

# **Assessment of the Status of Dairying & Potential to Improve Socio-Economic Status of the Milk Producers & Convergence of all Central & State Schemes at District level in India**

(Consolidated Report)

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## Foreword

Dairy development in India has been acclaimed as one of the most successful development programmes under the world's largest integrated dairy development programme 'Operation Flood'. India ranks first in the world in milk production, which has increased to 176.35 million tonnes in 2017-18 from 17 million tonnes in 1950-51. Nearly 51 per cent of milk production is contributed by buffalo followed by cow (24%), cow non descript (21%) and goats (4%). The per capita availability of the milk in the country has also increased significantly from 130 grams/day in 1950-51 to as increased to 355 gram per day in 2013-14 as against the world average of 293.7 grams per day during 2016-17. This represents sustained growth in the availability of milk and milk products for our growing population. Dairying has become an important secondary source of income for millions of rural families and has assumed the most important role in providing employment and income generating opportunities particularly for marginal and women farmers.

There are large interregional and interstate variations in milk production as well as in per capita availability in India. The largest producer of milk is Uttar Pradesh which produces 17.6 per cent of the total milk production in the country followed by Rajasthan (10.5%) and Andhra Pradesh (9.6%). More than 71 percent of national milk production comes from these major eight milk producing states, viz. Uttar Pradesh, Rajasthan, Andhra Pradesh, Gujarat, Punjab, Madhya Pradesh, Maharashtra and Haryana. Only 9 States are having per-capita availability more than the national average of 355 gm/day in the year 2016-17. Major milk-producing states in the country have good resource endowment and infrastructure, while eastern states are lagging behind in terms of dairy development. The government has initiated various dairy development programs, especially for the eastern and hilly regions. Since the animal productivity and per capita milk availability are low in these eastern states of India, there is ample scope for increasing productivity through control of animal disease, scientific management and up-gradation of genetic resources, development of processing and marketing facilities.

It is well recognised that while western, northern and southern parts of India have progressed significantly in dairy development while the eastern part of the country has lagged far behind in dairy development. The demand for milk and dairy products is expected grow at a higher rate compared to the previous decade due to accelerated economic growth. According to various estimates, the demand for milk and milk products is expected to grow at an annual incremental rate of 8-9 million tonnes, as against the present rise of about 5 million tonnes. To achieve the above growth, it is believed that the growth has to be inclusive and geographically more diffused. Quantum jump in milk production is possible through increase in productivity, and linking small holders to

dairy cooperatives/producer groups/SHGs with forward linkages with milk processing. This means that the areas which have low levels of productivity, preponderance of low yielding non-descript animals, but rich in resource endowment and presence of good markets would require attention of the policy makers for initiating a focussed program for the study area. Therefore, a comprehensive assessment of the present status of dairy development and potential for growth from the perspective of regional and national consideration needs to be drawn up for dairy development.

There are plethora of state and central government schemes that provide forward and backward linkages for promotion of dairying involving milk producers. Apart from the government programs, the state milk federations and the milk unions have evolved a variety of schemes that provide incentives to the milk producers. Given the diversity in social and economic contexts, district level milk unions have drawn up schemes to promote dairy development, which are funded through various ingenious ways (partly through profits generated in milk business, partly through token cess/user fee or through charity (synonymous with welfare). Some anecdotal evidence suggests that the Banaskantha union of Gujarat had evolved some 20 different schemes to their producer members. Needless to say, the schemes are intended to provide impetus for milk production. Convergence of different state and central governments programs in a given geography provide forward and backward linkages to any development program enhancing efficiency in implementation. Convergence of different programs also enhances sustainability. In view of same, the Ministry of Agriculture and Farmers Welfare, Government of India entrusted this study to our Centre, covering seven eastern and two western states of India, viz. Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern UP, West Bengal, Gujarat, and Rajasthan. The study is based on both primary and secondary level data. The study came out with important and relevant policy implications which would help to enhance efficiency of implementation benefitting the milk producers.

I am thankful to authors and their research team for putting in a lot of efforts to complete this excellent piece of work. I also thank the Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Government of India for the unstinted cooperation and support. I hope this report will be useful for policy makers and researchers.

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## List of Abbreviations

APEDA	- Agricultural and Processed Food Products Export Development Authority
ASMM	- Area Specific Mineral Mixture
A.I.	- Artificial Insemination
A.I.C.	- Artificial Insemination Centre
Av.	- Average
BANAS DAIRY	- Banaskantha District Cooperative Milk Producers' Union Limited
BDO	- Block Development Officer
BEN	- Beneficiary
BRGF	- Backward Regions Grant Fund Programme
CB	- Cross Breed
DADF	- Department of Animal Husbandry, Dairying and Fisheries, New Delhi
DCS	- Dairy Cooperative Society
DES	- Directorate of Economics and Statistics
DM	- Dry Matter
DPAP	- Drought Prone Area Programme
EIA	- End Implementing Agency
FDG	- Focus Group Discussion
GCA	- Gross Cropped Area
GCMMF	- Gujarat Co-operative Milk Marketing Federation Limited
GDP	- Gross Domestic Product
GIA	- Gross Irrigated Area
GNP	- Gross National Product
GOA	- Government of Assam
GOB	- Government of Bihar
GOC	- Government of Chhattisgarh
GOJ	- Government of Jharkhand
GOO	- Government of Odisha
GOUP	- Government of Uttar Pradesh
GOR	- Government of Rajasthan
GOG	- Government of Gujarat
GOI	- Government of India
GRO	- Grievance Redressal Officer
GVA	- Gross Value of Agriculture
GVO	- Gross Value of Output
ha	- Hectare
HH/hh	- Household
I.I.	- Irrigation Intensity
IDA	- International Development Association
INAPH	- Information Network for Animal Productivity and Health
ISP	- International Organization for Standardization
kg	- kilograms
KVK	- Krishi Vigyan Kendra
KM	- Krishi Mahotsav
LTPD	- Litres per day
LRP	- Local Resource person
mha	- Million hectares
MOA	- Ministry of Agriculture
MU	- Milk Union (district level)



mt	- Metric Tonnes
NA	- Not Available
NBEN	- Non-Beneficiary
NCDFI	- National Cooperative Dairy Federation of India
NDDDB	- National Dairy Development Board
NDP	- National Dairy Plan
Nos	- Numbers
OF	- Operation Flood
PCs	- Producers Company
PDCS	- Primary Dairy Cooperative Society (village level)
PDO	- Project Development Objective
PMC	- Project Management Cell
PMU	- Project Management Unit
Prodvty.	- Productivity
PSC	- Project Steering Committee
RBP	- Ration Balancing Programme
SC	- Scheduled Caste
SNF	- Solid Not Fat
ST	- Scheduled Tribe
SUMUL	- Surat Milk Union Limited
SWOT	- Strength, Weakness, Opportunity and Threat
TE	- Triennium Endings
VAP	- Village Awareness Programme
Y	- Yield

---

**(A) Institution / Farms etc.**

V.D	- Veterinary Dispensaries
F.A.V.C.	- First Aid Veterinary Centre
DISP	- Dispensary
AVI	- Animal Vaccine Institute
ICDP	- Intensive Cattle Development Programme
IPDP	- Intensive Poultry Development Project
ISDP	- Intensive Sheep Development Project
ICBP	- Intensive Cattle Breeding Programme
CBF	- Cattle Breeding Farm
PBF	- Poultry Breeding Farm
SBF	- Sheep Breeding Farm
Dist.	- District
B.K	- Banaskantha
S.K	- Sabarkantha
P.M	- Panchmahal
GDDC	- Gujarat Dairy Development Corporation
L.I. Centre	- Livestock Inspector Centre

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**(B) Words related to Budget**

Sec.	- Section ( Section -I , Section - II )
CFT	- Coming for First Time
Cont/ Conti	- Continuous
Co on AH	- Capital Outlay on Animal Husbandry
Co on DD	- Capital Outlay on Dairy Development
C.C	- Cent age Charges
S.C.A	- Special Central Assistance

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<b>(C) Plan / Report / Programmer/ Scheme</b>		
SNP	-	Sate Normal Plan
TASP	-	Tribal Area Sub Plan
SCP	-	Special Component Plan
BADP	-	Border Area Development Plan
CSS	-	Centrally Sponsored Scheme
ADP	-	Annual Development Plan
OFF	-	Operation Flood Programme
<b>(D)</b>		
DAH	-	Director of Animal Husbandry
JD	-	Joint Director of Animal Husbandry
DD	-	Deputy Director of Animal Husbandry
AD	-	Assistant Director of Animal Husbandry
VO	-	Veterinary Officer
Supdt	-	Superintendent
Sr	-	Senior
Jr	-	Junior
CL	-	Clerk
CL	-	Class
<b>(E) Weight / Measurement etc.</b>		
Kg	-	Kilogram
M.T.	-	Metric Tone
Km	-	Kilometer
Hect. Or Hec.	-	Hectare
No.	-	Number
Rs.	-	Rupees
<b>(F) Diseases / Vaccine</b>		
R.P.	-	Rinderpest
F.M.D.	-	Foot and Mouth Disease
T.B.	-	Tuberculosis
H.S.	-	Hamorrhagic Septicemia
B.Q.	-	Black Quarter
E.T.	-	Enterotoxaemia
F.D.R.D.	-	Freeze Dried Ranikhet Disease
<b>(G) Others</b>		
A.I	-	Artificial Insemination
L.N. 2	-	Liquid Nitrogen
S.C.	-	Scheduled Caste
S.T.	-	Scheduled Tribe
SF/MF/AL	-	Small Farmer, Marginal Farmer, Agricultural Laborer
A.H.	-	Animal Husbandry
M.V.Sc.	-	Master in Veterinary Science
NPCBB	-	National Project on Cattle and Buffalo Breeding
IACBP	-	Indo-Australian Cattle Breeding Project IACBP
PDU	-	Private Dairy Unit
UP	-	Uttar Pradesh
WB	-	West Bengal