



सत्यमेव जयते

AERC NEI POLICY BRIEF



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Status of Dairying and its Potential in improving the Socio-Economic livelihood of the Milk Producers in Assam

Introduction

Dairy farming is an important enterprise that provides employment, income and nutritive food to the people and also supplies dung as organic manure to enrich soil fertility and thus help in increasing crop production.

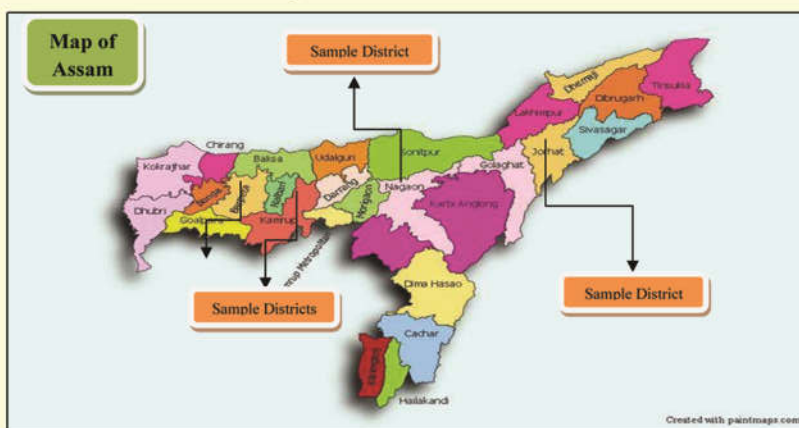
Assam is a home for 18.09 million livestock which is 3.37 per cent of the total livestock in India. Bovine population constitutes 62.63 per cent of the total livestock population of Assam. About 3.74 per cent of the total cattle population of India is present in Assam. According to 20th Livestock Census Report, only 7.05 per cent of the cattle population is crossbred (CB) in the state in comparison to all India figure of 26.19 per cent. Buffalo population in Assam is minimal with only 0.38 per cent of India's total buffalo population.

In recent years, the Animal Husbandry and Dairy Development Department of the state have been implementing various livestock development

programmes to boost up dairy production and bridge the gap between demand and supply.

farmers to improve their income but will also create huge employment potential at various levels of the milk value chain. In this venture, it is proposed to set up six dairy processing facilities across Assam, wherein milk from more than 4,100 Dairy Cooperative Societies shall be processed, packed and marketed. Under the arrangement, it was envisaged to induct 15,000 high milk-yielding Gir cows of Gujarat in the state to ensure higher returns to the dairy farmers and increase the supply of milk and milk products.

The present study was conducted by the AERC for NE India in order to assess the status of dairying with reference to animal distribution, milk production, consumption and marketable surplus; to identify the constraints in dairy development from supply side, institutional deficiency and processing infrastructure; to



highlight the facilitating factors that could help in promoting dairy development in order to improve the socio economic status of the milk producers; to suggest broad areas for focussed interventions for promoting dairy development in the State and the way forward and to suggest suitable policy measures.

In this connection, the Government of Assam and National Dairy Development Board (NDDB) signed a Memorandum of Understanding (MoU) for creation of Rs.2,000 crore joint venture for the dairy sector's holistic development in January, 2022. The target of this joint venture is to create milk processing capacities and add value to over 10 lakh litres of milk every day. It is envisaged that this will not only help more than 1.75 lakh

The study was based on both primary and secondary level data. The primary level data were collected from 4 districts of Assam viz., Nagaon, Barpeta, Kamrup and Jorhat and from each district 4 villages were selected.

Further, from each village, 15 milk producers were selected randomly based on the number of bovine population- (a) Small Milk Producers (1-2 milch-animal), (b) Medium Milk Producers (3-5 milch animal) and (c) Large Milk Producers (above 5 milchanimals). Thus, the sum total of sample villages for the study stood at 16. Altogether, the study covered 240 sample milk producers from dairy cooperative societies & non-cooperative societies. In addition to this, 1 milk union and 8 Primary Dairy Cooperative Societies were also selected for the study. The reference period of the study was 2017.

Findings

■ In spite of having huge livestock resources and ample potentiality as growth engine, the state has the lowest per capita availability of livestock products. The demand for milk and milk products has increased gradually over the recent period but the current milk production scenario of the State is far below the national level. According to 20th Livestock Census, 2019, Assam produced only

India was only 0.06.

■ The total milk collection at Primary Dairy Cooperative Societies (PDCS) was much higher than that of Non-Dairy Cooperative Society (NDCS).

■ The average milk yield per local cow/day for PDCS milk producers in rainy season was found at 1.22 ltrs; in winter season it was 1.33 ltrs and in summer season, it was found to be 1.24 ltrs. The corresponding figures in case of NDCS milk producers were recorded at 1.22 ltrs, 1.32 ltrs and 1.32 ltrs. In case of cross bred cow, PDCS milk producers fetched 5.3ltrs/day in rainy season, 5.89 ltrs/day in winter season and 5.45 ltrs/day in summer season. In case of NDCS milk producers, the corresponding figures were 4.17 ltrs/day, 4.96 ltrs/day and 4.51 ltrs/day in rainy, winter and summer season.

■ The PDCS households were more aware about the various dairy development schemes/programmes and availed more benefits from those schemes.

■ It was found that milk production and net return was not up to the desired level in case of NDCS households.

Table-1
Trend of Milk Production and Per Capita Availability in Assam and All India
(Million Ltr)

Year	Milk Production		% of Assam to All India	Per Capita Availability (Gram/day)	
	Assam	All India		Assam	All India
2010-11	833	118288	0.70	71	281
2011-12	839	124212	0.68	70	290
2012-13	845	128582	0.66	69	299
2013-14	857	133729	0.64	69	307
2014-15	873	142081	0.61	70	322
2015-16	888	151016	0.59	70	337
2016-17	904	160631	0.56	71	355
2017-18	925	171216	0.54	71	375
2018-19	946	182287	0.52	71	394
2019-20	975	192679	0.51	73	406
2020-21	1004	203906	0.49	74	427
CAGR (%)	1.89*	5.74*		0.48*	4.43*

Source: 1. Statistical Handbooks of Assam, GOA.2. NDDB, GOI

Note: * Indicates significant at 1% probability level.

0.45 per cent of the total milk produced in India with per capita availability of 74 gram/day against 427 gram/day for all India. As against this, the normative requirement for per capita milk consumption is reported to be 300 gram/day indicating a significant demand-supply gap. As such, Assam is a deficit State in terms of milk production.

■ At present, there are 522 numbers of primary dairy cooperative societies in the State. In 2020-21, the total members of the dairy cooperatives stood at 34 thousand in Assam. As against this, only about 59 thousand litres of liquid milk are marketed daily by the dairy cooperative societies. As per National Dairy Development Board (NDDB), Annual Report 2020-21, the percentage share of Assam in total milk procurement by cooperative sector in

It may be due to low milk productivity of cows with poor health, low feeding, un-scientific husbandry practices and low price offered by private agents/buyers.

■ The PDCS sample households directly sold the entire milk produced by the local cows to the consumers at an average price of Rs. 40.50/ltr. on monthly payment basis. They disposed off the entire amount of marketable surplus of cross bred cows to the dairy cooperative societies with weekly payment basis at an average price of Rs. 35.33/ltr.

■ The PDCS households received adequate supply of cattle feed both from cooperative society and private agent with credit facilities. But most of the respondents opined that cost of cattle feed and mineral mixture was

agent with credit facilities. But most of the respondents opined that cost of cattle feed and mineral mixture was high. In case of NDCS households, the sample farmers did not get any support or benefits from the dairy cooperative societies functioning in their locality and they were fully dependent on private agency for input and output services.

■ Major infrastructural constraints in case of PDCS households included lack of improved equipments, unavailability of emergency vaccine services, inadequate visit of veterinary staff, unavailability of cattle feed and fodder on credit *etc.* Together with these problems, the

■ The problems faced by the lone milk union (WAMUL) in Assam were lack of skilled manpower, lack of availability of raw materials for manufacturing of cattle feed locally in a viable manner, lesser number of crossbreed animals in the State and non-adherence to the principles of Anand pattern cooperatives/ three tier structure by the village level PDCS.

Policy Implications

- The State Government should prioritize in the State Plan to make a real breakthrough in the dairy sector.
- There is need to evolve a comprehensive dairy

Fig. 1. Per Capita per day Availability of Milk in Assam and All India (Gram)



NDCS sample farmers also faced with the problem of lack of training facility on improved farm technology.

■ The PDCS households experienced the economic constraints like high cost of fodder seed, low price of milk, high cost of cross breed cow, high cost of medicine, high cost of cattle feed and mixture, low incentive for supplying milk, high charges of emergency veterinary services *etc.* The major economic constraints faced by the NDCS households were same as that of the PDCS households.

■ Additionally, at individual level they did not have any scope of availing loan from the society or Government for purchasing cattle.

■ The common problems faced by both PDCS and NDCS households were poor irrigation facility to grow fodder crop, poor livestock extension services, poor knowledge about scientific animal husbandry practices, lack of awareness about quality milk production, lack of milk testing and animal screening facilities, lack of veterinary services and lack of finance to invest in dairy business for quality milk production.

■ The major constraint as reported by the sample PDCS and NDCS was the competition from imported dairy products. Competition from private dairy, unstable prices of milk, inability to market the value-added products and poor road infrastructure were the other marketing constraints faced by both the groups.

development policy in the State through genetic improvement of indigenous milch animals. Process should be initiated for production of good quality semen from high genetic sources. In order to achieve that, the existing semen stations should be strengthened and upgraded. Larger focus should be on field progeny testing for quality bull production.

■ All the ongoing schemes relating to dairy development in Assam should be converged and put under three mega schemes; a) Animal Production, b) Livestock Health and c) Dairy Development. Proper monitoring and implementation of dairy schemes/programmes together with convergence of existing schemes may bring in more efficiency in to the existing system.

■ Revival of non-functional milk union like Cachar Milk Union Limited (CAMUL) at Silchar can give a new lease of life to the dairy sector. It may be mentioned here that Govt. of Assam has signed an agreement with the NDDB on 11th May, 2022 for handing over the operational management of East Assam Milk Union Limited (EAMUL) located at Jorhat with a view to improving the financials of the ailing cooperative body.

■ In order to overcome the fodder deficit, the Animal Husbandry and Veterinary Department of the State, being the key player, can take up elaborate programmes for enhanced fodder production throughout the State. Proper adoption of high yielding fodder varieties recommended

by AAU such as hybrid Napier *etc.* may reduce the fodder deficit in the State.

■ There is need to assist and train the milk producers in the field of breeding, feeding, animal management technique and marketing of milk and milk products in a cost effective manner.

■ Some infrastructural development like road communication and transport is needed for transportation of fodder, feed concentrates, veterinary medicines and also transportation of milk to the consuming centres round the year.

■ Livestock insurance coverage should be extended to all types of production systems and species with suitable incentives.

■ Well-equipped laboratories for testing adulterants, antibiotics, residues and food borne pathogens should be established to enhance safety and quality of animal

feeds and fodder.

■ Improving the farmers' access to institutional credit through simplification of procedures, reduction in interest rates, etc.

■ Optimum utilization of natural resources, adequate health-care facilities for livestock, improvement of breeding programmes through Artificial Insemination, and timely vaccination can bring in marked changes in the lives of the milk producers.

■ Establishment of organized network of market can benefit the livestock farmers in getting due share for their products.

■ Networking of village level dairy co-operatives can benefit all the stakeholders through enhanced market linkages, expansion of cooperative activities and facilitating proven models of dairy farming.

Conclusions

The status of dairying in Assam is far from satisfactory in terms of production and coverage despite the fact that there lies enormous potential which remains unrealized till date. The problems and impediments, if addressed in right earnest, can gear up new vista for dairy development in the State of Assam. Development of dairy farming on sustainable basis through optimum utilization

of natural resources, adequate health-care facilities for livestock, improvement of breeding programmes through Artificial Insemination, improvement of present milk marketing system and timely vaccination can go a long way in bringing marked changes in the lives of the milk producers of this part of the country. ■

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