

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 Agriculture plays an important role in Rajasthan economy and nearly one fourth of the total state income is generated by Agriculture and allied activities including Animal Husbandry. The Animal husbandry sector is harboring a fabulous livestock wealth having very significant role in providing subsidiary to 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 crop enterprise, 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 breeds 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 Livestock production in general and cattle and buffaloes in particular is highly women oriented as it is labour intensive. Over 95% of households chore is related to the care and management of milch animals in livestock owing households are dealt by women and 60% of all labour engaged in rural livestock production are women. Live stock sector in Rajasthan is thus extremely livelihood intensive, closely interwoven into the social economic fabric of the rural society, making investments in development of this Sector the critical pathway for rural prosperity. The details of livestock population since 1951 are given below:

Table No. 8.1

(No. in lakhs)

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.

8.5 The scarcity of fodder and low grass land productivity has forced the reduction in livestock population.

Objectives and strategy during Eleventh Five Year Plan:

8.6 The objectives for Animal Husbandry are:

- Prompt community participation with Public Private Partnership.
- Improvement of out reach services to increase livestock health & production.
- Increases in the income of the people engaged in Animal Husbandry.
- Promotion of Livestock industries and marketing in the State.
- Active participation of the local breeders.
- Shift from veterinary health care to animal husbandry practices and breed improvement.
- 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.

8.7 In the Eleventh Plan, an amount of Rs. 17500.00 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 1340.00 lacs and amount proposed for 2009-10 is Rs. 1500.00 lacs. In the year 2008-09 State Government has taken an initiative as Sankalp in which several activities is being started in the department viz. establishment of mobile units in 19 districts, Jamunapari buck rearing at calf rearing center, Kumher and printing of Breeding and Health card for identification of elite animals and record keeping of best animals in the State, Backyard poultry farming etc. 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 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 46.36 lacs and amount proposed for 2009-10 is Rs. 49.98.90 lacs.

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.

8.10 In the Eleventh Plan, an amount of Rs. 8419.00 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 674.67 lacs and amount proposed for 2009-10 is Rs. 836.69 lacs.

Veterinary Council:

8.11 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 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 13.50 lacs and amount proposed for 2009-10 is Rs. 14.00 lacs for state matching share.

Goshala Development:

8.12 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 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 30.00 lacs and amount proposed for 2009-10 is Rs. 28.00 lacs. For the compliance of budget announcement Rs. 50.00 Lacs has been given to Madhav Govigyan Anusandhan Sansthan, Bhilwara and Rs. 30.00 Lacs has been given to Revasa Dham Goshala for the strengthening of goshala and establishment of Panchgavya lab and farmers training center in the year 2008-09.

Institutional Arrangement of Supplies (RLDB):

8.13 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 salary expanses. In the Eleventh Plan, an amount of Rs 200.00 lakhs has been proposed. Likely expenditure during 2008-09 is Rs.44.00 lacs and amount proposed for 2009-10 is Rs.45.00 lacs.

Sample survey for estimation of major livestock products

8.14 In the Eleventh Plan, an amount of Rs. 300.00 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 56.62 lacs and amount proposed for 2009-10 is Rs. 62.08 lacs to meet out the 50% share for salary of staff working to promote this scheme.

Special Component Sub Plan:

8.15 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 lakhs has been proposed. Likely

expenditure during 2008-09 is Rs. 155.00 lacs and amount proposed for 2009-10 is Rs. 105.00 lacs.

Tribal Sub Plan:

8.16 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 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 88.77 lacs and amount proposed for 2009-10 is Rs. 73.03 lacs.

Construction Works:

8.17 In the Eleventh Plan, an amount of Rs. 250.00 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 50.00 lacs and amount proposed for 2009-10 is Rs. 50.00 lacs for the repair and renovation works of the buildings of the departmental offices and veterinary institutions.

Assistance to States for Control of Animal Diseases:

8.18 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.

8.19 Public awareness programme would also be taken up. In the year 2008-09, the B.P. Lab have been conferred ISO 2001 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 lakhs has been proposed. Likely expenditure during 2008-09 is Rs. 75.08 lacs and amount proposed for 2009-10 is Rs. 109.21 lacs.

Rajasthan Agriculture University, Bikaner & MPUAT Udaipur

8.20 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.

8.21 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 11 by Maharana Pratap University of Agriculture & Technology, Udaipur.

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

Veterinary Education and Research (Animal Husbandry)

8.23 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

8.24 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

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

Fisheries & Limnology Research

8.26 Studies on bio-diversity including survey of ichthyo 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

8.27 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.

8.28 In the Eleventh Plan, an amount of Rs. 335.00 lakhs and Rs. 325.00 lacs has been proposed for Rajasthan Agriculture University, Bikaner and MPUAT, Udaipur respectively. Likely expenditure during 2007-08 of Rs. 14.85 lacs and Rs. 25.00 lacs and amount proposed for 2008-09 is Rs. 15.50 lacs and Rs. 84.68 lacs for these Universities.

FISHERIES

8.29 Rajasthan possesses a large area of inland water bodies which offer potential for development of both intensive and extensive system of culture based fisheries. From the available fresh water resources in the state 3.30 lakh ha. of inland water sheets in the form of reservoir (1.2 lakh ha.) tanks, and ponds (1.8 lakh ha.) and rivers (0.30 lakh ha.) have been identified for capture cum culture fishery management. Besides, there exists 0.04 lakh 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.

8.30 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.

8.31 The main objects 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:

8.32 Under Centrally Sponsored Scheme, 15 FFDA's are functional in the state with the object:

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

8.33 During the annual plan 2009-10 about 1500 fish farmers are proposed to be trained in aquaculture techniques and an additional water area of about 1000 ha. Is to be brought under aquaculture.

8.34 An amount of Rs. 5.65 lacs is proposed as spillover liability for following activities:-

Table No. 8.2

Rs. In lacs)

S.No.	Item	Amount	Rmarks
1	Grant in aid to FFDA for Training and subsidy.	4.00	25% CSS matching
2	Subsidy for Nets & Boats	1.50	25% CSS matching
3	Subsidy for Pan culture	0.15	25% CSS matching
	Total	5.65	

Fisheries Training and Extension:

8.35 For updating the knowledge of advance aquaculture techniques among departmental personnel, creating awareness regarding adoption of advance practices of aquaculture among fish farmers, for fish culture and capture activity. An amount of Rs. 0.50 lacs is being proposed for Annual Plan 2009-10, for spillover liability for following activities:

Table No. 8.3

(Rs. In lacs)

S.No.	Particulars	Amount	Remarks
1	Training to progressive farmers	0.30	CSS matching 20%
2	National/State level workshop	0.20	CSS matching 20%
	Total	0.50	

Group Accident Insurance Scheme for Active Fishermen:

8.36 Active fisher folk which is engaged with fisheries activities are proposed to be insured through this scheme. For this purpose a premium of Rs. 14/- per fisher folk 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. 0.50 lacs has been proposed for the year 2009-10 as committed liabilities. About 6000 fishers will be benefited under this scheme.

National Scheme of Welfare of Fishermen:

8.37 Under central sponsored scheme (50:50) “ National scheme of Welfare for Fishermen” an amount of Rs. 13.35 lacs is proposed as state share for the year 2009-10 as state marketing share for following activities.

1. Development of Model Fishermen Village.

8.38 For development of model fishermen village in Tribal sub plan area of the state a provision of Rs. 10.00 lacs is proposed as state share during the year 2009-10, for construction of fishermen houses, hand pumps and community hall.

2. Saving cum Relief:

8.39 Under this scheme financial assistance is provided to fishermen during lean fishing season. Fishermen has to contribute Rs. 50.00 per month for nine month of fishing period the amount so collected along with the equal contribution of government (Central and State Government sharing 50:50 basis) will be paid to the beneficiaries in three equal installment of Rs. 300.00 during three months of close season.

8.40 An amount of Rs. 3.35 lacs is proposed as matching share for the year 2009-10 for this purpose.

DAIRY

8.41 Rajasthan Co-operative Dairy Federation, with commitment of Dairy development in rural area without state grant in the 11th Five Year Plan, continued its successful journey with an ever growing membership of 6.60 lakh milk producers and improving their economic status by providing rural self employment and additional source of income.

8.42 RCDF attained 1st rank among North Indian State Dairy Federations in Milk procurement and Liquid Milk Marketing during 2008-09. It recorded the highest milk collection of 22.19 lakh litres on a particular day in December, 2008. RCDF policies of providing a uniform milk procurement price in all affiliated milk unions resulted in highest milk price pay back to the milk producers ever. The demand for Saras Milk and milk products in a wide range of milk products in consumers is also growing day by day.

8.43 Apart from the above, Social Welfare Schemes – Saras Suraksha Kavach and Saras Samuhik Arogya Bima Yojana, Centrally Sponsored Schemes SGSY & WDP (Women Development Programme) also contributed in the upliftment of rural citizens. The WDP also opened doorways for women's empowerment in the state through a network of 3,558 women dairy societies at the village level with 1.90 lakh women members.

8.44 During the 11th Five Year Plan, Centrally Sponsored Schemes – Clean Milk Production Programme (CMP) was launched by RCDF with an outlay of Rs. 9.40 crores with the objective of milk quality improvement, increasing returns to milk producers and production enhancement in Ajmer, Bhilwara, Jaipur, Bundi, Churu, Jodhpur, Udaipur, Alwar, Sriganganagar and Pali districts all are completed except Pali & Churu. Similarly, IDDP with a total outlay of Rs. 26.07 crores has been launched for development of Dairy Infrastructure in Jhalawar, Chittorgarh, Baran, Rajsamand, Churu, Sriganganagar, Sirohi, Dholpur and Tonk districts. Out of which Jhalawar & Chittorgarh has been completed in rest of the project work is in progress.

8.45 State Government has sanctioned a sum of Rs. 9.94 crs. under Devnarain Yojana to be implemented in 13 pre identified tehsils 9 Gujar majority populated districts where in infrastructure facilities for milk procurement will be established.

8.46 Rajasthan Co-operative Dairy Federation while marching ahead has set its goal of achieving 25 lakh litres of average milk collection by the end of the 11th Five Year Plan by an intensive coverage of villages, Induction of Milch Cattle, Breed Improvement and productivity Enhancement. The amount of Rs. 2 crore allocated has been conditional for milk unions who can fulfil the norms of additional milk quantity form the new DCS mentioned by categorized milk unions within the scheme.