

CHAPTER - 8

ANIMAL HUSBANDRY, DAIRY AND FISHERIES

8.1 The animal husbandry sector comprises (i) Department of Animal Husbandry; (ii) Dairy Development; (iii) Fisheries and (iv) Veterinary Education & Research.

8.2 Live stock sector plays an important role in economy of Rajasthan and nearly 10 % of total state income is generated by Animal Husbandry. The Animal husbandry sector is harboring a fabulous livestock wealth having very significant role in providing major sources of income to the large numbers of cultivators, small farmers, marginal farmers, BPL families and agricultural labourers. Milk enterprise generates income on regular basis as against the Agriculture, which is mostly seasonal and is more prone to droughts. Cattle are mainly looked after by the women folk. The provision of assured market for the milk leads to their increased participation and the availability of cash income encourages them to take up to social development programmes.

8.3 As against twenty five well defined breeds of cattle and buffaloes in the country, the state is endowed with seven breeds with finest drought hardy milch breeds (Rathi, Gir and Tharparkar), dual purpose breeds (Kankrej and Hariyana) and the famous draught breeds of Nagauri and Malvi.

8.4 Live stock sector in Rajasthan is thus extremely livelihood intensive, closely interwoven into the social economic fabric of the rural society. The details of livestock population since 1951 are given below:

(No. in lac)

Item	1951	1961	1972	1983	1992	1997	2003	2007
Cattle	107.82	131.36	124.70	135.04	116.66	121.41	108.54	124.11
Buffalo	30.45	40.19	45.92	60.43	77.75	97.70	104.14	115.42
Sheep	53.87	73.60	85.56	134.31	124.91	145.85	100.54	112.84
Goat	55.62	80.52	121.62	154.80	152.85	169.71	168.09	218.82
Camel	3.41	5.70	7.45	7.56	7.46	6.69	4.98	4.30
Others	3.99	3.72	3.53	4.36	4.82	5.19	5.07	3.51
Total	255.16	335.09	388.78	496.50	484.45	546.55	491.36	579.00

Source: Livestock Census.

Objectives and strategy during Eleventh Five Year Plan:

8.5 The objectives for Animal Husbandry are:

- Improvement of out reach services to increase livestock health & production.
- Increases in the income of the people engaged in Animal Husbandry.
- Active participation of the local breeders.

- Shift from veterinary health care to animal husbandry practices and breed improvement.
- Promotion of Livestock industries and marketing in the State.
- Enabling the small producer to participate in the process of Globalisation, to gainfully participate in the process of growth and modernisation of the livestock sector.
- Prompt community participation with Public Private Partnership.
- To utilize livestock sector as a tool for economic & social development and gender equity.
- Increase animal protein availability to fulfill the nutritional requirements of the human population of the state.

8.6 Major Achievements during the eleventh five year plan as per the midterm review are as below:

- State Government has taken many decisions and initiatives for the development of the sector. Which include recruitment of 304 Veterinary Officers, First time release of Sheep and Goat Breeding Policies, Buffalo insurance to protect farmers from contingency losses, Introduction of Breeding and Health cards for record keeping of Breeding, Production and Health of Milch animals.
- 14 multi utility vehicles were made available for supply of inputs for Breed improvement programme and supervision work. Policy decision was taken to rear Jamunapari Bucks at Breeding farm Kumher (Bharatpur) and distribute Jamunapari Bucks after maturity for breed improvement in the tract.
- Under Rashtriya Krishi Vikas Yojana (RKVY), 100 Out-Doors in Veterinary Hospitals were built, provided to built and Rajasthan State Livestock Training and Management Institute (RSMLTI), Jaipur has been strengthened. Fertility camps and trainings to be organized under RKVY to combat infertility problem in cattle and Buffalo to improve productivity and reduce losses to the farmers. A special project for maintenance of Cold Chain during transportation and storage of vaccines to be started.
- A Scheme to organized treatment camps at every Panchayat where departmental institution doesn't exist to provide coverage of veterinary health and husbandry services has been started, called **Pashu Chikitsalaya Pashupalak Ke Dwar Yojana**.
- As per the budget Announcement 2009-10, frame work of Livestock policy for the Rajasthan state and establishment of Veterinary University work is in progress.

8.7 In the Eleventh Plan, an amount of Rs. 17500.00 lac has been kept. For 2010-11, an amount of Rs. 1800.01 lac has been proposed. The scheme wise details are as under:-

Establishment of Veterinary Polyclinics:

8.8 There are at present 14 polyclinics in the state. It was envisaged earlier to establish polyclinics at all the district head quarters. At 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 facility to treat complex animal disease & infertility problems by the subject matter specialist. In the Eleventh Plan, an amount of Rs. 300.00 lac has been kept. For 2010-11, an amount of Rs. 51.00 lac has been proposed.

Veterinary Hospital and Dispensary:

8.9 The existing facilities of animal health care are inadequate. There is one veterinary center for each 14299 animals where as the recommendation of National Commission on Agriculture is one Veterinary Center for each 5000 animals. Thus the state is lagging far behind the NCA recommendation. Therefore it is necessary to increase and strengthen the existing veterinary health care facilities during 11th plan period to take care of precious livestock. In the Eleventh Plan, an amount of Rs. 8419.00 lac has been kept. For 2010-11, an amount of Rs. 1206.96 lac has been proposed.

Veterinary Council:

8.10 State Veterinary Council has been constituted under the provisions of Indian Veterinary Council Act. It regulates the veterinary practices in the state and skill and knowledge up-gradation of veterinarians. It is a Centrally Sponsored Scheme on 50:50 basis. In the Eleventh Plan, an amount of Rs. 150.00 lac has been kept. For 2010-11, an amount of Rs. 15.00 lac has been proposed.

Goshala Development:

8.11 For the development and monitoring of the Goshalas in the state Department is providing grant to the Rajasthan Go Seva Ayog. In the Eleventh Plan, an amount of Rs. 150.00 lac has been kept. For 2010-11, an amount of Rs. 25.00 lac has been proposed.

Institutional Arrangement of Supplies (RLDB):

8.12 Rajasthan Livestock Development Board has been constituted in the 9th Five Year Plan for regular input supply to the departmental institutions and development. RLDB is getting funds from Government of India for the various livestock development programmes under NPCBB (National Project for Cattle and Buffalo Breeding). Department has been providing grant to RLDB to meet out establishment expenses. In the

Eleventh Plan, an amount of Rs 200.00 lac has been kept. For 2010-11, an amount of Rs. 50.00 lac has been proposed.

Sample survey for estimation of major livestock products

8.13 For the estimation of wool, Milk, Meat and Egg production in the state, a CSS (50%) scheme is going on. In the Eleventh Plan, an amount of Rs. 300.00 lac has been kept. For 2010-11, an amount of Rs. 82.00 lac has been proposed to meet out the 50% share for salary of staff working to promote this scheme.

Special Component Sub Plan:

8.14 Under this head departmental schemes like calf rallies, buck distribution and purchase of medicines are undertaken. In the Eleventh Plan, an amount of Rs. 3000.00 lac has been kept. For 2010-11, an amount of Rs. 105.00 lac has been proposed.

Tribal Sub Plan:

8.15 Under this head departmental schemes like calf rallies, buck distribution, backyard poultry development and trainings are undertaken. In the Eleventh Plan, an amount of Rs. 2205.00 lac has been kept. For 2010-11, an amount of Rs. 73.02 lac has been proposed.

Construction Works:

8.16 In the Eleventh Plan, an amount of Rs. 250.00 lac has been kept. For 2010-11, an amount of Rs. 50.00 lac has been proposed for the repair and renovation works of the buildings of the departmental offices and veterinary institutions.

Assistance to States for Control of Animal Diseases:

8.17 Under this Centrally Sponsored Scheme (75:25), it is intended to fill up the critical gaps in terms of strengthening the laboratories and creating a disease management system, and to equip the personnel by providing them training on various aspects of disease diagnosis, control and management. Under the scheme, the biological product laboratory and the state as well as regional disease diagnostic laboratories are under the process of modernization/ strengthening.

8.18 Public awareness programme would also be taken up. In the year 2008-09, the B.P. Lab have been conferred ISO 9001 level and tissue culture lab will be fully established very soon. Strengthening cold chain facilities through out state will also be taken up. In the Eleventh Plan, an amount of Rs. 900.00 lac has been kept. For 2010-11, an amount of Rs. 110.00 lac has been proposed.

Rajasthan Agriculture University, Bikaner & MPUAT Udaipur

8.19 The Rajasthan Agriculture University Bikaner was established in 1987 to look after Agriculture Extension, Education and Research and to carry out production oriented agriculture research, rural mass education,

adoption and propagation of new technologies in the field of agriculture including animal husbandry and allied services.

8.20 In the year 1999-2000 another Agriculture University was also established at Udaipur with a view to watch the interest of Agriculture Education and Research more effectively in the southern and eastern parts of the State. Now out of the 32 districts, 21 districts are served by RAU, Bikaner and 12 by Maharana Pratap University of Agriculture & Technology, Udaipur.

8.21 Following are the major activities related to Animal Husbandry which are under taken by these universities:

Veterinary Education and Research (Animal Husbandry)

8.22 The responsibility of Animal Husbandry, Veterinary Education and Research and fisheries are entrusted to RAU, Bikaner & Maharana Pratap University of Agriculture & Technology, Udaipur in the State. A state livestock breeding strategy needs to be evolved to meet the requirement of milk, meat, egg and livestock products and to enhance the role of draught animals as a source of energy for farming operations and transport. Major thrust will be on genetic up-gradation of indigenous / native cattle and buffaloes using proven semen and high quality pedigreed bulls and by expanding artificial insemination network to provide services at the farmers' doorsteps. Following are the important thrust areas of research in the field of Veterinary & Animal Science, dairy technology and fisheries.

Livestock Research

8.23 There is need for research on conservation and improvement of indigenous germplasm of Tharparker and Rathi Cattle, Surti Buffaloes, Gir cows, Deogarhi and Parbatsari goats and magra, Chotla, Mawari, Sonadi sheep etc.

Dairy Technology Research

8.24 Research on food products- technology standardization, packaging, by-product utilization and development new foods.

Fisheries & Limnology Research

8.25 Studies on bio-diversity including survey of ichthyic fauna and other aquatic organisms contributing to the aquatic bio-diversity. To work out nutritional requirement of local commercially important fishes for formulating ideal fish diet to promote intensive fish culture.

Education

8.26 In view of current needs of the State, syllabus has been re-oriented to include new disciplines viz. Veterinary Biochemistry, Livestock Product Technology and Epidemiology and Preventive Veterinary Medicine. In order to cater to the employer needs, new courses viz. Veterinary

Ambulatory Clinic, Vety. Laboratory Diagnosis, Vety. Epidemiology and Computer Applications and Bio-statistics have been included. However, as per VCI norms, there are deficits in respect of equipments, and facilities in various departments of the College. One time financial assistance is required to make up the deficiencies of equipments and facilities. Significant infrastructure additions have been made under ADP, namely- Teaching Clinical Complex, Animal Biotechnology laboratory, Central Laboratory and Faculty House. These facilities need to be strengthened through equipment and work force. Other facilities requiring strengthening are Library, Internship Programme, Field Practical Mobility, Disease Investigation facility, PG Programmes, Internship stipend and PG Stipend.

8.27 In the Eleventh Plan, an amount of Rs. 335.00 lac and Rs. 325.00 lac has been proposed for Rajasthan Agriculture University, Bikaner and MPUAT, Udaipur respectively. For 2010-11, an amount of Rs. 21.68 lac and Rs. 51.77 lac has been proposed for these Universities.

FISHERIES

8.28 Rajasthan possesses a large area of inland water bodies which offers potential for development of both intensive and extensive system of culture based fisheries. From the available fresh water resources in the state 3.30 lac ha. of inland water sheets in the form of reservoir (1.2 lac ha.) tanks, and ponds (1.8 lac ha.) and rivers (0.30 lac ha.) have been identified for capture cum culture fishery management. Besides, there exists 0.04 lac ha. brackish water bodies and perennial flowing system, 214 KM. Indira Gandhi Feeder Canal and about 500 KM under I.G.N.P. in north west Rajasthan.

8.29 Constraints in increasing production

- Uncertain and irregular monsoon.
- Draining/ pumping out of maximum stored water for Irrigation and Drinking purposes.
- Shortage of quality fish seed.
- Lack of traditional fishermen community.
- Lack of awareness among rural masses.
- Lack of technical know how in rural sector for fish culture.

8.30 The main objectives of the fisheries and aquaculture development programme identified for Eleventh Five Year Plan are:

- Maximization of Biological Productivity with optimum utilization of available resources.
- Enhancement of the quality fish seed production.
- Generation of employment opportunities.

- Production of all commercially important fish species available in Rajasthan.
- Improvement in socio economical condition of Fishermen.
- Conservation of aquatic bio diversity and eco system.
- Intensive training and demonstration for propagation of advance technologies in aquaculture practices.
- Propagation of cage and pan fish culture.
- Establishment of fish marketing yard, cold chain and retail outlets.
- Promotion of nutritional fish feed production units.
- Strengthening of the fisheries research and education net work.
- Strengthening the data base information net work.

Development of Inland Fisheries and aquaculture:

8.31 Under Centrally Sponsored Scheme, 15 FFDA's are functional in the state with the following objectives:

- (a) Increase of Fish Production through intensive fish culture, particularly in rural area for utilization of small water bodies.
- (b) Generation of rural employment potential.
- (c) Additional source of income for local bodies.

8.32 During the annual plan 2010-11, an additional water area of about 300 ha. is to be brought under aquaculture. An amount of Rs. 4.20 lac is proposed as spillover liability for following activities:-

Rs. In lac

S.No.	Item	Amount	Remarks
1	Grant in aid to FFDA for subsidy.	3.00	25% CSS matching
2	Subsidy for Nets & Boats	1.20	25% CSS matching
	Total	4.20	

Fisheries Training and Extension:

8.33 For updating the knowledge of advance aquaculture techniques & creating awareness regarding adoption of advance practices of aquaculture among fish farmers. An awareness center has been constructed in Jaipur under Centrally Sponsored Scheme. The operational and recurring expenditure will be borne by State Government. An amount of Rs. 3.00 lac is proposed for operating this center & Rs. 0.50 lac as a matching share is proposed for Training to progressive farmers. A total provision of Rs. 3.50 lac is proposed for Annual Plan 2010-11.

(Rs. in lac)

S. No	Particulars	Amount	Remarks
1	Operational cost of Awareness Center	3.00	State Plan
2	Training to progressive farmers	0.50	CSS matching 20%
	Total	3.50	

Group Accident Insurance Scheme for Active Fishermen:

8.34 Active fisher, who are engaged with fisheries activities are proposed to be insured through this scheme. For this purpose a premium of Rs. 30/- per fisher has to be paid to FISHCOPPED, New Delhi. The 50% of the premium is paid by Government of India directly to FISHCOPPED, and 50% has to be contributed by state government. A provision of Rs. 1.50 lac has been proposed for the year 2010-11 as committed liabilities. About 10000 fishers will be benefited under this scheme.

Fish Marketing

8.35 A State level fish market costing about 250 lac with all essential facilities like parking space, loading unloading facilities, cold storage, hygienic stalls, waste management system, proper drainage, communication and information facilities etc. will be constructed at Jaipur with the 90% assistance of National Fisheries Development Board. A provision of Rs, 10.00 lac (10%) is proposed as a matching share for this project for the year 2010-11 and Rs. 90 lac (90%) will be provided by NFDB.

National Scheme of Welfare of Fishermen:

8.36 Under central sponsored scheme (50:50) “National scheme of Welfare for Fishermen” an amount of Rs. 17.00 lac is proposed as state share, for the year 2010-11 for following activities.

Development of Model Fishermen Village.

8.37 For development of model fishermen village in Tribal sub plan area of the state a provision of Rs. 5.00 lac is proposed as state share during the year 2010-11, for construction of fishermen houses, hand pumps and community hall.

Saving cum Relief:

8.38 Under this scheme financial assistance is provided to fishermen during lean fishing season. 2000 Fishermen will be covered and benefited under Saving cum relief scheme for which they will be given equal assistance of Rs. 600 each by State Government and Government of India on saving of Rs. 600 by fishermen during close season (June to August)

in equal instalment. An amount of Rs. 12.00 lac is proposed as matching share for the year 2010-11 for this purpose.

DAIRY

8.39 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 sustained efforts to reach the village milk producers of 33 districts of Rajasthan in order to ensure substantial contribution to rural economy and betterment of milk producers.

8.40 Over the years RCDF has established a sprawling net work of more than eleven thousand 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.

8.41 The Major objectives of RCDF are as follows:-

- Creation of effective infrastructure for procurement, processing and marketing of Milk and Milk products,
- Social and Economics development of Milk producers by transferring cash flow from Urban to Rural areas,
- Implementing various schemes for social securities of the producers,
- Women participation at village Level Milk Co-operative Society,
- Milk production and enhancement of bovine live stock,
- Animal Health Care and Vaccination,
- 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.

8.42 RCDF has procured 19 LLPD milk till November, 09 and has setup a target of procuring 25LLPD milk during the year 2011-12. Procurement price being paid to the farmers in the State is one of the highest among the Cooperative Dairies in the country.

8.43 Feed & Fodder is the most important input in production of milk. In last six months, prices of feed and fodder have registered unexpected rise and this has affected the economic condition of milk producers particularly of small and marginal farmers for whom this is more of livelihood than business. RCDF and its affiliated milk unions in the state have diverted their profits to help the milk producers in the period of crisis. In the past one year, RCDF has given a subsidy of about Rs. 14

Crore in supply of cattle feed. Similarly, milk producers have been paid an amount of Rs. 1144 Crore as against Rs. 905 crore during the corresponding period of previous year. Looking at the magnitude of distress, the farmers facing particular scarcity condition in most part of the state deserve more assistance.

8.44 Therefore, Govt. of India is requested to make special provisions for assistance to farmers to subsidize the cattle feed and give them incentive in procurement price.