
**DAIRY DEVELOPMENT PROGRAMES IN HARYANA: PROGRESS &
CONSTRAINTS**

Dr. Anil Kumar Sharma*

Ishwar Singh **

ABSTRACT

Dairying contribute to Haryana's growth and development in numerous ways. State occupies a prominent place in the Country for its livestock wealth and has earned the distinction of being the home of the World famous Murrah buffaloes and 'Haryana' and Sahiwal Cows. The main objectives of this study is to depicts the dairy development scenario through critical examination of the dairy development programs being implemented by the State Government in Haryana and to find out the constraints hampering the dairy development in the State. The study of the various dairy development programmes reveals that the financial , operating and many other types of assistance to dairy farmers have now , been looked after by different agencies, mostly in isolation . It lead us to infer that dairy development programmes have been lagging behind to deliver the expected results due to administrative apathy, infrastructural and staff deficiencies , overlapping and duplication of efforts. The State however, has a grate potential for dairy development.

Key Words: *Dairying, Veterinary Health, Dairy Cooperative Network, Artificial Insemination etc.*

* Ph.D Supervisor

** Ph.D Student , Singhania University , Pancheri Bari, Jhunjunu (Rajasthan).

INTRODUCTION

Animal Husbandry and dairying have been an integrated and important component of State's agricultural economy as well as contribute to its growth and development in numerous ways. As the Country is all set to usher in era of second phase of 'White Revolution' promising to transfer it into a global giant in the production of dairy products, dairy farming is fast being acknowledged a employment option for young farmers who are at crossroads and need to diversity in order to survive. Dairying, apart from generating substantial direct employment, has a large inbuilt potential for generating indirect employment in several ancillary activities like manufacturer of feed for animals and production of milk products. Thus, dairying has a edge over all other possible alternative. Before Haryana came into existence as a separate State on November 1, 1966 it was a part of Punjab State. Agriculture has been the backbone of the economy of the State. Haryana occupies a prominent place in the Country for its livestock wealth and is credited with having World's best breed of buffalo known as Black Gold and pride of the State. As already said the State has earned the distinction of being the home of the World famous 'Murrah' buffaloes and 'Haryana' and 'Sahiwal' cows. There are about 59.53 lakh buffaloes and 15.52 lakh cattle in Haryana. At present, we have a number of agencies for animal husbandry and dairy development in the State, namely, the State Department of Animal Husbandry and Dairying, Haryana Live Stock Development Board and Haryana Dairy Development Cooperative Federation Ltd. (HDDCF) & Voluntary Organizations.

These agencies have been playing the key role in developing the infrastructure for dairying in the State. We have also some others agencies involved in dairy farmers life in various ways. They are District Rural Development Agencies, State Women Development Corporation, State Schedule Caste and Backward Caste Development Corporation, Cooperatives and nationalized banks and Insurance Companies etc, the State Dairy Laboratory, Haryana Veterinary Vaccination Institute (Hissar), State Veterinary Training Institute (Hissar), have also been functioning. Thus, the Livestock economy of the State has attracted wide spread attention since the formation of the separate State. The main objective of this paper is to depict the dairy development scenario through certical examining the dairy development strategies and programmes in State of Haryana and find out the constraints which have been hampering the dairy development in the State. This study is based on published and unpublished data available from Union and State Government

agencies. The other source of data is field observation and discussions held with personnel working in dairy development agencies in the State and the milk producers of the Haryana.

STRATEGIES FOR DAIRY DEVELOPMENT:

In Haryana, the State Animal Husbandry and dairy development administration has been playing a significant role in making dairying work on modern commercial lines. The major thrust of policies and programmes of the State Government has been concentrated on the following strategies.

- i) To achieve growth rate more than 6-7 to 10% in animal husbandry & dairy sector.
- ii) To increase individual animal productivity.
- iii) To make Murrah Buffaloes to the Animal of 21st Century.
- iv) Global export of Murrahs Germplasm as Triple purpose animals.
- v) Quality Breeding Improvement Services.
- vi) Veterinary Health & Disease Control.
- vii) Feed and Fodder production.
- viii) Human Resource Development.
- ix) Publicity and Extension.

DAIRY DEVELOPMENT PROGRAMMES

The dairy development infrastructural facilities rendered through earlier dairy development programmes had contracted on establishing the bull breeding farms in the major cattle tracts of the State and a very general approach was adopted which resulted in lack of serious thought to improve the productivity of the milch animals. Later on, realization of the importance of the cattle wealth, a more comprehensive and intensive development alternative known as the Intensive Cattle Development Project (ICDPs) were introduced in the State. The importance aspects of cattle development such nutrition, fodder development, disease prevention and health care were given special attention under the ICDPs. A serious thrust was given to feed the public sector milk plants through increasing the milk production of our cattle. The ICDPs included the cross breeding component, integrated livestock management and linking up with rural dairying with the urban milk supply. The ICDPs were entrusted with a target population and also provided with all necessary inputs and services simultaneously required to dairy farmers. In 1967-68, two ICDP were established in Karnal and Gurgaon. Later on, the State Government has also

established four medium size ICDPs at Jind, Kurukshetra, Bhiwani and Ambala and a fifth large size ICDP in Sirsa. Present seven such ICDPs have been in operation in the State. There are 3 semen production centers under State Department of Animal husbandry and Dairying and 4 under other agencies. The state animal Husbandry & Dairying has 10 frozen semen banks of which 4 under other agencies. The number of AI centres under the State Department of Animal Husbandry and Dairying are 2758 and 1145 centres are under other agencies. The following programs have been implemented in the state of Haryana.

A) Murrah Development Programme: Under Centrally Sponsored Scheme/ Programme named “National Project for Cattle and Buffalo Breeding (NPCBB)”, a major programme for the development and conservation of important indigenous breeds have been implemented in the State. This provides for establishing Milk Recording Centres and establishing of Central Hard Registration Scheme Units (CHRS Unit). A unit has been setup at Rohtak under this scheme, Integrated Murrah Development Project has also been in operation in the State. Strategically, the initial approach under this project included screening of the base population for their production performance and identification of Murrah buffaloes yielding more than 200 litres of milk in lactation. The male progeny of these recorded buffaloes have been procured and reared under scientific management as future bulls. The provisions of cash incentives from five thousand to twenty five thousands has been introduced for the owners of these buffaloes. All the identified buffaloes are got insured special bull rearing centers and milk recording centers have been established for recording the milk yield of indigenous breeds. The number of Murrah buffaloes identified has been very small keeping in view the total number of murrah buffaloes in the State. Murrah Village societies have been setup in 45 Selected villages of the state for proper development of the Murrah breed and a subsidised amount of Rs. 5 lakh has been provided to each society for their development. The progress of various activities under cattle and buffalo development programmes is given in Table -1.

Table -1

Progress Under Cattle and Buffaloes Development

Sr. No	Item	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Number of Murrah Buffaloes Identified	1700	1745	3122	4424	9500	17654	10506
2	Number of Animal Insured	1655	1842	3122	4424	9500	17654	10506
3	Number of Murrah Male Buffaloes /cows Purchased	156	151	250	437	452	784	739
4	Number of Male Murrah Buffaloes Supplied to Panchyats	69	104	150	250	468	476	352

Source: Haryana Live Stock Development Board Panchkula (Haryana)

The data given in Table –I reveals that number of buffaloes identified was 10506 in 2009-10 as against 1700 in 2003-04 . It is evident from the data given in Table -1 that about 739 male buffaloes were purchased in 2009-10 as against just 156 in 2003-04. The number of male murrah buffaloes supplied to Village Panchyats was 352 in 2009-10 as against 69 in 2003-04. The identified male calves of Murrah buffaloes are being reared at Hisar and Bhiwani from livestock owners of State and other states could purchase male calves. The Murrah buffaloes in the State have been provided insurance under the Centrally Sponsored Scheme, designed with the twin objectives of providing protection mechanism to farmers and cattle keepers against any eventual loss of their animal due to death as well to demonstrate the benefit of insuring of livestock in order to popularize rearing of improved animals leading to the ultimate goal of attaining qualitative improvement in livestock and their products in the State. It is clear from the Table-1 that almost all the murrah buffaloes, identified were insured.

B) Development of Dairy Units :The State Dairy Development Machinery has been playing a vital role in bringing dairy on modern commercial lives. It is well known fact that now agriculture has reached a plateau where diminishing marginal return have set in, so

diversification of agriculture has become necessary. Dairying has an edge over all other possible alternatives, because it may provide employment to millions of unemployed and under employed rural people.

The State has a vast potential of self employment generation in animal husbandry and dairy sector. The State Government has introduced various dairy development schemes on commercial lines. Under High tech Dairy Unit Scheme comprising 3,5,10 and 20 milch animals can alone generate substantial employment for the youth in the State under this scheme loan is being provided by the commercial banks and subsidy by the State Government. The major objective of the Scheme has been the clean milk production and creation of data bank. It also focuses on the formation of breed association and more employment as a result of shift from 1-2 milch animals to large commercial dairies. The subsidy on sanction of loan is released in advance to the financing banks. The year wise number of dairy units established and number of persons trained in dairying in Haryana has not been adequate keeping in view the growing youth population in the State (Table –II).

Table –II

Position of Dairy Units and Training In Dairying

Sr. No	Item	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Number of Dairy Units Established	2109	2112	2404	2641	2696	2075	1541
2	Number of person Imported in Training in Dairying	18146	9182	10485	10733	13867	15476	525

c) Dairy Development Through Gaushalas : Gushala movement is synonymous with protection of cows and cattle wealth of our Country. Gushalas have been regarded as vast reservoir of domestic cattle resources and repository of large segment of biodiversity in cattle breeds. These may act as conservation units of Indian cattle biodiversity. The Haryana Government has designed a scheme for genetic improvement and enhancing productivity through which Goushalas in the State has been provided financial assistance from state

government and Animal Welfare Board of India. The number of Goshalas affiliated with the State Goshalas Sangh has now increased to 219 in 2009-10 from 57 Goshalas in 1990-91. Gram Seva Ayog has been setup for the development of cows, their breed development and modernization of Gaushalas infrastructure.

D) Animal Health Care Network and Man Power : Health care facilities have been the critical inputs for the integrated cattle and breed development in the State. The State Government has been making efforts for developing an animal health care network for providing better health services through veterinary hospitals, dispensaries and first aid centres, supported by disease diagnostic laboratories.

Table –III

Veterinary Health Care Institutes in Haryana

Years	Vety Hospitals	Regional Artificial Insemination Centres	Vety. Dispensaries	Stock man Centres	Total
1966-67	125	17	66	97	305
1970-71	154	37	71	337	599
1980-81	301	60	273	765	1399
1990-91	495	60	679	777	2011
1995-96	546	60	859	751	2216
2000-01	579	60	853	751	2243

Source: Haryana Livestock Development Board, Panchkula, (Haryana)

Table –IV

Veterinary & Health Care Institutes Established & Upgraded

Sr. No	Item	Units	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Total Number of Veterinary Institutions	No	2421	2423	2605	2605	2789	2789	2789
2	Institution	HCBC	-	-	36	-	96	-	-

	Opened								
	(b)	CVD	1	-	146	-	85	-	-
4	Institution upgraded (a)	Into CVH	-	-	16	-	104	-	-
	(b)	Into HCBC	-	-	-	-	--	-	-

Source: Haryana Livestock Development Board , Panchkula , (Haryana)

The progress of Veterinary Institutions in Haryana is given in Table –III and IV. It is clear from the data given in Table –III that during the year of the emergence of the State, there were only 305 Veterinary Institutes in the State, comprising 125 vety. Hospitals , 17 Regional Artificial Insemination Centres, 66 Vety. Dispensaries and 97 Stock man Centres. These has increased to 2243 Veterinary Institutions comprising 579 Vety Hospitals , 60 Regional Artificial insemination centres , 853 Vety. Dispensaries and 751 stockman centres in 2000-01. There after according to restructuring policy of the Government new Verty. Institutions have been established and some are also upgraded in the State. Table –IV clearly shows the years wise number of newly established and upgraded Vety. Institutions in the State. The number of total Vety. Institutions like Hospitals , Dispensaries & Cattle Breeding Centres etc have increased to 2789 in 2009-10 as against 2243 in 2000-01. In addition to these a Haryana Veterinary Training Institute and a Haryana Veterinary Vaccine Institute have also been set up in Hisar. A new university known as Lala Lajpat Rai Veterinary and Animal Science University has also been established at Hisar to boost up overall development of animal husbandry and dairying sector in the State.

Thus, a network of Vety Health Care Institutions has been functioning in the State for quick and reliable diagnosis of disease. The efficiency of the veterinary network depends upon the quality and quantity of the veterinary Man power. An examination of the position of the veterinary manpower in Haryana (Table V) reveals that there still exist a gap between demand of Veterinary Personnel and the availability of the service through existing network in the State . The vety. health care network has also been lacking infrastructure facilities and availability of required manpower in the State. (Table -V)

Table –V
Veterinary Health Manpower in Haryana

Year	Number of Vety. Surgeons	Number of VLDA	No. of Dress and Farmers	Other classes
1966-67	115	77	23	N.A
1970-71	154	14	30	N.A
1980-81	322	907	22	2546
1995-96	634	2736	23	4572
2000-01	731	2738	23	4784
2005-06	697	2848	23	4538
2006-07	760	2999	23	4538
2007-08	753	2930	23	4538

Source : Statistical Abstract , Government of Haryana

E) Performance of Vety Health Care Network : The Vety Health Care services have been rendered to dairy farmers through a network of Veterinary Hospitals and Dispensaries. A.I. services is a monopoly of the State Department of Animal Husbandry and Dairying which provides about two third of the A.I. The data regarding the performance of veterinary network in the State in terms of A.I. performed, cases treated and Animal Husbandry (AH) care camps organized and other related activities (Table –vi) speaks volumes about the performance of the veterinary network in the State.

Table VI
Performance of Animal Health Care

Sr. No	Item	Units	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	A.I. Performed (in Lakh)	Cows	2.71	3.32	3.73	4.33	4.73	5.17	5.85
		Buffaloes	6.54	8.81	10.49	13.06	13.72	14.31	14.52
		Total	9.25	12.13	14.22	17.39	18.45	19.48	20.37

2	Calves Born (in lakh)	Cows	1.09	1.15	1.27	1.47	1.71	1.87	2.07
		Buffaloes	2.13	2.38	3.03	3.77	4.66	4.86	5.32
		Total	3.23	3.53	4.30	5.24	6.37	6.73	7.39
3	Outdoor Cases Treated (in lakh)	--	41.00	44.67	47.19	40.06	33.95	34.17	38.25
4	A.H.Care camps organized	-	8116	5402	6741	6901	5479	5243	9762
5	Infertility Camp organized (Nos.)	-	N.A.	3204	1461	1253	1052	1612	3505
6	Calf Rallies (Nos.)	-	N.A	164	96	96	80	83	102
7	Animal Dewarmed (in lakhs)	-	17.37	22.60	23.10	52.78	49.29	32.27	36.63
8	Vaccination (in lacs)	-	164.48	249.46	193.77	158.96	174.85	169.21	139.31
9	Vaccination under FMDCP (in lakh)	-	NA	NA	NA	64.88	101.03	76.82	38.79
10	Vaccination Production (in lakh)		122.01	125.46	119.05	141.75	136.68	124.36	82.62
11	Forzen Semen Straw (lakh)	Cow	4.34	2.52	3.79	5.13	5.58	53.66	7.21
		Buffaloes	9.64	9.36	13.17	15.61	18.47	14.93	16.39
		Total	13.98	11.88	16.95	20.74	24.05	20.59	23.60

Source: Office Records of Haryana Livestock Development Board , Panchkula , (Haryana)

A perusal of data given in Table VI reveals that total number of A.I. performed is 20.37 lakh in 2009-10 as against 9.25 lakh in 2003-04. The total number of calves born is 7.39 lakh in 2009-10

as against 3.23 lakh in 2003-04. The progress in case of outdoor cases treated is 38.25 lakh in 2009-10 as against 41 lakh cases in 2003-04 and during the given period the same have been showing a fluctuating trend. Similar observations can also be made with regard to the animal husbandry care and infertility camps as well as calf rallies organized in the State.

The number of animal dewarmed is 36.63 lakh in 2009-10 as against 17.37 lakh in 2003-04. In case of vaccination of livestock, the number of vaccination done is 139.31 lakh in 2009-10 as against 164.48 lakh in 2003-04 which reflects dissatisfactory performance and same is the case with vaccination done under FMDCP. So far as vaccination production and frozen semen straws are concerned they have also been found showing fluctuating trend during the given period.

F) Feed and Fodder Development : The nutritive value of feed and fodder has significant bearing on productivity of livestock. Due to increasing pressure on land for growing food grains, oil seeds & pulse, adequate attention has not been given to the production of fodder crops. Further, an account of diversified use of agriculture residues the gap between the demand and supply of fodder is increasing. The study revealed that there has been deficiency of feed and fodder in the State. If scientific feeding is followed, there is scope to double the milk production in short run. It is disheartening to note that State has not only confronted with severe feed shortage, but the feeds which have been available, are largely of inferior quality. To meet the nutrient requirement of our huge bovine population, there is urgent need to make all efforts to increase the nutrient supply from existing as well as newer feeds. Under the Centrally Sponsored Fodder Development Scheme, assistance is provided to supplement their effort in feed & fodder development. Under this scheme farmers are provided fodder seeds so they can grow fodder crops around the year to maintain high level of milk production. The progress of fodder seed production under the aegis of State Department Animal Husbandry and Dairying is given in Table –VII. It is evident from the data given in the Table –VII that fodder seed production has remained fluctuating during the given period.

Table VII

Fodder Seed Production

Year	Fodder Seed Production (in MTs)
2003-04	308.3

2004-05	269.8
2005-06	253.80
2006-07	261.80
2007-08	232.94
2008-09	184.17
2009-10	19.27

Source: Official Records of Animal Husbandry & Dairying , Haryana

It has been observed that there has been a wide gap between demand and supply of the fodder. The constraint faced in dairy development is the acute scarcity of fodder of improved varieties. The area under fodder cultivation has also been decreasing due to increasing pressure on long for growing for food grains , oil seeds and pluses. Further, on account of diversified use of agriculture residues, the gap between the demand and supply of fodder has been increasing.

G) Dairy Development Through Cooperatives : The Operation Flood Programme launched in 1970 by promoting Anand Pattern of dairy development envisaged sustained increase in resource productivity culminating in improved quality of life of milk producers. The Operation Flood programme during its first phase laid the foundation for modernization of dairy sector in the State. The second phase was designed to build on the foundation laid in its first phase , where as the third phase of the programme aimed at expansion of the dairy processing , marketing facilities , procurement, infrastructure and professionalization of management of the dairy cooperative network in the State. The Dairy Cooperative Network in the State has now become one of the major development instrument for small cattle breeders who constitute the majority of the milk producers in rural areas. Dairy Cooperative Network have made a remarkable progress during the last about three decades.

The existing scenario of the Dairy Cooperatives Network in Haryana is presented in Table VIII

Table VIII

Progress of Dairy Cooperative Network in Haryana

Sr. No	Particulars	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	No. of Milk Unions	6	6	6	6	6	6	6
2	No. of Milk Plants	5	5	5	5	5	5	5

3	No. of Chilling centers	25	27	27	27	27	27	07
4	No. of Functional dairy Coop. Socs.	3350	3794	4127	5028	2979	6167	28
5	Milk Procured (lac ltrs)	1209.15	1331.80	14868.30	168.00	1880.00	1971.14	5194
6	Peak Milk Procurement (Lacs Litrs)	5.81	5.67	7.75	7.80	8.61	9.45	1905.30
7	Average Milk Procured /day (lacs LPD)	3.30	6.65	4.02	4.60	5.14	5.40	8.44
8	No. of Pourers	87688	104189	112772	12369	142660	144890	5.22

Source : Cooperatives Mirror, July 2009, Haryana State Cooperative Development Federation Ltd. Chandigarh.

The data given in Table VIII reveals that the number of Milk Unions milk remained six . However the number of chilling centers have increased from 25 in 2003-04 to 27 in 2009-10 and the number of functional dairy coop. Societies has also increased to 5194 in 2009-10 as against 3350 in 2003-04. The quantity of milk procured through dairy cooperative network also increased to 1905.30 lakh likes in 2009-10 as against 1209.15 lakh litres in 2003-04. The peak milk procurement has near to double during the given period. The average milk percured day (lacs liter per day) is 5.02 in 2009-10 as against 3.30 in 2003-04. The number of pourers / milk producers supplying milk to village dairy cooperatives has also increased to 140072 in 2009-10 from 87688 in 2003-04.

Recently, State Government has decided to set up another Milk Plant at Ujhana village in District Kaithal . The other Milk Plants are located at Jind, Ambala, Ballabhgarh, Rohtak, Sirsa. Each plant has taken steps to implement Hazard Analysis and Critical Central Points. It has also been planned to provide automatic milk units and Milko testers to all the village level dairy cooperatives for quality milk collection in the State. Similarly Bulk milk coolers will also be provided to a Village Dairy Cooperative Society, who form a cluster of 10 to 15 villages. Milk is also being checked for any adulteration with milk testing kits approved by National Dairy

Research Institute (Karnal). At apex level Haryana Dairy Development Cooperative Federation is to promote economic interest of milk producers of the state especially those belonging to economic weaker, sections. Thus State have a dairy cooperative network having three tier system which includes milk producers cooperative societies at village level, milk unions at district level and state dairy federation at state level.

TRENDS IN MILK PRODUCTION AND ITS AVAILABILITY:

The pace of dairy development in the State was picked up only in 1980s with launching of the second phase of the Operation Flood Programme and thereby co-operativesation of dairying in the State. The dairy cooperative enterprises after years of neglect become producers oriented. The infrastructure development under the dairy cooperative network certainly cherish certain socio-economic goals. It is, therefore, vital important to examine the milk scenario in terms of milk production and per capital availability of milk the State.

Table –IX

Milk Production and Per Capital Availability of Milk in Haryana

Year	Milk Production in MTs	Availability of Milk (grams)
1966-67	10.89	352
1986-81	21.87	484
1990-91	34.19	571
2001-01	46.79	631
2005-06	52.20	660
2011-12	66.61	903

Source: Official Records Department of Animal Husbandry and Dairying, Government of Haryana

The milk production which was only 10.89 million tones, at the time of formation of the State has now jumped to 66.61 million tones tones in 2011-12 (Table –IX). The percapita availability of milk in the State was 352 gms. In 1966-67 has now increased to 903 gms in 2011-12 (Table IX). The per capita availability of the milk in the State is much higher than the advanced dairying countries like USA, Denmark, UK, Italy, Canada and even Asia and Whole

India. It is evident from the trends that Haryana has been on the threshold of a White Revolution and has been ranked at 8th position among the major milk producing States of India. Its contributions, to the total milk production in India is about 5.2 percent annually.

CONSTRAINTS HAMPERING THE OPTIMUM OUTPUT

A critical appraisal of the dairy development programmes reveals that these programs have faced following constraints which hampered the optimum output of the these programmes:

- 1) The productivity of animals for milk is quite low which is one of the major constraints in dairy development. The majority of the milch animals are of non-descript type and poor yielders. The farmers rear un-producing animals due to social and other factors. Poor animal management has led to poor performance of animals and lesser economic returns. There is lack of scientific knowledge among the farmers except few progressive farmers about management, balanced feeding and disease control etc. Infrastructure facilities related to health aspects, A.I. coverage, frozen semen centres, feed mixing plants, fodder seed production etc. are not adequate in the State.
- 2) Adequate health coverage is another problem. It is evident from the number of veterinary hospitals / dispensaries which are not commensurate with the high bovine population. Artificial insemination facilities are not adequate. The age at first calving and inter-calving periods are large which makes the dairy husbandry less remunerative.
- 3) The institutional and service infrastructure created at different levels could not be utilized sufficiently and effectively. Today, dairying is a highly technical activity, present study revealed that very limited number of people has been trained in dairy farming in the State. This leads to infer that livestock sector has been plagued by poor productivity. Extension of knowledge, technology and service at the grassroot level is of paramount importance for the growth of the dairy sector. However, compared to crop sector, extension services for livestock have so far been inadequate severely hampering its growth. State Government have kept extension as a low priority as there has been insignificant public spending for extension activities.
- 4) The human resource requirement and availability in respect of veterinary personnel, to meet the development need, is not available at desired levels. Similarly, availability of para-vets and supporting staffs shortage is also a major concern. Para-vet staff is involved in delivery of vaccination, artificial insemination, and other minor veterinary practices. In the State, it

surprising to note that one para vet has to cover three villages and despite of this about 500 veterinary hospitals/ dispensaries are without Veterinary and Livestock Development Assistants. There are about 2789 Veterinary Hospitals/Polyclinics and Dispensaries in the State providing services for the large livestock population. Not only their number grossly inadequate compared to the requirement, they also have poor infrastructure in terms of dilapidated buildings, lack of equipments and medicines etc.

The current status of manpower in veterinary hospitals and dispensaries is far from adequate in the context of offering quality animal health care services in the rural areas. Thus, deficit in required manpower is major constraint in dairy development in the State.

5) The dairy farmers who wanted to setup high tech commercial dairies frequently been harassed by the Bankers and the amount sanctioned under loan scheme has not been found adequate. Frequent complaints have been reported that loan per buffalo and cross-bred cow under the existing scheme is too meager to buy a quality Murrah Buffalo and cross-bred cow.

6) The dairy cooperative network has not been able to procure adequate quantity of milk to the total milk production in the State. The dairy cooperative network in the State has been facing various organizational and administrative problems and shortage of staff at various levels. The bureaucratic cultures have been dominating the entire network in State.

The present critical study of various dairy development programmes in the State of Haryana reveals that the financial, operating and many other types of assistance to dairy farmers have now been looked after by different separate agencies, mostly operating in isolation. In absence of a clear sense of directions and proper supervision and coordination, the dairy development programmes tend to lose their original perspective to enhance the earning levels of dairy farmers.

The net outcome has been in the form of unproductive and inadequate utilization of resources coupled with duplicacy of efforts due to lack of proper coordination at various level between State Department of Animal Husbandry & Dairying Development and the Dairy Cooperative Network in the State as well as other agencies.

The foregoing analysis lead us to infer that dairy development programmes have been lagging behind to deliver the expected results due to administrative apathy, poor infrastructure inadequate staff & poor input services, overlapping and duplication of efforts. Thus, sustained sincere and coordinated efforts have been wanted to be made in as a uniform way to create a facilitative effective and stable infrastructure for dairy development. The State has a great

potential for dairy development. In order to make the Haryana a model State in the dairy sector, a lot more has to be done for promoting dairy development in coming decades.

REFERENCES

- 1 Official Records of **Haryana Livestock Development Board**, Government of Haryana , Panchkula.
- 2 **Statistical Abstract**, Government of Haryana.(Various issues)
- 3 **Annual Reports** , Union Department of Animal Husbandry , Dairying & Fisheries, Ministry of Agriculture , Government of India, New Delhi.
- 4 Official Records of **Haryana Dairy Development Cooperative Federation Ltd.**, Panchkula, Haryana.
- 5 **Cooperatives Mirror** (various issues), Haryana State Cooperative Development Federation Ltd., Chandigarh.
- 6 **The Economic Times**, August 22,2012
- 7 **The Tribune , Chandigarh**, April 19,2013