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## TRENDS IN CONSUMER EXPENDITURE AND CONSUMPTION PATTERN OF MILK – INSIGHTS FROM NSS DATA

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#### ABSTRACT

The analyses of Consumer Expenditure Survey data of NSS reveal consistent increase in average monthly per capita expenditure (at constant prices) over last decade, albeit it grew significantly during recent times. In terms of disparity, the gap between poorest (lowest 20 per cent of population in terms of monthly per capita expenditure-MPCE) and richest (highest 20 per cent) is higher in milk and milk products as compared to egg, fish and meat, but still lower than the gap in non-food items. With the rise in per capita expenditure, the incidence of milk consumption increases sharply in the bottom two decile groups of MPCE classes. If the ratio of consumption in poorest to richest is considered as a measure of divergence, then it is found that on milk and milk products, poorest spends only 12 and 18 per cent of the amount spent by the richest in rural and urban areas, respectively. The States like Odisha, Madhya Pradesh and Bihar show higher disparity in consumption of milk in comparison to national average. In the urban areas, a similar pattern is also noticed, but the degree of divergence between poorest and richest is on the lower side. In urban areas, 96 per cent of the population consumes milk from purchases, accounting for 89 per cent of total volume of milk consumption. The balance 11 per cent of consumption demand is met from home production of milk. The incidence of milk purchase in rural areas stands at 62 per cent and accounts for about 26 per cent of the total volume of milk consumed (i.e. 74 per cent of rural consumption demand is met out from home production of milk). While the southern States of Kerala, Tamil Nadu and Andhra Pradesh have the largest proportion of consumption that is bought out, and therefore, offer scopes for exploring rural marketing of milk.

## Introduction

As is well-known, milk is very much a part of Indian diet, which is consumed almost daily in some form or the other in majority parts of the country. Also, milk is one of the important sources of animal protein for human beings, especially in India where majority of the population is lactovegetarian. The National Sample Survey (NSS) is the most important and regular source of this information, especially the

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quinquennial rounds of surveys, which capture consumption, in both absolute and value terms, and therefore, offers scope to examine the phenomenon from longitudinal as well as cross-sectional perspectives.

The aim of the present paper is to analyse consumer expenditure pattern in general and milk consumption and its expenditure behaviour in particular in the country. The information available for different rounds has been collated and analysed in a way that facilitates the understanding of milk consumption in rural and urban areas better. Analyses of some useful indicators and examination of their trends, whenever possible, from the crosssectional data have been carried out. As an outcome, it is intended to draw some policy lessons from the analysis.

### Data

The various published reports on Consumer Expenditure Survey (CES) referred to in the present analysis are NSS 55th Round (Gol, 2000), NSS 61st Round (Gol, 2007), NSS 66th Round (Gol, 2011), NSS 68th Round (Gol, 2013). It may be indicated that NSS in their annual rounds of consumer expenditure surveys, do not report absolute consumption data and therefore, one needs to wait for at least five years to examine the changes in absolute consumption. Data aggregation is done at the State level both for rural and urban areas, and for individual States, value of consumption of different items is analysed and presented for broad 10 expenditure groups. The latter classification helps in

assessing dispersions in consumptions in the society and also identifying the reasons (i.e. affordability) that inhibit consumption.

The scope in NSS enquiry is limited only to household consumption and out of home or institutional consumption is not captured. For milk, following definition is contained in the report; "consumption of milk (liquid) includes milk converted into curds, butter, ghee, paneer etc., within the household prior to consumption. It also includes liquid milk used in the household preparation of sweetmeats. Bottled or poly packed flavoured milk comes under the category" – as defined by the NSS.

## **Results and Discussions**

Trends in Per Capita Expenditure: Before studying the trends in milk consumption, it would be worthwhile to analyse the trends in total consumer expenditure. The per capita monthly expenditure can be regarded as proxy indicator of prosperity and its growth reflects amelioration in the standard of living of the people. At constant prices (at 1999-00), the increase in all-India average monthly per capita expenditure (MPCE) has been a meagre 1.7 and 2.3 per cent in rural and urban regions, respectively during 1999-2000 and 2011-12 (Table 1). It is interesting to note that during recent times, the average MPCE in both rural and urban regions has been increasing at a greater pace – while it was around 1-2 per cent during the major period of first decade of the new millennium, it grew significantly at around 6-8 per cent during 2009-10 to 2011-12.

			Co	nstant Pric	e (1999-00	))		
								(in ₹)
						CA	GR (%)	
	2011-12	2009-10	2004-05	1999-2000	2004-05/	2009-10/	2011-12/	2011-12/
				1999-2000	2004-05	2009-10	1999-2000	
Rural	598	509	475	486	-0.5	1.4	8.3	1.7
Urban	1117	991	868	855	0.3	2.7	6.2	2.3

Table 1: Growth in All India Average Monthly Per Capita Expenditure (MPCE) atConstant Price (1999-00)

CAGR: Compounded Annual Growth Rate. Source: CES, NSS Reports, Gol.

Similar growth trend was observed in the average MPCE across major States (Annexure- A 1.1). It is interesting to note that while the average annual growth registered by States was in a narrow range of 0.4 - 4.5per cent, both in rural and urban areas during the above period (12 years), it was very sharp during last two years (Rural: 1.5 - 21.6 per cent & Urban: 1.0 - 20.0 per cent). Whereas Karnataka recorded the highest growth in both rural and urban areas (around 20 per cent), it was lowest in rural Assam (1.5 per cent) and urban Maharashtra (1.0 per cent) during the period 2009-10 to 2011-12.

Another interesting observation emerging from the analysis is the widening gap between the poor and the rich, notwithstanding the efforts being made by the governments for inclusive growth especially for the people belonging to lower income brackets (Tables 2 & 3). During 1999-2000 and 2011-12, while the gap in expenditure on food including milk and milk products and eggs, meat and fish varied marginally or remained constant both in rural and urban areas, the gap increased manifolds in case of expenditure on nonfood items and total expenditure in both urban and rural areas.

One positive aspect which comes out of this analysis is that the growth in expenditure on milk and milk products is highest for the poorest 20 per cent of the population. (Tables 2& 3).

Table 2: Growth in Per Capita Monthly Expenditure (at Constant Price i.e., 1999-2000) for Different Sections of the Society (in ኛ)	Per Capi	ta Month	ly Expen	ıditure (at Soci	e (at Constant Society (in ₹)	t Price i.e.	, 1999-2	2000) for D	ifferent	Sections of	the
All India-Rural											
		201	2011-12			199	1999-00			CAGR (%)	
ltems	Poor 20%	Middle 60%	Rich 20%	Gap between Poor & Rich	Poor 20%	Middle 60%	Rich 20%	Gap between Poor & Rich	Poor 20%	Middle 60%	Rich 20%
Milk and milk products	14	48	118	105	7	34	111	103	5	m	-
Egg, fish and meat	6	20	41	32	9	15	32	25	c	2	2
Total food	159	275	485	325	158	271	494	336	0	0	0
Total non-food	101	226	855	754	148	161	466	319	'n	m	5
Total expenditure	261	500	1340	1079	237	432	961	724	-	-	m
CAGR: Compounded Annual Growth Rate. Source: CES, NSS Reports, Gol.	nual Grow s, Gol.	vth Rate.									

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Items     Poor     Middle     Rich     Gap     Poor     Middle     Rich     Cu     Middle     Rich     Z0%     60%     Z0%     Poor & Middle     Middle     Rich     Z0%     Z0%	All India-Urban			) 7 7								
Fich     Gap     Poor     Middle     Rich     Gap     Poor       20%     between     20%     60%     20%     between     20%       Poor &     Poor &     20%     60%     20%     poor &     20%       167     137     21     65     162     141     3       52     37     11     25     48     37     2       780     569     205     376     752     547     0       780     569     205     376     752     547     0       2144     1985     119     322     1266     1146     2       2925     2533     324     698     2018     1694     1			50.	11-12			19.	00-66			CAGR (%)	
1671372165162141523711254837780569205376752547780569205376752547214419851193221266114621241985324698201816942925255332469820181694	ltems	Poor 20%	Middle 60%	Rich 20%	Gap between Poor & Rich	Poor 20%	Middle 60%	Rich 20%	Gap between Poor & Rich	Poor 20%	Middle 60%	Rich 20%
52371125483778056920537675254721441985119322126611462125255332469820181694	Milk and milk products	30	81	167	137	21	65	162	141	ſ	2	0
780     569     205     376     752     547       2144     1985     119     322     1266     1146       2925     2553     324     698     2018     1694	Egg, fish and meat	14	30	52	37	11	25	48	37	2	2	-
2144     1985     119     322     1266     1146       2925     2553     324     698     2018     1694	Total food	212	396	780	569	205	376	752	547	0	0	0
2925 2553 324 698 2018	Total non-food	159	466	2144	1985	119	322	1266	1146	2	£	4
MPCE: Monthly Per Capita Expenditure. CAGR: Compounded Annual Growth Rate. Source: CES, NSS Reports, Gol.	Total expenditure	371	862	2925	2553	324	698	2018	1694	-	2	3
	MPCE: Monthly Per Capit CAGR: Compounded Ann Source: CES, NSS Reports	a Expend iual Grow , Gol.	liture. vth Rate.									

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Trends in Consumer Expenditure and Consumption Pattern of Milk...

**Consumption of Milk:** The urban consumption of milk in terms of absolute quantity has been rising over the years for over a decade beginning 1987-88. The rural consumption also increased or remained almost stagnant during the same period. Here it may also be noted that the absolute consumption of milk reported in NSS survey is partial as it does not estimate out of home and institutional milk consumption (Table 4).

If incidence of consumption rises, it would be construed as enhancement of consumption base across wider population. It is found that incidence of milk consumption is rising over the years uniformly across urban and rural areas. For instance, in 1987-88, 78 per cent of the urban households reported milk consumption, which increased to 88 per cent in 2009-10.

Similarly, in rural areas the incidence increased from 62 to 80 per cent during the same period. In essence, the incidence of consumption improved by 10 and an impressive 18 per centage point in rural and urban areas, respectively over the last 23 years (Figure-1). Therefore, increasing per capita consumption coupled with rising incidence would automatically induce higher demand for milk, especially in the urban areas.

	Ru	ural	Ur	ban	% chang	je in Qty	% chang	ge in Value
Period	Qty	Value*	Qty	Value*	Rural	Urban	Rural	Urban
43rd Round (1987-88)	3.20	12.06	4.26	19.42				
50th Round (1993-94)	3.94	14.14	4.89	22.60	23	15	17	16
55th Round (1999-00)	3.79	14.16	5.10	22.46	-4	4	0	-1
61st Round (2004-05)	3.87	13.89	5.11	21.69	2	0	-2	-3
66th Round (2009-10)	4.12	16.23	5.36	27.58	6	5	17	27
68th Round (2011-12)	**	19.83	**	30.72			22	11

Table 4: Per Capita Monthly Consumption of Milk: Quantity (Ltrs/ Month) and Value (₹)

\* Value in ₹ at 1987-88 prices .

\*\* Yet to be published in latest NSS report of 68th round (2011-12).

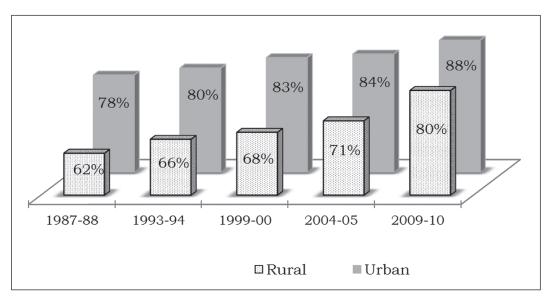


Figure1: Incidence of Milk and Milk Products Consumption (%)

Milk Consumption Across Expenditure Groups: The NSS 66th round (2009-10) data provided expenditure class-wise variation in absolute consumption of milk at the national level. This facilitated analysis of milk consumption behaviour in absolute quantity and effect of change in income or expenditure on milk consumption (Table 5). The same report also contained data on proportion of household consuming milk among different expenditure groups.

It is found that milk consumption rises monotonously as per capita total household expenditure tends to rise, and such rise is more pronounced in rural areas than in urban areas. In the lowest per capita expenditure group (less than ₹ 450 per month) of the rural area only 46 per cent of the population consumes milk, which increases to as high as 86 per cent in the top most 10 per cent group of expenditure class. With rise in per capita total expenditure, the incidence of milk consumption increases sharply in the bottom two decile groups of MPCE classes.

From the point of view of disparity in income and milk consumption, it could be argued that if the income of the people in the lower strata rises, more so in rural milieu, it would induce stronger demand- pull for milk when compared to rise in income of the people in higher income groups. Therefore, redistribution effect of income or expenditure or a higher growth in incomes in the lower income groups will positively induce demand for milk.

Source: CES, NSS Reports, Gol.

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Expenditure		Rural			Urk	ban	
Group (₹)	Monthly qty. (ltrs)	Value (₹)	%HH consuming	Exp. Group (₹)	Monthly qty. (ltrs)	Value (₹)	%HH consuming
0-450	0.91	15.31	46	0-642	1.72	33.60	61
450-537	1.49	25.39	60	642-797	2.67	53.76	79
537-613	2.32	40.06	70	797-945	3.25	67.15	85
613-685	2.79	49.74	73	945-1114	4.26	88.72	88
685-765	3.40	60.52	76	1114-1307	4.87	104.47	91
765-853	4.01	71.08	79	1307-1543	5.40	116.25	89
853-974	4.66	84.28	84	1543-1843	6.23	139.70	88
974-1144	5.62	104.73	87	1843-2303	6.90	154.31	89
1144-1477	6.63	126.73	88	2303-3166	8.27	192.02	87
>1477	9.34	183.78	86	>3166	10.03	244.28	80
All	4.12	76.16	76	All	5.36	119.13	85

Table 5: Volume of Consumption of Liquid Milk Across Expenditure Group (2009-10)

HH: Household.

Source: CES, NSS Reports, Gol.

Sources of Consumption: Incidence and Quantity: NSS reported the data on sources of consumption of milk in two rounds viz., 1993-94 (Gol, 1997). Though the data are quite dated, it still holds the importance in absence of any latest reference and hence, it would be useful to analyse the sources of milk consumption in both urban and rural areas. The milk consuming households have been categorised into (i) Only purchase, (ii) Only home grown, (iii) Both purchase and home grown, (iv) Free collection and (v) Others. The incidence and quantity of milk consumed are negligible in category (iii), (iv) and (v) and hence, only first two categories are analysed in detail. According to the latest available data, as expected, 96 per cent of the population in the urban area consumes milk

from purchases and another 4 per cent consume milk from their own milk production. For the purpose of general understanding, this 4 per cent of the population could be construed as milk producers in the urban areas (Table 6). Now, this particular statistics as revealed through NSS does not vary much with the population distribution of milch animals as described through the Livestock Census 2007 (only about 5 per cent of milch animals reside in urban areas).

Source of consumption of milk in the rural areas is balanced between purchase and home grown stock. Ironically, of those who consume milk, only 36 per cent meet their demand from home raised animal, and

62 per cent get their milk from purchases. This is a very interesting observation from the NSS survey, indicating apparent scope for exploring rural marketing of milk. If this observation is to be validated, efforts need to be made to carry out some sample surveys or rapid surveys so that more conclusive observation could be made for policy decisions.

ltems		Rural			Urban	
	% consumers of milk*	% Quantity consumed#		% consumers of milk*	% Quantity consumed#	Absolute per capita milk consumption (ltrs/ month) #
Only purchase	62.0	26	1.01	95.6	89	4.33
Only home grown	36.2	74	2.93	3.8	11	0.56

## Table 6: % Distribution of Source of Consumption of Milk

\* 1999-2000 round. # 1993-94 round.

Source: CES, NSS Reports, Gol.

To understand per capita volume of milk consumption source-wise, the proportion of total consumption has been split between cash purchase and home grown. It may be indicated that this is a special tabulation contained in NSS 50th Round at the All-India level (this kind of data have not been published in the subsequent rounds yet). Nevertheless, these help in assessing the magnitude of cash purchase and home grown volume, and also, identify States where there are scopes for rural milk marketing, essentially in the States where the incidence of milk purchase is relatively higher as compared to proportion of households producing milk (Annexure B).

In rural areas, 74 per cent of volume of consumption is met from home grown source and the balance 26 per cent is met from purchases. Though NSS does not provide data on sources of purchase, it could be presumed that one- fourth of the volume consumed within the rural areas is from the rural channels (milk producers, dairy cooperatives, vendors, etc.). The southern States of Kerala, Tamil Nadu and Andhra Pradesh have the largest proportion of consumption that is bought out, and therefore, offer scope for exploring rural marketing. The States of Maharashtra and Gujarat however have moderate scopes for rural markets (Annexure B).

In urban areas, 89 per cent of volume consumption is purchased and 11 per cent is sourced from home grown stock of animal. It would perhaps be not out of place to assume that 11 per cent of milk demand in the urban areas could be available from the milch animals reared in urban areas. The States where such proportion is high are Haryana and Rajasthan and moderate in Uttar Pradesh, Bihar and Punjab.

Many authors, in the context of cereal production in the 1970s and 1980s, have argued that it was the mass production of cereals in the green revolution era that reduced production cost, increased economy of scale and profitability, all contributing to significant increase in production as well as consumption base of food crops. Therefore, the key-point that emerges is how to enhance the productivity of milch animal leading to higher milk production in a way that the scale of production and profitability are enhanced and consumption increases.

On a similar line of observation, 4 per cent of the milk consumers in the urban areas account for 11 per cent of volume consumption. Both these observations bring home a point that it is the own stock of milch animal that contributes to higher consumption volume.

How Divergent is Consumption Profile?: In order to examine extent of disparity in milk consumption across different consumer groups, the expenditure data of 10 classes have been grouped into five equal quintiles, first two groups form first quintile (Q1) and last two form fifth quintile (Q5). These quintiles can also be renamed as, in order, poorest class, lower middle class, middle class, upper middle class and the richest class. The comparison has been made for (i) milk group, (ii) meat, fish & egg group and for (iii) food, (iv) non-food and (v) total expenditure, with the purpose of analysing the divergence in expenditure of other group of items along with milk.

If, for the sake of simplicity, ratio of consumption in poorest to richest is considered as a measure of divergence, it is found that 20 per cent of the consumers, who fall in poorest class spend only 12 per cent of what a typical consumer spends on milk and milk products in richest class in rural areas. Comparative disparity is lower for egg, meat and fish group (23 per cent) than milk (12 per cent) (Table 7).

Table 7: All India Consumption of Milk & Milk Products Across E	conomic Classes (2009-10)
	(₹ ner nerson ner month)

						(c per p	erson pe	er month)
All India	Particulars	Poor	Lower middle		Upper middle	Rich	All	Poor as % to Rich
Rural	Milk & milk prod.	21	44	67	98	171	80	12
	Egg, fish and meat	14	22	29	37	59	32	23
	Total food	286	385	464	557	792	497	36
	Total non-food	150	227	302	424	1049	431	14
	Total expenditure	436	612	766	982	1842	928	24
Urban	Milk & milk prod.	47	85	123	169	261	137	18
	Egg, fish and meat	28	53	69	86	123	72	23
	Total food	430	621	788	999	1565	881	28
	Total non-food	483	728	1131	2892	1104	1104	44
	Total expenditure	1104	1516	2130	4457	1984	1985	56

Source: CES, NSS Report, 66th round, Gol.

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On the whole, the divergence indicator varies across the States. The States like Odisha, Madhya Pradesh and Bihar show higher disparity in consumption of milk in comparison to national average. In the urban areas, a similar pattern is also noticed, but the degree of divergence between poorest and richest is on the lower side (Annexure C- 1.1 & C-1.2).

The point that emerges is that distribution of income in Indian society is highly skewed and the same is also reflected in consumption pattern. And milk consumption is no exception - almost all food groups display similar disparities. Affordability is the most plausible explanation for such disparity. So, a change in distribution of income favouring the lower stratum of the society or a relatively higher growth in income in this group or affordable prices of milk may alter the situation and would induce higher demand for milk.

Share of Consumer Expenditure on Food Groups-Protein: If the share of consumer expenditure among food groups which are the major sources of protein is examined, it is found that it is highest for milk followed by pulses. Milk and milk products command almost half of the consumer expenditure for both rural and urban consumers while the share of expenditure on animal protein derived from other sources like eggs, fish and meat etc., is low in comparison to milk (Table 8). This can be attributed to food habits - while milk is consumed almost daily across the nation in some form or the other, the food items like meat, fish and eggs are not taken on a daily basis. Arguably, the Indian society is largely vegetarian or prefers to have vegetarian food in their daily diet.

					Valu	e (₹)		%	of HH
Items	Unit	Qua	ntity	Μ	PCE	Perce	entage		orting umption
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Liquid milk	litre	4.12	5.36	76.16	119.43	48	50	76.4	84.9
Pulses	g	651	788	35.03	49.12	22	20	96.9	92.7
Eggs	No	1.73	2.67	5.35	8.15	3	3	27.1	32.3
Fish/prawn	g	269	238	18.81	20.74	12	9	28.2	20.9
Goat meat/mutton	g	47	91	8.74	18.66	5	8	7.2	12.3
Beef/buffalo meat	g	37	51	3.1	4.42	2	2	3.9	4.3
Chicken	g	123	180	12.66	19.23	8	8	16.6	21.5

#### Table 8: Comparison of Share of Expenditure on Different Sources of Proteins (2009-10)

MPCE: Monthly Per Capita Expenditure. HH: Household. Source: CES, NSS Reports, Gol.

#### **Summary and Conclusion**

The increase in monthly per capita total expenditure at constant prices (1999-200) has been 1.7 and 2.3 pe rcent in rural and urban regions, respectively during last 12 years. It grew a significant 6-8 per cent during last two years as against 1-2 per cent per annum during initial period of last decade.

Since the average inflation during last 10 to 12 years is more or less uniform, barring 2010-11, it may be argued that the seemingly narrow variation between rural and urban growth may be attributed to the rise in rural household income as a result of various Central and State developmental schemes.

The gap in expenditure of the poor and the rich during 1999-2000 and 2011-12 has increased both in food and non-food items and the gap was substantially higher in nonfood items. The gap is widening notwithstanding the efforts being made by the governments for inclusive growth especially for the people belonging to lower income brackets. It may be noted that while the food and non-food expenditure in rural areas contributed almost same to the total expenditure gap in 1999-2000, the trend changed significantly in favour of expenditure on non-food items.

As regards urban areas, both in 2009-10 and 2011-12, the share in the gap was more on non-food expenditure as expected, it increased by about 10 per cent at the cost of food expenditure while for rural areas it increased by almost 25 per cent.

Available evidence suggests that per capita consumption of milk has been rising in both the urban and rural areas. The incidence of milk consumption among rural and urban population is on the rise. This translates into higher aggregate demand. According to the latest available data, the urban consumers overwhelmingly buy milk (96 per cent) and only 4 per cent consume milk from home grown source, generally a phenomenon attached with urban dairying. In volume term, 89 per cent of total milk in the urban areas is purchased and only 11 per cent is sourced from their own domestic milch cattle.

In the rural area, only 36 per cent of the milk consumers have their own production base, while 62 per cent buy milk. In as much as rural volume is concerned, 74 per cent of the consumption volume is from own source, while 26 per cent is purchased. This implies that this 62 per cent of the milk buyers of the rural area contributing 24 per cent in volume term are the consumers who buy in limited quantities. This also corroborates the fact that the consumption of milk is higher when the families have their own source of milk production. The States of Kerala, Tamil Nadu and Andhra Pradesh offer relatively higher potential for rural marketing of milk. This throws some preliminary information on the scope for rural marketing of milk in certain regions, which need to be conclusively proved through additional insights.

Disparity of milk consumption in India is glaring. A typical consumer in the bottom 20 per cent of the population group (poorest class) in rural area spends only one-tenth of the amount spent by the top 20 per cent group (richest class). This disparity is the largest among other heads of consumption expenditure (food, meat, fish, eggs and nonfood). Incidentally, the States which are generally milk deficient (Odisha, Bihar, West Bengal and Madhya Pradesh) show higher disparity compared to the milk surplus States like Punjab, Haryana, Gujarat etc.

As a policy measure, consumer prices of milk need to soften so that the consumers of lower income or expenditure bracket could afford the same. This certainly may not appear easy, as the primary producers have a universal tendency to claim for higher prices of milk and the consumers would tend to exert pressure for a price reduction or maintenance of status quo. This is a dilemma that the organised sector in milk business inherently faces. Therefore, price parity could only be possible if, efficiency in milk production, processing and marketing could be increased which is one of the most demanding challenges for the dairy industry.

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## Annex

A-1.1: Ranking of States According to Growth in MPCE at Constant Prices (1999-2000): Rural (in ₹)

						CAGR	(%)	
State	2011-12	2009-10	2004-05	1999-2000	2004-05/ 1999-2000	2009-10/ 2004-05	2011-12/ 2009-10	2011-12/ 1999-2000
Andhra Pradesh	716	560	498	454	1.9	2.4	13.1	3.9
Kerala	1173	1015	861	766	2.4	3.4	7.5	3.6
Tamil Nadu	703	531	511	514	-0.1	0.8	15.1	2.6
Maharashtra	670	555	483	497	-0.6	2.8	9.9	2.5
Karnataka	654	443	432	500	-2.9	0.5	21.6	2.3
Punjab	970	812	720	743	-0.6	2.4	9.3	2.3
Gujarat	683	546	506	551	-1.7	1.5	11.8	1.8
Haryana	879	765	733	714	0.5	0.8	7.2	1.8
Rajasthan	598	509	475	486	-0.5	1.4	8.3	1.7
All-India	670	551	502	549	-1.8	1.9	10.3	1.7
Bihar	469	374	354	385	-1.7	1.1	12.1	1.7
Madhya Pradesh	488	437	373	401	-1.4	3.2	5.7	1.7
West Bengal	534	469	477	455	1.0	-0.4	6.7	1.3
Assam	487	473	461	426	1.6	0.5	1.5	1.1
Odisha	411	375	339	373	-1.9	2.0	4.8	0.8
Uttar Pradesh	489	455	550	467	3.3	-3.7	3.7	0.4

MPCE: Monthly Per Capita Expenditure.

CAGR: Compounded Annual Growth Rate.

								(in ₹)
						CAGR	(%)	
State	2011-12	2009-10	2004-05	1999-2000	2004-05/	2009-10/	2011-12/	2011-12/
					1999-2000	2004-05	2009-10	1999-2000
Haryana	1515	1053	943	912	0.7	2.2	20.0	4.3
Kerala	1428	1477	1066	933	2.7	6.7	-1.7	3.6
Andhra Pradesh	1165	1099	841	773	1.7	5.5	3.0	3.5
Karnataka	1370	952	853	911	-1.3	2.2	20.0	3.5
Punjab	1225	1105	1095	899	4.0	0.2	5.3	2.6
Odisha	823	790	625	618	0.2	4.8	2.0	2.4
Madhya Pradesh	916	815	746	693	1.5	1.8	6.0	2.4
West Bengal	1138	963	928	867	1.4	0.7	8.7	2.3
All-India	1117	991	868	855	0.3	2.7	6.2	2.3
Maharashtra	1263	1238	948	973	-0.5	5.5	1.0	2.2
Rajasthan	1027	926	796	799	-0.1	3.1	5.3	2.1
Uttar Pradesh	880	757	807	690	3.2	-1.3	7.8	2.1
Gujarat	1108	1031	920	892	0.6	2.3	3.6	1.8
Assam	944	854	873	814	1.4	-0.4	5.1	1.2
Tamil Nadu	1109	931	891	972	-1.7	0.9	9.1	1.1
Bihar	656	606	575	602	-0.9	1.1	4.1	0.7

# A-1.2: Ranking of States According to Growth in MPCE at Constant Prices (1999-2000): Urban

MPCE: Monthly Per Capita Expenditure.

CAGR: Compounded Annual Growth Rate.

	B: Perc	centage	Distribut	B: Percentage Distribution of Consumption of Milk - Purchase and Home Grown (1993-94)	sumption	of Milk	- Purchase	and Hom	e Grow	n (1993-94	-	
				Rural					Urban	an		
States	Cash purchase	Home grown	Total	Cash purchase	Home grown	Total	Cash purchase	Home grown	Total	Cash purchase	Home grown	Total
AP	1.39	1.23	2.62	53.05	46.95	100	3.69	0.23	3.92	94.13	5.87	100
Bihar	0.71	1.68	2.39	29.71	70.29	100	2.86	0.63	3.49	81.95	18.05	100
Gujarat	1.92	3.15	5.07	37.87	62.13	100	5.85	0.36	6.21	94.20	5.80	100
Haryana	2.48	11.34	13.82	17.95	82.05	100	6.51	2.59	9.1	71.54	28.46	100
Karnataka	1.15	1.73	2.88	39.93	60.07	100	4.11	0.31	4.42	92.99	7.01	100
Kerala	1.72	0.89	2.61	65.90	34.10	100	2.88	0.39	3.27	88.07	11.93	100
MP	0.65	2.11	2.76	23.55	76.45	100	3.51	0.57	4.08	86.03	13.97	100
Maharashtra	1.19	1.31	2.5	47.60	52.40	100	4.54	0.18	4.72	96.19	3.81	100
Odisha	0.27	0.5	0.77	35.06	64.94	100	1.85	0.35	2.2	84.09	15.91	100
Punjab	2.54	11.79	14.33	17.73	82.27	100	8.14	1.56	9.7	83.92	16.08	100
Rajasthan	1.09	9.32	10.41	10.47	89.53	100	5.66	1.87	7.53	75.17	24.83	100
T Nadu	1.43	0.69	2.12	67.45	32.55	100	3.55	0.25	3.8	93.42	6.58	100
UP	0.78	4.66	5.44	14.34	85.66	100	4.67	0.96	5.63	82.95	17.05	100
WB	0.5	1.04	1.54	32.47	67.53	100	2.44	0.29	2.73	89.38	10.62	100
All India	1.01	2.93	3.94	25.63	74.37	100	4.33	0.56	4.89	88.55	11.45	100

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State	Particulars	% HH reporting consumption	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to Rich
Andhra	Milk & milk prod.	85.7	28	49	62	82	115	67	24
Pradesh	Egg, fish and meat	87.4	25	38	44	53	76	47	33
	Total food		320	440	536	634	929	572	34
	Total non-food		170	255	329	449	1039	448	16
	Total expenditure		489	696	864	1083	1969	1020	25
Bihar	Milk & milk prod.	77.5	12	25	43	71	111	52	11
	Egg, fish and meat	71.0	8	13	18	22	30	18	28
	Total food		258	334	390	469	606	411	43
	Total non-food		116	165	228	291	550	270	21
	Total expenditure		374	498	618	760	1156	681	32
Gujarat	Milk & milk prod.	96.1	55	91	128	164	226	133	24
	Egg, fish and meat	28.0	7	10	11	10	15	10	45
	Total food		348	452	530	616	843	558	41
	Total non-food		178	255	321	435	996	437	18
	Total expenditure		526	706	852	1051	1839	995	29
Haryana	Milk & milk prod.	99.4	107	193	314	413	570	319	19
	Egg, fish and meat	9.1	1	3	2	6	4	3	38
	Total food		373	530	696	842	1121	712	33
	Total non-food		232	362	477	688	1650	681	14
	Total expenditure		606	892	1173	1530	2771	1394	22
Karnataka	Milk & milk prod.	95.5	34	42	60	58	94	58	36
	Egg, fish and meat	63.6	14	24	26	43	71	35	20
	Total food		290	368	443	517	699	463	41
	Total non-food		149	224	264	363	717	343	21
	Total expenditure		439	591	707	880	1416	807	31
Kerala	Milk & milk prod.	82.3	23	41	55	83	120	65	19
	Egg, fish and meat	92.4	66	90	113	140	217	125	30
	Total food		387	528	645	788	1152	700	34
	Total non-food		268	430	574	855		1151	7
Ma allas	Total expenditure	04.1	656	958	1220	1642	4780		14
Madhya	Milk & milk prod.	84.1	18	38	62	86	192	78	9
Pradesh	Egg, fish and meat	36.7	4	7	8	12	44	15	10
	Total food		221	306	374	450	706	411	31
	Total non-food		148	219	289	391	880	385	17
	Total expenditure		369	525	663	841	1586	797	23

## C-1.1 Divergence in Per Capita Monthly Value of Consumer Expenditure: Rural (₹) (2009-10)

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(Contd...)

		C-1.1	(Con	<i>.j</i>					
State	Particulars	% HH reporting consumption	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to Rich
Maharashtra	Milk & milk prod.	87.7	25	35	60	80	108	62	23
	Egg, fish and meat	58.4	15	20	28	31	50	29	31
	Total food		328	418	503	596	731	515	45
	Total non-food		176	275	354	499	1175	496	15
	Total expenditure		503	693	856	1095	1906	1011	26
Odisha	Milk & milk prod.	42.8	2	6	12	22	50	18	4
	Egg, fish and meat	82.9	14	21	25	35	54	30	26
	Total food		224	314	375	463	646	404	35
	Total non-food		108	161	226	289	609	279	18
	Total expenditure		332	475	600	751	1255	683	26
Punjab	Milk & milk prod.	98.7	124	166	234	302	461	257	27
	Egg, fish and meat	15.7	4	4	3	8	15	7	24
	Total food		451	549	670	777	1090	708	41
	Total non-food		258	411	552	801	1832	772	14
	Total expenditure		709	960	1221	1578	2922	1480	24
Rajasthan	Milk & milk prod.	99.3	83	125	178	215	313	183	27
	Egg, fish and meat	16.5	5	4	5	6	13	7	39
	Total food		352	446	546	607	788	548	45
	Total non-food		210	298	350	488	939	457	22
	Total expenditure		562	743	895	1095	1727	1004	33
Tamil Nadu	Milk & milk prod.	77.8	21	43	60	76	102	60	20
	Egg, fish and meat	84.2	24	39	49	57	74	49	33
	Total food		303	406	479	569	743	500	41
	Total non-food		189	271	339	460	1084	468	17
	Total expenditure		492	677	818	1028	1777	968	28
Uttar	Milk & milk prod.	84.3	27	49	71	101	159	82	17
Pradesh	Egg, fish and meat	39.8	8	11	14	16	27	15	29
	Total food		284	365	423	492	673	447	42
	Total non-food		149	209	273	383	893	381	17
	Total expenditure		433	574	696	875	1566	829	28
West Bengal	Milk & milk prod.	63.0	7	18	25	29	55	27	13
	Egg, fish and meat	97.6	31	53	64	80	116	69	27
	Total food		320	423	476	534	717	494	45
	Total non-food		141	202	277	380	807	361	17
	Total expenditure		461	625	753	913	1524	855	30

C-1.1 (Contd...)

(Contd...)

C-1.1 (Contd)										
State	Particulars	% HH reporting consumption	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to Rich	
All India	Milk & milk prod.	79.7	21	44	67	98	171	80	12	
	Egg, fish and meat	61.9	14	22	29	37	59	32	23	
	Total food		286	385	464	557	792	497	36	
	Total non-food		150	227	302	424	1049	431	14	
	Total expenditure		436	612	766	982	1842	928	24	

HH: Household.

Note: Poor-Quintile Q1 (first 20% of the population); Lower middle-Quintile Q2 (next 20% of the population); and so on.

State	Particulars	% HH reporting	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to
		consumption		maare		madie			Rich
Andhra	Milk & milk prod.	86.8	47	73	98	144	202	113	23
Pradesh	Egg, fish and meat	76.4	32	51	57	69	97	61	33
	Total food		412	567	688	915	1353	787	30
	Total non-food		295	482	734	1177	3286	1195	9
	Total expenditure		708	1049	1423	2092	4639	1982	15
Bihar	Milk & milk prod.	83.0	24	45	76	116	161	85	15
	Egg, fish and meat	63.6	10	22	22	28	43	25	23
	Total food		305	414	492	599	830	529	37
	Total non-food		143	238	354	556	1497	563	10
	Total expenditure		448	652	846	1155	2327	1092	19
Gujarat	Milk & milk prod.	99.2	84	134	206	250	321	199	26
	Egg, fish and meat	23.0	12	16	12	14	14	14	86
	Total food		447	608	768	908	1164	779	38
	Total non-food		290	514	763	1117	2719	1080	11
	Total expenditure		738	1122	1531	2024	3883	1859	19
Haryana	Milk & milk prod.	96.7	97	165	262	361	505	278	19
	Egg, fish and meat	23.9	17	8	12	11	9	11	189
	Total food		391	547	715	957	1316	786	30
	Total non-food		328	456	695	1202	2876	1112	11
	Total expenditure		720	1004	1410	2159	4192	1898	17
Karnataka	Milk & milk prod.	87.4	45	77	104	112	160	100	28
	Egg, fish and meat	55.5	22	37	53	59	76	50	29
	Total food		395	556	710	858	1212	746	33
	Total non-food		247	450	705	1071	2377	970	10
	Total expenditure		642	1006	1415	1929	3589	1716	18
Kerala	Milk & milk prod.	84.9	27	50	72	112	149	82	18
	Egg, fish and meat	89.7	74	108	146	164	237	146	31
	Total food		407	570	738	949	1470	827	28
	Total non-food		301	515	788	1246	6349	1837	5
	Total expenditure		708	1085	1526	2195	7820	2663	9

## C-1.2: Divergence in Per Capita Monthly Value of Consumer Expenditure: Urban (₹) (2009-10)

(Contd...)

C-1.2: (Contd)										
State	Particulars	% HH reporting consumption	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to Rich	
Madhya	Milk & milk prod.	93.3	42	80	110	145	242	124	17	
Pradesh	Egg, fish and meat	33.1	7	11	16	19	27	16	25	
	Total food		298	414	514	628	957	562	31	
	Total non-food		234	407	593	948	2352	907	10	
	Total expenditure		532	821	1108	1576	3310	1469	16	
Maharashtra	Milk & milk prod.	90.4	48	87	126	162	263	137	18	
	Egg, fish and meat	55.6	30	40	51	58	66	49	46	
	Total food		422	606	762	934	1409	827	30	
	Total non-food		296	530	788	1267	4135	1405	7	
	Total expenditure		718	1136	1550	2202	5543	2232	13	
Odisha	Milk & milk prod.	67.0	12	27	40	63	126	53	9	
	Egg, fish and meat	78.2	21	36	46	58	91	50	23	
	Total food		332	451	526	697	1038	608	32	
	Total non-food		196	290	460	754	2398	817	8	
	Total expenditure		528	741	986	1451	3435	1425	15	
Punjab	Milk & milk prod.	98.6	105	194	238	338	498	275	21	
	Egg, fish and meat		4	10	15	14	23	13	17	
	Total food		424	605	721	920	1299	794	33	
	Total non-food		308	478	738	1171	3284	1199	9	
	Total expenditure		732	1083	1459	2091	4583	1993	16	
Rajasthan	Milk & milk prod.	96.8	94	149	188	283	395	222	24	
	Egg, fish and meat	24.5	12	25	17	15	16	17	76	
	Total food		388	529	620	758	1093	677	35	
	Total non-food		261	390	586	835	2892	992	9	
	Total expenditure		649	918	1207	1593	3985	1670	16	
Tamil Nadu	Milk & milk prod.	87.3	49	80	105	136	180	110	27	
	Egg, fish and meat	78.4	34	51	67	78	95	65	36	
	Total food		401	533	663	826	1159	717	35	
	Total non-food		277	445	668	1032	2387	962	12	
	Total expenditure		678	978	1332	1858	3545	1679	19	
Uttar	Milk & milk prod.	90.0	42	73	109	165	288	136	15	
Pradesh	Egg, fish and meat	37.9	13	22	18	18	24	19	53	
	Total food		325	431	524	660	1104	608	29	
	Total non-food		193	320	499	783	1993	757	10	
	Total expenditure		517	752	1023	1443	3097	1365	17	

(Contd...)

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C-1.2: (Contd)										
State	Particulars	% HH reporting consumption	Poor	Lower middle	Middle	Upper middle	Rich	All	Poor as % to Rich	
West Bengal Milk & milk prod.		77.7	17	33	51	81	138	64	12	
	Egg, fish and meat	89.9	48	88	112	147	269	133	18	
	Total food		391	543	658	833	1264	738	31	
	Total non-food		214	365	599	992	2819	998	8	
	Total expenditure		605	908	1257	1825	4083	1736	15	
All India	Milk & milk prod.	88.0	47	85	123	169	261	137	18	
	Egg, fish and meat	51.4	28	53	69	86	123	72	23	
	Total food		430	621	788	999	1565	881	28	
	Total non-food		483	728	1131	2892	1104	1104	44	
	Total expenditure		1104	1516	2130	4457	1984	1985	56	

HH: Household.