4.00 lakh for National Animal Disease Reporting System, ₹ 87.01 lakh for National Brucella

Control Programme, ₹ 0.25 lakh for FMD-CP and ₹ 0.26 lakh for PPR-CP are proposed for the Annual Plan 2014-15.

Gender Budgeting

3.27 Major activities of Animal Husbandry Sector are performed by women. In 2014-15, 900 combat Infertility Camps, 116 six days Training Camps as well as 232 two days Training Camps for livestock breeders will be organized. About 53000 women will be benefitted in these programs.

GAU-SEVA DIRECTORATE

An Overview of the State's Cattle Wealth

3.28 Rajasthan has a considerably large, 121.20 lakh of, cattle population which supplements large number of families as the income source through dairy farming. Out of the total population 5.00 lakh of cattle are reared in 1408 Gaushalas registered under Raj. Gaushala Act 1960 and two are aided by Government as Gau Sadans.

3.29 Water scarcity, low employment generation and least protection of the cattle population have become the main concerns of the Government during drought years. However cattle wealth remained major sources of livelihood in rural areas of the State assuring year-round income, employment to the small holder farmers and other weaker sections of the society including women and the landless population through draught power, rural transportation means, manure, fuel and last but not the least milk and milk products.

Vision

3.30 To improve State's cattle wealth so in near future cow rearing will emerge as a major economic activity offering immense employment opportunities.

Objectives

- Registration of Gaushalas and their development towards self-sufficiency.
- Gau-Seva Se Swavalamban (Self Reliance through service to Cow)
- To contribute in National and State's economic growth by modernization and revolutionary improvisation of Gau-Seva sector.
- To ascertain opportunities towards cent per cent employment to adequately trained human resources in Animal Husbandry and Gau-Seva Sector within the State.
- To assure large scale rural based self-employment in Animal Husbandry and Gau-Seva Sector to check human resource migration from villages.
- To improve cattle health by ensuring to meet the requirement of the quality feed and fodder, including ample green fodder.

- Introduction of livestock friendly specialized techniques and services in order to improve quality of services and door step delivery to livestock breeders.
- Establishment of computer connectivity up to tehsil level institutions.
- Preparation and maintenance of an enriched data bank of the data collected and processed.
- To facilitate enforcement of legal provisions related to cattle with a view of protection to cattle.
- To stop cattle slaughter in the State.
- To identify and seize the vehicles carrying cattle wealth for slaughter purpose and arrest and prosecute the persons involved in such transportation activities.
- To impose stringent penalties and punishment to the persons involved in cattle slaughter activities.
- To make provisions for establishment of Gaushalas in each and every city and village of the State under P.P.P. model in order to provide shelter to the cattle wealth so confiscated.

3.31 An outlay of ₹ 208.78 lakh is proposed for the administrative expenses of newly constituted Directorate and provision of ₹ 9130.57 lakh is proposed for grant to registered Gaushalas and ₹ 700.00 lakh for construction of building of Gau-Seva Directorate for the Annual Plan 2014-15.

FISHERIES

3.32 Keeping up the development process for increasing the production of fish and fish seed and to increase the scope of employment generation for rural weaker sections of the society. It is essential to continue the improvement in productivity and production along with the diversification of programme and introduction of new technological advancements.

3.33 As for the Aquaculture, at present attention is being given only on the development of fisheries where as other sector like aquatic weed crops and aquatic animals of economic importance are also cultivated traditionally which requires attention towards their improvement and development.

Objectives & Priorities

- Self sufficiency in quality fish seed through own hatcheries and rearing area.
- Fisheries extension at par with agriculture extension service.

- Aquaculture, especially semi & intensive culture of carps, catfish & fresh water prawn.
- Human resources/ livelihood development of beneficiaries through capture and culture fisheries activities.
- Ornamental fish production and trade.
- Innovative fisheries activities such as pen and cage culture prawn culture
- Research in breeding innovation.
- Reservoir Fisheries development.
- Value addition of low priced fishes. (Byproduct/ processing)
- Development of market infrastructure.
- Conservation of fish bio-diversity.
- Utilizing all schemes of National Fisheries Development Board and RKVY, etc. for developmental activities.

3.34 An outlay of ₹ 506.72 lakh has been proposed for the Annual Plan 2014-15. Scheme wise details are as under:

Fish Seed Production

3.35 For the development of fishermen, the most important input component is the availability of quality fish seed. By the end of Twelfth Five Year Plan period, the estimated requirement of fish seed will be above 500 million of fry.

3.36 To meet this requirement, an outlay of ₹ 97.99 lakh is proposed for the Annual Plan 2014-15 for maintenance, operational cost, purchase of equipments etc. at fish farm viz., Rawatbhata, Kasimpura, Guawadi, Sursagar, Kaithoon, Silised and Bheempur. ₹ 80.00 lakh is proposed for the remaining work of fish farm Bheempur and Sagrod (Banswara).

Development of Fish Farms

3.37 For the development of Fisheries, Fish Farm Development is essential. To meet this requirement, strengthening and modernization of department fish farms were taken up in 2013-14. An outlay of ₹ 195.00 lakhs has been proposed for completion of remaining work of fish farms Silised (Alwar), Lakhuwali (Hanumangarh), Sursagar (Kota) in Annual Plan 2014-15.

Development of Inland Fisheries and Aquaculture

3.38 Under centrally sponsored scheme, 15 Fish Farmers Development Agencies (FFDAs) are functional in the State with the following objects:

- Development of water bodies through intensive fish culture particularly in rural area.

- Generation of rural employment potential.
- Additional source of income for local masses.

3.39 An outlay of ₹ 16.80 lakh is proposed for the Annual Plan 2014-15. It consist State share provision of ₹ 3.00 lakh for development activities such as pond renovation & first year input subsidy for feed, fish seed etc. of ongoing Fish Farmers Development Agencies (FFDAs) and ₹ 1.20 lakh for subsidy for purchase of boat and nets to 480 fish farmers.

Strengthening of Data Base and GIS for the Fisheries Sector

3.40 Central Sector Scheme is being implemented to improve the inland fisheries data base and to provide realistic fish production data in the State. An outlay of ₹ 25.00 lakh is proposed for the Annual Plan 2014-15 to need the expenditure of salary and other items of the scheme.

Integrated Development of Reservoir Fisheries

3.41 An outlay of ₹ 6.00 lakh is proposed for the Annual Plan 2014-15. It consist provision of ₹ 1.00 lakh for maintenance and operation of existing mechanized boats and ₹ 5.00 lakh to procure 100 units of life saving appliances (life jackets & life-boats) in order to avoid possibilities of accidents in the reservoir water.

Fisheries Extension, Education and Training

3.42 An outlay of ₹ 13.50 lakh is proposed for the Annual Plan 2014-15 for following items:

Table No. 3.1

1.	Training to Department Personnel (out of State)	₹ 0.50 lakh
2.	Exposure Visit of Progressive Farmers (within/ out of State)	₹ 1.00 lakh
3.	Extension and Publicity of Fisheries Development	₹ 1.00 lakh
4.	Training to Farmers and Organization of Workshop	₹ 6.00 lakh
5.	Purchase of Equipments and Accessories etc. for Training Center at Rawatbhata	₹ 5.00 lakh

3.43 A Training Center is completed under centrally sponsored scheme (CSS) at Rana Pratap Sagar, Rawatbhata in the year 2013-14. The outlay proposed is kept for the purchase of equipments and accessories for above training centre during the year 2014-15.

3.44 An outlay of ₹ 0.60 lakh is kept for the empowerment of women by providing fisheries training to the women in the Annual Plan 2014-15.

Group Accident Insurance Scheme for Active Fishermen

3.45 Fish Farmers/Fishermen licensed/identified or registered with the State are proposed to be insured for ₹ 2.00 lakh against death or

permanent total disability and ₹ 1.00 lakh for partial permanent disability and a cover of ₹ 10000/- towards hospitalization expenses in the event of accident. The insurance cover will be for a period of 12 months under Centrally Sponsored Scheme. A premium of ₹ 65.00 per fisherman are paid to FISHCOPPED, New Delhi. The 50 per cent of the premium is paid by the Government of India directly to FISHCOPPED, and 50 per cent has to be contributed by the State Government. An outlay of ₹ 2.00 lakh is proposed for the Annual Plan 2014-15 to benefit about 12,000 farmers.

National Scheme of Welfare of Fishermen

3.46 Under this scheme an outlay of ₹ 30.00 lakh is proposed for the Annual Plan 2014-15, for the following items:

Development of Model Fishermen Village

3.47 A Fishermen village may consist of not less than 10 houses. There is no upper limit for number of houses to be constructed in a village, which would depend on number of eligible fishermen in that village. However, State has to ensure equitable distribution of houses among all villages in proportion to the number of eligible fishermen, as far as possible. The plinth area & cost of construction of a house will be limited to 35 sq. mts and ₹ 75,000/- respectively. Beneficiary should be an active fisherman and preference is given to fishermen below poverty line and to landless fisherman. Presently, under the Scheme, development of model fishermen village is taken in the tribal belt of the State. An outlay of ₹ 20.00 lakh has been proposed in the Annual Plan 2014-15 to benefit 40 farmers.

Saving cum Relief

3.48 Objective of this scheme is to provide financial assistance to fishermen during lean fishing season (3 months- June to August). Fishermen has to contribute ₹ 900.00 during the period of 9 months, contribution of ₹ 1800.00 will be made by the Central and the State Government on 50:50 basis, thus the total ₹ 2700.00 will be distributed to every contributing fisherman in 3 equal monthly installment of ₹ 900.00 each during close season/ lean fishing season. For purpose of this component, an eligible fisherman means a person who is a professionally engaged in full time fishing, is member of Cooperative Society/ Federation/ Welfare Society, lives below poverty line and is below 60 years of age.

3.49 To benefit around 825 Tribal Fishermen, an outlay of ₹ 10.00 lakh is proposed for the Annual Plan 2014-15.

Computerisation

3.50 Information Technology is not only a tool for improving governance, but also more significantly is a means to deliver the services that the

department provides. For strengthening headquarter and district offices with web-based software, modern IT equipments, it is imperative that on-line software be developed and upgraded computers be provided to Fisheries Department Offices. An outlay of ₹ 2.00 lakh is proposed for the Annual Plan 2014-15.

Supervisory Staff- Direction and Administration

3.51 New 43 posts of following technical cadres created in first phase during the year 2012-13:

Joint Director	1
Fisheries Development Officers	9
Fisheries Fieldman	6
Fisherman	27

3.52 An outlay of ₹ 89.98 lakh is proposed for salary and other expenses for above mentioned posts for the Annual Plan 2014-15.

National Fisheries development Board

3.53 An outlay of ₹ 28.42 lakh is proposed for the year 2014-15 as State matching share for the National Fisheries Development Board projects, out of which an outlay of ₹ 22.72 lakh is kept for ongoing rearing of seed in cages and ₹ 5.70 lakh for the Sport Fisheries project at Bisalpur as new item involving total cost of ₹ 57.00 lakh.

RAJASTHAN COOPERATIVE DAIRY FEDERATION

3.54 Rajasthan Cooperative Dairy Federation (RCDF) was established in the year 1977 under Rajasthan Co-operative Societies Act, 1965 with affiliated 16 district milk unions. Since then RCDF has made sincere efforts to reach the village milk producers of 33 districts of Rajasthan in order to ensure substantial contribution to rural economy and betterment of village level milk producers.

3.55 Over the years RCDF has established a sprawling net work of more than twelve thousand and nine hundred primary village level Co-operative Societies linked with 21 Milk Unions at District Level which are affiliated to RCDF, being their apex body. The governance of village level milk societies and milk unions is ensured by elected Board of Milk Producers under a democratic system. RCDF too is being governed by an elected board.

The Major Objectives of RCDF are as follows:

- Creation of effective infrastructure for procurement, processing and marketing of milk & milk products
- Social and Economic development of milk producers by transferring cash flow from urban to rural areas

- Implementing various schemes for social security of the producers
- Women participation at Village Level Milk Co-operative Society
- Milk production and enhancement of bovine live stock
- Animal Health Care, Vaccination and Animal Insurance
- Breed improvement
- Balanced Cattle Feeds, Mineral Mixtures and UMB for milk producers at village level
- Hybrid seed processing and distribution for green fodder
- Provide quality milk and milk products to the consumers

RAJASTHAN UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES, BIKANER

3.56 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 w.e.f. 13th May, 2010 at Bikaner. It aims at making provision of improving education towards development of quality human resource in different branches of study in veterinary and animal sciences as well as furthering the advancement of learning and conducting of research and extension education.

3.57 Considering the changes in scenario required to be brought for preparedness to meet the forthcoming challenges in this modern age of science, high quality education, research and extension activities are the key drivers for the development of livestock sector. In concern with livestock sector in Rajasthan, it is furthermore significant because of immense potential of this sector to grow in the State. Therefore, all efforts were taken to propose the schemes for strengthening the facilities, ensuring proper and systematic training, research and extension under the Twelfth Five Year Plan.

3.58 Thrust has been given on production of quality human resource and appropriate technologies to improve production as well as health status of animals and conservation of indigenous quality and/or endangered germplasm, so as to address the animal husbandry sector in befitting manner in the modern systems of veterinary and animal sciences in the State. Moreover, while proposing the activities due consideration was given to the priorities and directives of the approach paper of Planning Commission and Livestock Development Policy of the State.

Campuses (Constituent):

- College of Veterinary and Animal Sciences (CVAS), Bikaner.

- College of Veterinary and Animal Sciences, Navania-Vallabhnager (Udaipur)
- Post Graduate Institute of Veterinary Education & Research (PGIVER) (Est. As Apex Center, 1994 and as PGIVER, 2012) with 10 departments having an objective to impart quality professional higher education, to develop technologies suitable for promoting animal production in the State and to develop a centre of higher learning as well as research in the field of veterinary and animal science. The post graduate programme in veterinary and animal science will be initiated in 15 disciplines at PGIVER, Jaipur.
- Livestock Research Stations (LSRs) at College of Veterinary and Animal Sciences (Bikaner), Vallabhnagar (Udaipur), Chandan (Jaisalmer), Nohar (Hanumangarh), Beechwal (Bikaner), Kodamdesar (Bikaner) and Bojunda (Chittorgarh).
- Veterinary University Training and Research Centre (VUTRCs-10 in number by March, 2014) with objective to impart diagnostic and testing services and training to farmers on new technologies of animal husbandry and veterinary science to sustain and improve production of animals for better livelihood of farmers. Ten VUTRCs are at Ladnun (Nagaur), Kumher (Bharatpur), Suratgarh (Ganganagar), Bojunda (Chittorgarh), Kota, Dungarpur, Ajmer, Churu, Sikar and Tonk.

Research Achievements

1. Conservation of Animal Biodiversity

- Centre for Conservation of Animal Biodiversity at Bikaner
- Establishment of Microbiological and Biotechnological Information System Network (Bioinformatics and Chemo informatics) Centre for exploring interconnections of molecular Biological Application in the field of Animal Husbandry at Bikaner
- Establishment of live demonstration models of diversified livestock production systems for motivating adaption to enhancing agricultural income at Bikaner, Vallabhnagar and Jaipur.
- Establishment of Rathi Cattle Breeding Farm at LRS, Bikaner and LRS, Nohar (Hanumangarh)
- Establishment of Tharparkar Cattle Breeding Farm at LRS, Chandan (Jaisalmer) and LRS, Beechwal (Bikaner)
- Establishment of Kankrej Cattle Breeding Farm, LRS, Kodamdesar (Bikaner)

- Establishment of Gir Cattle Breeding Farm at LRS, Vallabhnagar (Udaipur)
- Establishment of Sahiwal Cattle Breeding Farm, LRS, Kodamdesar (Bikaner)
- Enhancing mutton productivity in Marwari Sheep under Arid conditions, LRS, Beechhwal (Bikaner)
- Enhancing productivity in Magra Sheep under Arid conditions, LRS, Kodamdesar (Bikaner)
- Enhancing productivity in Marwari Sheep under Arid conditions, LRS, Beechhwal (Bikaner)
- Network Project on Surati Buffalo improvement at LRS, Vallabhnagar (Udaipur)
- Mega Sheep Seed Project (Sonadi), at LRS, Vallabhnagar (Udaipur)
- All India Coordinated Research Project (AICRP) on Goap improvement “Genetics improvement of Sirohi Goats in Farms’ flocks” at LRS, Vallabhnagar (Udaipur)
- AICRP on Goat improvement “Genetics improvement of Marwari Goats in Farms’ flocks” at Department of Animal Breeding & Genetics (ABG), CVAS, Bikaner

2. Feed & Fodder

- Livestock Feed Resources Management and Technology Centre at Bikaner
- Capacity building for animal feed technology, quality and productivity enhancement at PGI-VER, Jaipur
- Establishment of State level feed and fodder analysis laboratory for quality assurance in feeding of animals for sustainable Animal production in Rajasthan at Bikaner.
- Increased production of green fodder through hydroponics technology for sustainable Livestock production in Arid Rajasthan at Bikaner
- Sewan grass development and green fodder production along with fodder conservation for sustainable livestock production in arid region of Rajasthan at LRS, Kodamdesar (Bikaner)

3. Animal Production

- Centre for Organic Animal Production Technology at Bikaner
- Centre of Excellence for Space Based Technology in Animal Sciences at Bikaner

- Centre for Disaster Management Technology for Animals at Bikaner
- Engineering and Technology Centre for Animal Science at Bikaner

4. Animal Health

- Animal Bio Medical Waste Disposal Technology Centre at Bikaner
- Centre for Ethno-Veterinary Practice & Alternative Medicine at Bikaner
- Centre for Studies on Wild Life Management and Health at Bikaner
- Area specific mineral mixture supplementation of enhancing the production, reproduction and health status of cattle and buffalo of the semi-arid eastern plain of Rajasthan at PGI-VER, Jaipur
- Assessment of occurrence of various diseases in camel (*Camelus dromedarius*) prevailing in Arid and Semiarid region of the State using pathological diagnostic tools and development of field based diagnostic/sampling technologies for identification of camel diseases at Bikaner
- Capacity building for detection of newer synthetic ingredients, highly pathogenic microbial presence, drug and pesticide residues, pollutants etc. By establishing high-end milk equality testing laboratory at PGI-VER, Jaipur

5. TSP Area Development

3.59 Three new projects under TSP financed by the Education Division of ICAR were launched, which are-

- Strengthening of training hub and audiovisual lab, Strengthening of demonstration units, and purchase of animals for demonstration units
- Strengthening of clinics
- Strengthening of fodder farm

6. Organized Seminars/Conferences/Symposia

- National Workshop of National Academy of Veterinary Sciences at Jaipur in Sept., 2013
- International Seminar on Veterinary Pathology at Bikaner in Dec., 2013
- National Seminar on Veterinary Anatomy at Bikaner in Jan., 2014

Linkages for Capacity Building

- MoU with the National Meat and Poultry Processing Board, under the Ministry of Food Processing, Government of India to become knowledge partner in the field of meat and poultry processing.
- MoU with the National Research Centre (NRC) on Equines, Hisar for collaboration in the fields of Education, Research and Extension.
- MoU with the NRC on Camel, Bikaner in the fields of Education, Research and Extension.
- MoU has also been signed with IGNOU, New Delhi for starting courses on Milk Production Technology, Meat Technology and Poultry Farming
- MoU with Ayurved Ltd., New Delhi in the fields of research and extension.
- MoU with Reliance Industries Limited for silage technology.
- MoU with Central Sheep & Wool Research Institute, Avikanagar.
- MoU with Dr. Sarvapalli Radha Krishnan Ayurved University, Jodhpur for Research on Panchgaya.
- MoU with World Bank for Rajasthan Agriculture Competitiveness project under which proposal for establishment of two Mega farms of 1000 goats at LRS, Kodamdesar for Marwari breed and at Chittorgarh for Sirohi breed has been submitted.
- MoU has been signed between ICAR and North Carolina University, USA. Under which North Carolina University has expressed its interest to Collaborate with Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner. Two Professors from North Carolina University visited RAJUVAS and exchanged the ideas to identify areas of mutual interest.
- MoU with School of Medical Science and Technology (SMST), IIT, Kharagpur has been finalized and agreed by the University and is under process of finalization for collaboration technology research and extension in Animal Science.

3.60 For the Annual Plan 2014-15, an outlay of ₹ 5025.78 lakh is proposed for the University.