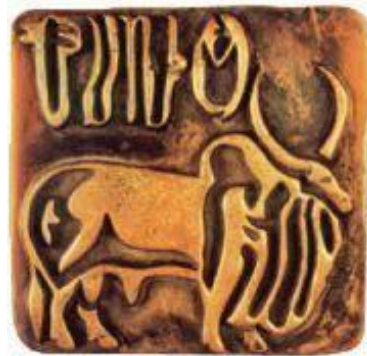


STUDY ON DEMAND OF MILK AND MILK PRODUCTS IN INDIA

Final Report
December 2019

For National Dairy Development Board (NDDB)



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BACKGROUND

Dairy industry has been one of the most dynamic sector in the agriculture industry and has demonstrated significant growth of in last 15 years (2004-2018). Milk production in India has increased at the rate of 6% CAGR from 2004 (Ministry of Agri. & Farmer Welfare & Department of Animal Husbandry & Dairying Data), matching growth in demand, as higher incomes spur more consumption of fluid milk and dairy products. India has been the world's top producer of milk and has sustainable growth in availability of milk and milk products since 1998 (Financial Express). It had a share of about 21% of world production in 2017 (Food and Agriculture Organization Corporate Statistical Database FAOSTAT, 15 Feb 2019). India has come a long way from being a milk deficit country in 1970 to emerge as the world's largest producer and consumer of milk (The Food and Agriculture Organization of the United Nations FAO). The dairy sector also plays a prominent role in agricultural and food policy, and dairy products are a traditional and nutritionally important component of average diets in the country. India's cooperative and private-sector dairy processors have, so far, been successful in meeting growing domestic demand for dairy products However, there is limited information with which to assess the future growth and competitiveness of India's dairy processors, and particularly the relatively nascent private dairy sector. To maintain the demand and supply balance it is important to assess the future growth and competitiveness of India's dairy processors.

India being the world's largest producer and consumer of dairy, has witnessed an increasing demand of dairy products over years. This has been fuelled by variety of factors like rising disposable income, improvement in supply chain, greater interest in nutrition, people interacting more with the dairy category. Consumption of processed and packaged dairy products has increased in urban as well as in rural areas (FAO). As the economy improves, the dairy industry will need to enhance milk production, and upgrade milk processing; using infrastructure, innovation and newer technologies. Dairy industry, to say the least, is poised to see robust growth in coming years.

With the growth in milk production, it is vital to estimate the increase in demand of milk & milk based products for near future. It is therefore important to generate robust, statistical evidence regarding the aforementioned demand estimates, across all states in India.

The study thus results in scientifically robust results pertaining to present (2019) and future (2030) demand estimates for Milk & Milk products by means of household as well as non-residential interactions.

The study has also covered other information areas like milk source, place and frequency of consumption, type of milk purchased (packed vis-à-vis loose), consumer perception about

attributes of milk like quality, price, packaging, and special feature like milk fortification, brand of milk & milk products purchased, per capita consumption of milk and milk products.

Hence, the main objectives of the study here as follows:

1. To estimate the current consumption (2019) of milk and milk products at the State/ Union Territory level, and also at the country level for both rural and urban areas separately.
2. To estimate the current consumption of milk and milk products for pre-decided list of million plus population cities in the country.
3. To project the demand for milk and milk products at the State/ UT level and also at the country level till 2030.

The demand projections for milk and milk products was done separately for rural and urban areas, and for the million plus cities.

The study was carried out pan India covering the 29 States and 7 Union Territories.

LITERATURE REVIEW

Milk and milk products are essential for humans as they act as nutritional supplement for children (Basic Animal Husbandry & Fisheries Statistics- AHS Series 18, 2017). In 2017-18, total milk production in India was about 176.3 million tonnes (National Dairy Development Board, 2019) and it had a share of ~21% of world production (FAOSTAT, 15 Feb 2019). India also contributes significantly in the world's total consumption of milk and milk products (Alexandratos, 2008). It is also evident from the previous studies that the demand of livestock products with the dominant share of milk and milk products is on rapid rise (Gandhi & Zhou, 2010). Besides, dairy industry has been one the most dynamic sector in the agriculture industry and has demonstrated significant growth of in the last 14 years (2004-2017). Milk production in India is increasing at the rate of 5.1% CAGR since 2014 (Ministry of Agri. & Farmer Welfare, GOI & Department of Animal Husbandry & Dairying, GOI). Thus, demand estimation of milk and milk products is crucial for Indian Dairy Industry to maintain the balance between demand and supply.

Demand estimation models¹

Methodologically, there are two approaches that can be followed to estimate the parameters of demand equations. One consists of specifying estimable single equation demand function in a pragmatic fashion without recourse to economic theory. A typical situation, for instance, is to estimate from time series data the income and price elasticities for a commodity in a constant elasticity demand equation. The use of relative prices and real income in the equation as exogenous variable makes the demand equations homogeneous of degree zero in prices and income. This ensures that there is no money illusion in demand in the sense that it is not affected by a proportional increase in all prices and incomes. This approach is simple but has serious drawbacks (Sadoulet and Janvry 1995). First, the choice of functional form for the demand equation in a single equation demand function and of variables to be included is arbitrary. The guidelines used are usually a combination of common sense, interest in specific elasticities, computational convenience and goodness of fit criteria. Second, this functional form postulates constancy of elasticities over all values of the exogenous variables. This can be true for only a short range of price and income for policy analysis. Typically, commodities that are luxuries (high-income elasticity) become necessities (low-income elasticities) when per capita income

¹ approach adopted from Kumar (1998) & Mittal (2006)

increases. The third drawback is that the estimated parameters, in general, do not satisfy the requirements of demand theory, particularly the budget constraint.

An alternative approach to the estimation of demand equation parameters uses the theory of demand as a guideline for the choice of functional forms and variables to be included. In particular, the theory allows the derivation of estimable functional forms of demand equations from mathematically specified models of consumer choice and imposition of constraints on demand parameters to reduce the number of independent parameters to be estimated to manageable numbers relative to data availability.

Three demand systems have received considerable attention: the Linear Expenditure System (LES) developed by Stone (1954), the Almost Ideal Demand System (AIDS) developed by Deaton and Muellbauer (1980) and the combination of these two systems into a Generalized Almost Ideal Demand System (GAIDS) proposed by Ballino (1990) (Meyer, Yu, & Abler, 2011). Other complete demand systems found in the literature but not widely used are the Rotterdam model of Theil (1976) and Barten (1969) and the translog model of Christensen, Jorgenson and Lau (1975).

The Linear Expenditure System is the most frequently used system in empirical analysis of demand. A significant drawback of this system is that it implies linear Engel functions, a specification not supported by empiricism and can be true only over a short range of variation of income. Consequently, if the equations are to be used for predictions, only short-term predictions can be made. Like all point wise-separable models, the LES model is better applied to large categories of expenditure than to individual commodities, since it does not allow for inferior goods and implies that all goods are gross complements.

The AIDS model derives from a utility function specified as a second order approximation to any utility function. The demand functions are derived in budget share form. Deaton and Muellbauer (1980) suggest approximating the price index P by the Stone geometric price index:

$$\ln P^* = \sum_i w_i \ln p_i$$

This linear approximation is all the better if there is collinearity in prices over time.

The econometric problem with the AIDS model is that the demand equations appear to be unrelated, since none of the endogenous quantities or budget share appear on the right-hand side of the equations. This is not the case, however, since error terms across equations are correlated by the fact that the dependent variables need to satisfy the budget constraints. While

an ordinary least squares (OLS) estimate of these equations would be consistent and unbiased, the estimation method developed by Zellner (1962) for Seemingly Unrelated Regressions (SUR) provides estimates that are more efficient. In a first stage, OLS is used to estimate the variance-covariance matrix residual; in a second stage this estimated matrix is used in a generalized least square estimation. Since the covariance matrix among residuals is singular because of the residuals satisfying the budget constraint, the typical procedure consists in deleting one of the equations of the demand system. The parameters from the deleted equation can be calculated from the parameters of the other equations through the restrictions on parameters. Barten (1969) has suggested an Iterated Seemingly Unrelated Regression (ITSUR) routine, which produces results that are invariant to the equation deleted.

Demand estimation model assumptions and restrictions

Demand parameters need to satisfy several restrictions, and these must be imposed on the estimators. Equality constraints are imposed by using a restricted least square approach. The basic objective of the theory of consumer behaviour is to explain how a rational consumer chooses what to consume when confronted with various prices and a limited income. At this level of generality, the main usefulness of the theory for empirical purposes is that it establishes a set of constraints which demand parameters must satisfy, thus limiting the number of independent parameters to be estimated and ensuring consistency in the results obtained.

Due to time series data constraint, we use recently developed techniques for estimating price elasticities using cross section expenditure survey data when there are spatial variations in prices. The data requirements to apply these techniques are household expenditures by commodity, quantity of each commodity consumed and individual characteristics. Given expenditure and quantity data, the unit value and expenditure shares can be calculated for each household. Consumers respond to price movements by changing both the quantity and quality of a good.

Demand elasticities are an important parameter in predicting food demand. The magnitude of these elasticities depends largely on the methodology used in computing the price and expenditure elasticity. Different studies have used different methods to estimate the demand elasticities and make demand projections. Kumar (1998) computed the expenditure and price elasticities for food and non-food commodities using various econometric (Transcendental Logarithmic Demand System (TLDS), Normalized Quadratic Demand System (NQDS) and

Linear Expenditure Demand System (LEDS)) and non-econometric (Food Characteristic Demand System (FCDS)) techniques.

A recent study (2018) for Kosovo's households used eight rounds (2005-2012) of Household Budget Survey (HBS) data to analyse the complete food demand system. It included all major food groups like cereals, meat and fish, dairy products and fruits and vegetables. Main objective of their study was to provide fundamental food demand taking income, prices and other socio-economic household characteristics for demand estimation (Braha, Cupak, Qineti, & Pokrivcak, 2018). The study estimated complete demand system by using Quadratic Almost Ideal Demand System (QUAIDS). The results showed that the estimated expenditure elasticities were positive and statistically significant for all dairy products. QUAIDS was also used to compute food demand elasticities for Ethiopia's household. The researchers used income consumption expenditure survey data for year 2004-05 for the analysis (Tafere, Taffesse, Tamiru, Tefera, & Paulos, 2010).

Few researchers from Germany and USA conducted study in 2011 to find the advantages of the then popular demand systems like Linear Expenditure System (LES), Almost Ideal Demand System (AIDS), Basic Translog (BTL), Quadratic Expenditure System (QES), Quadratic Almost Ideal Demand System (QUAIDS) and An Implicitly, Directly, Additive Demand System (AIDADS) in estimating elasticities. The results indicated that QUAIDS system is robust in estimating own-price elasticity (Meyer, Yu, & Abler, 2011). Another similar comparative study was done in 2000 using cross-sectional data of several countries. The finding of the analysis showed that QU-AIDS model is better suited as compared to AIDADS and QES where cross-price effects are studied (Cranfield, Eales, Hertel, & Precket, 2003).

Income Elasticities

There is a growing body of literature providing evidence on the consumer demand worldwide. Only a limited number of studies shed the light on the milk demand for India. To estimate the milk demand, different studies used several estimation models to compute expenditure and price elasticities of milk and milk products.

In a study (Mittal, 2010) two stage QUAIDs model was tested for major food groups in Indian scenario using unit level (National Survey Sample) household data. It used NSS data for the round numbers 38, 43, 50 and 55, belonging to the period 1983-2000 respectively, income and price elasticities for milk and milk products was estimated. Expenditure elasticity of milk at national level was positive and high 1.19 as compared to the other food groups like cereals,

pulses, vegetable and fruits, edible oil etc. Expenditure elasticity for rural India was found higher (1.27) than urban India (1.15), rural households have less expenditure budget as compared to the urban ones. Uncompensated own price elasticity was estimated -0.78 at national level (rural was -0.73 and urban -0.84) with an expected negative sign indicating increase in price will lead to decline in consumption. The study also validated that the projected demand numbers using QUAIDS model elasticities for cereals was found close (2-4% difference) to the actual consumption numbers (Mittal, 2010).

Food Characteristics Demand System (FCDS) and QUAIDS multi-staging model was compared in a research study (Kumar, Kumar, & Parappurathu, 2011) using 30 years National Survey Sample household data (5 rounds 38, 43, 50, 55 and 61 covering years from 1983 to 2005). To understand the complete demand system at national level for different food items like cereals, pulses, edible oil, fruits, vegetables, milk, sugar etc. income and price elasticity was computed. The findings indicated that income elasticity of milk and milk products ranged from 0.429 (FCDS) to 1.640 (QUAIDS multi-staging). The income elasticities of milk and milk products are positive and decline with increase in household income. It was evident from the estimates of QUAIDS model that the income elasticities are much higher for poor households (2.342 for lowest income group than for richer (1.566 for higher income group) households Own price elasticity (uncompensated) varied from -0.624 for FCDS to -1.035 using QU-AIDS multi-staging demand systems.

In the recent literature (Subramanian, Kakkagowder, Perumal, & Gurusamy, 2019) on the demand of milk and milk products, QUAIDS single-stage model was used to estimate the expenditure elasticities. The study analysed unit level consumer expenditure survey of NSS (rounds 50th, 55th, 61st, 66th and 68th) and estimated liquid milk elasticities for rural (1.209) and urban (1.342). In contrast to all the studies the

Ganesh Kumar et al. used QUAIDS based on 61st NSS data (2004-05) to project the demand of major food groups. Milk expenditure elasticity at national level was computed and was found to be positive but low as compared to the other food groups (0.55) (Kumar, et al., 2012).

To project the demand in an alternative scenario, almost ideal demand system model was also used to examine consumer behaviour in India. Based on the NSS household survey data for the period 1973-74 through to 1993-94 (Agbola, 2000), it was found that the demand elasticity for milk and milk products at all India level was 1.075.

In a discussion paper of Babcock Institute, expenditure elasticities for demand projection of milk and milk products were used from the Roadmap group estimates (Patel, 2006).

Expenditure elasticity was reported as 1.36 (rural) and 1.07 (urban) for milk, 0.6 at national level for milk and milk products.

Expenditure elasticities were also computed (Bhalla, Hazell, & Kerr, 1999) based on NSS data (round 50th) using a log inverse expenditure function. It was computed that at the national level for milk and milk products expenditure elasticity in 2020 would be 1.53 for rural and 1.05 for urban. To project the expenditure elasticities to 2020, the authors used their best guesses along with the assumption of increasing elasticities for livestock products.

R. Radhakrishna and C. Ravi in 1990 employed the linear expenditure system model to estimate the demand elasticities for milk and milk products. They found that the milk elasticity in rural was 1.15, higher than urban (1.09). It was evident from their results that milk was luxury product for the rural dwellers.

In a discussion paper in 1995 on Global food projections to 2020, International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT) model was employed to estimate the demand elasticities. The expenditure elasticities of milk for 2020 was estimated for rural-urban and was found to be 1.01 (Rosegrant, Agcaoli, & Perez, 1995).

A recent report of Niti Aayog based on NSS round data from 47th up to 68th used AIDs model for demand elasticities estimation (NitiAayog, 2018). Based on the analysis results estimated elasticity for rural was 0.82 and for urban it was 0.4.

More recent studies are centred on the complete demand system, which takes into account mutual interdependence of a number of commodities in the budget decisions of the consumer. Muellbauer and Pashardes (1992) point out that most studies of demand systems use static models, which did not account for hypothesis of symmetry and homogeneity, derived from consumer theory. Thus, there is a need for a dynamic demand system which gives more realistic and econometrically viable results. Demand and income elasticities are not necessarily constant across groups. Indeed, food income elasticities generally decrease with increasing income (Ravallion 1990; Timmer 1991). If this property is not allowed in the functional form, it inevitably results in bias. Similarly, if changes in relative prices are not accounted for then it can lead to omitted variable bias.

The functional form used in the demand study affects estimates. There are two important requirements for the functional form that are used to estimate income elasticities of food demand. Gandhi and Zhou used double log functional form to estimate the demand elasticities in a study. The analysis results were based on NSS data of 5 rounds from period 1970 to 2004-05. (Gandhi & Zhou, 2010). The analysis estimated expenditure elasticity for higher in rural (1.821) than urban (0.955).

Year	Author	Data	Model	Expenditure Elasticity
2018	Niti Aayog	NSS rounds 47th up to 68th (2011-12)	AIDS	0.82(Milk, Rural) 0.4 (Milk, Urban)
2018	Raman Subramanian et al.	NSS rounds 50th (1993-94), 55th(1999-2000), 61th (2004-05), 66th (2008-09) and 68th (2011-12)	QUAIDS	1.209 (Milk, Rural) 1.342 (Milk, Urban)
2012	A. Ganesh-Kumar et al.	NSS round 61st (2004-05)	QUAIDS	0.55 (Milk and milk products, India)
2011	P. Kumar et al.	NSS rounds, 38th (1983), 43rd (1987-88), 50th (1993-94), 55th(1999-2000) and 61 (2004-05)	QUAIDS (2-stage)	1.64 (Milk and milk products, India)
			FCDS	0.429 (Milk and milk products, India)
2010	Vasant P. Gandhi and Zhang-Yue Zhou	NSS rounds 1970-71, 1977-78, 38th (1983), 43rd (1987-88), 50th (1993-94), 55th (1999-00) and 61st (2004-05)	Double-log form	1.821(Milk, Rural) 0.955 (Milk, Urban)
2006	Surabhi Mittal	NSS rounds, 38th (1983), 43rd (1987-88), 50th (1993-94), 55th(1999-2000)	QUAIDS (2-stage)	1.27 (Milk and milk products, Rural) 1.15 (Milk and milk products, Urban) 1.19 (Milk and milk products, India)
2006	Roadmap Group	-		1.36(Milk, Rural) 1.07 (Milk, Urban)
				0.6 (Milk and milk products, India)
2000	Frank Wogbe Agbola	NSS rounds 27th (1972-73) upto 50th (1993-94)	LA/AIDS	1.075 (Milk and milk products, India)
1999	G. S. Bhalla, Peter Hazell and John Kerr	NSS rounds, 27th (1972-73), 38th (1983), 43rd (1987-88), 50th (1993) and 52nd (1995)	Log Inverse Expenditure Function	1.53 (Milk and milk products, Rural) 1.05 (Milk and milk products, Urban)
1995	Rosegrant, Agcaoili-Sombilla, and Perez	-	IMPACT	1.01 (Milk and milk products, India)
1990	R. Radhakrishna and C. Ravi	-	LES	1.15(Milk, Rural) 1.09 (Milk, Urban)

Hence, functional form should be flexible and must allow income elasticities to differ between rich and poor households, because the usual pattern is of income elasticities of food demand to fall as income rises. Thus, in this study the elasticities are estimated for rural and urban households separately for different groups at all India level.

The functional form should be able to be estimated when a household has zero consumption of particular foods, otherwise those households have to be dropped from the sample, which could cause sample selection bias (Deaton 1989). In the study we computed inverse mills ratio (IMR) to take care of the selection bias due to zero household consumption of certain products.

Thus, the present study works with the complete demand system and makes demand projections after taking into account effects of urbanization and regional variations in dietary pattern. Several studies in literature have shown that demand elasticities can be computed by regions as production environments and tastes change.

If demand is analysed directly at the regional or national level, it is affected by both the averages level of these variables in the unit of analysis and by their distribution across the population. The Deaton (1988,1990) method assumes that there are no price variations within clusters and, hence, unit value variations across households in the same cluster are only due to quantity differentials and measurement errors. This assumption allows one to use within-cluster variations in demand to estimate the impact of income and consumer characteristics on demand including the quantity effects. This relation can then be used to remove the predicted effects of income and household characteristics on demand and to explain the residual cross-cluster variations in demand by prices only. Thus, in the current study the elasticities are computed at cluster level across four income classes, rural and urban sectors at the national level.

Demand and Supply Estimates

The findings from the literature suggest that there are substantial studies which has estimated all India demand and supply for milk and milk products. A recent report by Niti Aayog used AIDS model to estimate demand for 2021-22 (159.13 million tonnes) and 2028-29 (193.75 million tonnes). It used NSSO data for the estimation and also incorporated indirect demand for the projections. Indirect demand comprised seed, feed, wastage and other industrial consumption (NitiAayog, 2018). It was also evident from the supply projections of 2021-22 (193.97) and 2028-29 (276.28) that India will have surplus in milk and milk products.

Another study used FCDS (Food Characteristic Demand System) model to measure the demand and supply gaps for milk. Similar results were found (demand 170.4 million tons and supply 188.7 million tons for 2030) indicating that milk will be in surplus in 2030.

Food demand projections report for 2020 indicated that demand for milk and milk products will be 289.591 million metric tons. It used log inverse expenditure model.

Anjani Kumar et. al used QUAIDS multistage model for similar projections. The findings indicated that for 2021-22 the demand for milk in India will be 168.1 million tons. While for 2026-27 it will be 209 million tons. The demand estimates included both household and indirect (consumption outside home, in industries and waste) demand of milk.

Using computing framework adopted from literature, the current study used QUAIDS model for elasticities calculations.

SAMPLING

In order to meet the study objectives we proposed and conducted household and non-residential interviews across stratum in India. The primary survey results was then extrapolated to produce robust estimates of per capita consumption for milk and milk products.

Approach & Methodology

There were two steps to achieve the sampling objective:

Step 1: Stratification for sampling of Urban & Rural part in each state of India

Step 2: Primary Survey

Step 1: Stratification for sampling of Urban & Rural part in each state of India

- A stratified multi-stage random sampling design was adopted for the survey.
- Each state was considered as a stratum. Within each state, two basic strata were formed:

Rural strata comprised all rural areas of all the districts in the state, including lowest rural settlement, villages – The Selection of the districts was done randomly among NFHS (National Family Health Survey) regions.

-**Urban strata** comprised all the urban areas (Towns UA / Urban Settlements)

- **65 Million+** towns.

The state-wise proposed selection procedure for each of the target respondents were as follows:

Stratification Levels	Urban	Rural
Level 1	State	State
Level 2	NHFS – Region	NHFS – Region
Level 3	Town	District
Level 4	Ward	Village

Step 2: Primary survey

In each of the households selected within wards (urban areas) and villages (rural areas), the interviews were conducted in two parts as below:

Part 1: Homemaker Interview (*to capture household consumption of milk and selected milk products*)

Part 2: Individual Interview (*to understand out of home consumption of an individual aged 15-59 years from the same household*)

However, total recorded sample size of Individual interview was found to be slightly lower as this sample was subject to household size and availability of the individual member for the interview.

Sampling Design

The state wise proposed household sample size and selection procedure for each of the target respondents was as follows:

Survey among Consumers at Large

Study Universe:

The study was proposed to be carried out in urban and rural areas of all states and Union Territories of India. The proposed sample size and sampling design was to ensure proper representation at state and at national level.

However, some of the areas restricted/protected by Government were excluded from the ambit of this research due to security concerns.

Covering socio cultural regions:

The unique cultures of all religions and communities present across India, differing from place to place within the country had to be represented in our data.

For this study we therefore, took the region segmentation as per the National Family Health Survey- which is a large-scale, multi-round survey conducted in a representative sample of households throughout India. This aided in covering the socio cultural Diasporas, of each geography estimated for- both urban, as well as rural.

Sample Size

Total proposed sample covered in the study was 96,400:

Sample of 96,400 was further divided into non-residential and household sample in the following order:

- Household Sample: 91,000
- Non-Residential Sample: 5,400

Following states wise allocation criteria was followed to allocate household sample:

The sample size for a given state in a given stratum was decided considering the size of the state and the need of providing separate estimates for urban and rural areas, and to capture regional variations in the state.

To provide statistically valid estimates a sample of 3000 and above households were

allocated to states having population of 50+ million. A sample of 1500 - 2000 households is allocated to states having population of 10-50 million, 1000 - 1500 households to states having population less than 10 million, and all 6 Union Territories to have sample of 500 - 1000 households.

While pooling the data for state and national estimates appropriate weights were developed and utilised.

Within the state/UT, Urban and Rural sample allocation was done basis proportion of the urban rural population in the states / UT. In states where the urban population was less than 30%, a minimum of 30% state / UT sample was selected from urban areas. The suggested sample was proposed to provide the estimates by State-wise rural / urban, and million plus cities with 10 percent margin of error at 95 percent confidence interval and with design effect of 2.0.

Sample of 500 households was allocated to each of the 65 million plus cities as separate estimates were required for these cities.

Hence, total estimated sample proposed to be covered in the study was:

$$43,400 \text{ (R)} + 47,600 \text{ (U)} + 5,400 \text{ (Inst.)} = 96,400$$

However due to challenges faced in conducting interviews in army establishments, and permission issues among jails the final sample size achieved was as below:

$$44,198 \text{ (R)} + 52,475 \text{ (U)} + 5,086 \text{ (Inst.)} = 1,01,759$$

HOUSEHOLD SURVEY SAMPLE SIZE

The below table provides the sample size for the states and union territories:

State	Mn + Cities	Urban	Rural	Total
Andaman and Nicobar Islands		427	607	1034
Andhra Pradesh	2	1540	2298	3838
Arunachal Pradesh		404	1015	1419
Assam	1	913	1405	2318
Bihar	1	1106	2135	3241
Chandigarh	1	590	318	908
Chhattisgarh	2	1615	1358	2973
Dadra & Nagar Haveli		442	481	923
Daman & Diu		484	294	778
Delhi	1	555	520	1075
Goa		515	499	1014
Gujarat	4	2823	1733	4556
Haryana	2	1763	1434	3197
Himachal Pradesh		588	1192	1780
Jammu and Kashmir*	1	684	728	1412
Jharkhand	3	2250	1564	3814
Karnataka	3	2184	1773	3957
Kerala	7	4031	1018	5049
Lakshadweep		348	191	539
Madhya Pradesh	4	2769	2047	4816
Maharashtra	7	4753	1640	6393
Manipur		401	1009	1410
Meghalaya		488	1049	1537
Mizoram		403	695	1098
Nagaland		461	950	1411
Orissa	1	915	1426	2341
Puducherry		550	403	953
Punjab	3	2200	1212	3412
Rajasthan	3	2163	2292	4455
Sikkim		456	981	1437
Tamil Nadu	6	3830	1509	5339
Telangana	1	1087	1410	2497
Tripura		392	1021	1413
Uttar Pradesh	10	6371	2409	8780
Uttarakhand		416	1490	1906
West Bengal	2	1558	2092	3650
Grand Total	65	52,475	44,198	1,01,759

**For J&K, Field work was stopped soon after the GOI revoked the provisions of Article 370. However, the fieldwork was again launched after the enforcement of Jammu and Kashmir Reorganisation Act, 2019 when situation improved in the valley.*

Sampling in rural areas

To select the required number of respondents in rural areas, a three stage sampling procedure was followed. The units of selection in different stages were the district, the village and the household.

Step 1: Grouping of Districts: Districts were grouped according to various geographical regions as used in NFHS 2005-2006.

Step 2: Selection of Districts: In each NFHS region, districts were selected randomly which would represent at least 33% of the total no. of districts within each region. The newer districts formed after NFHS 2005-06 and part of Census 2011, were grouped in same region in NFHS from where they were originally formed.

Step 3: Selection of Villages: All villages of the above selected districts were considered as universe. Our experience of large surveys suggested that coverage of 20 households per village is adequate to represent similar cluster of villages due to their homogenous nature. Hence, taking a sample of 20 per village, number of villages to be selected was identified by dividing the rural sample per state by 20. The required number of villages (PSUs) within the sample districts was selected using PPS (Population proportion to size) methodology.

Step 4: Selection of Households:

In each selected village, the supervisor after reaching the village contacted sarpanch or any other knowledgeable person and determined the village boundaries, and identified the hamlets of the village. He then divided village into 2/3 zones depending on the availability of zones in a village. In each zone one starting point in selected and interviews were done.

In case of shortfall of 20 HH in the selected village, it was covered in the adjacent village – the sample was completed by combining neighbouring villages.

Sampling in urban areas

To select the required number of respondents in urban areas, as mentioned above, a multi-stage sampling procedure had been adopted. The units of selection in the different stages were town, municipal wards and the household.

Urban sampling (other than Million+ City)

Step 1: Grouping NFHS Regions:

Million+ city municipal corporation wards were removed from the total wards of the state. Then districts and its corresponding towns and wards were grouped, according to various geographical regions as used in NFHS

Step 2: Selection of Towns: Taking a sample of 20 per ward, number of wards to be selected was identified and 2 wards per town were proposed to be covered. Total number of towns to be selected was distributed equally across NFHS zones.

In each NFHS zone, PPS (Population proportion to size) methodology was used to select the towns.

Step 3: Selection of Wards:

In each of the selected Town, again PPS (Population proportion to size) methodology was used to select required wards.

Step 4: Selection of Households:

Ward map with ward boundaries were procured from Nielsen Micro Market Economic team's database and randomly 3 areas were selected, for field work, from one ward. In each area, starting point (Household) was selected from any crossing at right hand of any govt. building or polling booth.

In-case of non-availability of a ward map, 3 areas were identified through secondary research, for field work in each of those wards.

In case of non-availability of areas, interviewer visits the particular ward and select 3 starting points from particular ward.

Million + City sampling

Step 1: Ascertain no of wards to be selected: All wards in a Million+ city were considered as universe i.e. Million+ city municipal corporation wards. Taking a sample of 20 per ward, we divided the total required sample of a Million+ city by 20; to arrive at number of wards to be selected. As the sample size per Mn+ city was 500, 25 wards were selected accordingly.

Step 2: Selection of wards: PPS (Population proportion to size) methodology was used to select the wards.

Non-Residential sampling:

Four types of non-residential were proposed to be covered for the study: Jails, Armed Forces Settlement, Student hostels, and working people hostels. The achieved samples were extrapolated to all India consumption estimates.

Each non-residential type was proposed to be covered in every State/UT.

	Non-Residential	Respondent
1.	Jails	Food Procurement Officer
2.	Armed Forces Settlement	Station Officer , Mess Administrator, Canteen/Shop Vendor(s)
3.	Student / Working people Hostels	Residents

1. **Jails :** The purpose of covering jails was to have some representation of dairy consumption by inmates as they are individuals whose consumption was not being covered in the household module- however accounts for inclusion in total dairy consumption in India.

The proposed sample suggested minimal representation – 2 jails per state & 1 for UT, in some of states like Goa, there was only 1 jail. Further, Nielsen faced challenges in getting permission for survey in proposed sample of jails.

For this, Nielsen research team sent out communication seeking permission from Director General of Prisons in each geography on behalf of National Dairy Development Board. The on ground field teams visited the DGP office in person to convince for permission – however, in many states the DGP refused permission citing security concerns.

Thus, please find below the achieved sample for jail module by states:

State	Sample
Andaman & Nicobar Islands	1
Andhra Pradesh	2
Arunachal Pradesh	0
Assam	1
Bihar	2
Chandigarh	1
Chhattisgarh	0
Dadra & Nagar Haveli	1
Daman & Diu	1
Delhi	
Goa	2
Gujarat	1
Haryana	2
Himachal Pradesh	2
Jammu & Kashmir	
Jharkhand	
Karnataka	
Kerala	2
Lakshadweep	
Madhya Pradesh	2
Maharashtra	2
Manipur	2
Meghalaya	2
Mizoram	
Nagaland	2
Odisha	2
Puducherry	2
Punjab	2
Rajasthan	2
Sikkim	
Tamil Nadu	
Telengana	2
Tripura	
Uttar Pradesh	1
Uttarakhand	2

West Bengal	2
Total	43

2. **Armed Forces Settlement:** The dairy consumption of jawans in armed forces settlements was needed to be added to compute the total demand of dairy products in India. Due to security concerns, it was found to be infeasible to intercept jawans at these settlements, therefore the procurement data for military supply of milk and milk (for year 2018-19) was gathered from the National Cooperatives Dairy Federation of India (NCDFI) data and fed into the calculations for the estimates.
3. **Student/Working people Hostels:** The consumption of students staying in various hostels for higher studies and working people staying in hostels was captured through face to face quantitative surveys. The sample hostels were selected purposively however ensured spread across states and a mix of students and working people. However, there were some challenges faced in state coverage due to low penetration of working people hostels, especially in rural areas where the sample couldn't be completed. In Goa specifically, the team couldn't cover hostels due to vacation period and lack of permission in the few operational hostels in this fieldwork period.

Please find below the achieved sample for hostel module by states:

State	Sample
Andaman & Nicobar Islands	141
Andhra Pradesh	153
Arunachal Pradesh	180
Assam	162
Bihar	192
Chandigarh	161
Chhattisgarh	191
Dadra & Nagar Haveli	74
Daman & Diu	62
Delhi	154
Goa	2
Gujarat	104
Haryana	149
Himachal Pradesh	180
Jammu & Kashmir	0
Jharkhand	167
Karnataka	168

Kerala	191
Lakshadweep	0
Madhya Pradesh	194
Maharashtra	159
Manipur	164
Meghalaya	171
Mizoram	106
Nagaland	113
Odisha	143
Puducherry	145
Punjab	173
Rajasthan	158
Sikkim	147
Tamil Nadu	156
Telangana	155
Tripura	143
Uttar Pradesh	175
Uttarakhand	155
West Bengal	155
Total	5043

Development of weights

As various stages were involved in sampling for household module appropriate weighting was necessary to pool the data. In line with the finalised sampling design, appropriate weights were developed to pool the data at rural, urban and state / UT levels. Extrapolation to All state* rural & state*rural households were done post the below weighting.

	Weighting levels
State* Urban	NFHS Size, NCCS, Household size
State* Rural	NFHS Size, NCCS, Household size
States/UTs	Urban & Rural proportion
Million + Cities	NCCS, Household size

NCCS source & Household size source – IRS*

*The Indian Readership Survey (IRS)

Household size source – Census

NFHS Size source- Census & Micro Market and Economics (MME), Nielsen- 2018

The levels of weighting explained below:

- **State * Urban:** The weighting was done on two levels on the primary household data:

(i) NCCS *Household size: The households covered in sample were weighted to the proportion of households across NCCS & household sizes in the universe as per IRS 2019.

(ii) NFHS classification * pop strata of towns: The households covered in our sample were weighted basis the proportion of households in the NFHS region and town strata in the universe. The data on projected population and no of households (2018) were sourced from Micro Market and Economics (MME), Nielsen which factors in the growth rate, mortality rate and town boundaries. This data was used for population stratification of towns i.e population below 1 lakh, 1-5 lakh, 5-10 lakh and 1 Mn+. The population from MME Nielsen listed Jalandhar UA & Bhubhaneshwar UA were slightly below 1 Mn, therefore were stratified in 5-10 lakh population for weighting purposes.

The population for few towns which were beyond the coverage of MME in J&K, Arunachal Pradesh, Manipur & Mizoram were extrapolated using CENSUS 2001 & 2011 population data. The classification of towns in regions was done basis NFHS 2005-06 (National Family Health Survey). The newer districts formed after NFHS 2005-06 and part of Census 2011, were grouped in same region in NFHS from where they were originally formed.

-State * Rural: The weighting was done on two levels on the primary household data:

(i) NCCS *Household size (Source –IRS 2019)

(ii) NFHS classification * pop strata of towns: The households covered in our sample were weighted basis the proportion of households in the NFHS region and village strata in the universe. The village population has been extrapolated to 2018 using CENSUS 2001 & 2011 population data. Further, district average CAGR the villages for which past population data wasn't available or where the base was low in 2001.

This data was used for population stratification of villages i.e below 1000, 1000-5000, 5000-10000 and 10000+.

The classification of towns in regions was done basis NFHS 2005-06 (National Family Health Survey).

-Million + Cities: The 65 Million + cities were weighted on NCCS*Household size basis IRS 2019 data.

METHODOLOGY

In the previous studies, the major attention has been on the complete demand system including all food categories like cereals, pulses, vegetable, fruits etc. The present study focuses to the demand for high-value commodity, milk and milk products.

The demand estimation in the current study is conducted using the following 3 step approach:-

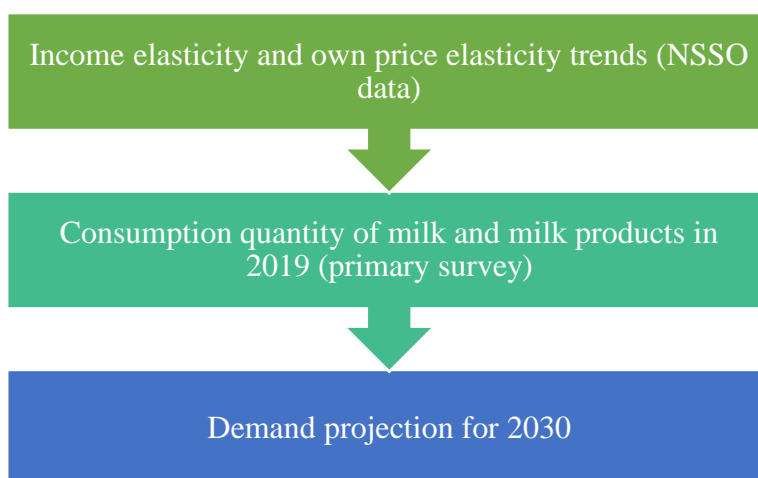


Figure 1 Steps for analysis

Step 1: Identified income and own-price elasticity trend

The study used household level consumer expenditure survey data of the National Sample Survey Organization (NSSO) from the 3 rounds, round 61 (2004-05), round 66 (2009-10), and round 68 (2011-12) for the analysis. It is evident from literature that NSSO data is close to an ideal set of data for measuring the structural shifts in food demand patterns. The NSSO data provide household data in terms of quantity and value of commodities by expenditure groups, rural-urban locations and by states.

Milk and milk products in NSSO data are classified into 8 sub categories, milk (liquid), baby food, milk: condensed/ powder, curd, ghee, butter, ice-cream and other milk product. These products were clubbed together as milk and milk products to compute elasticity and for demand projections.

Prices for rural and urban areas are computed implicitly as expenditure divided by the quantities and then deflated by the consumer price index to obtain the real prices. These are

done to compute the Stone Price Index which is used in stage 2 of QUAIDS model. Using the expenditure and quantity data, the unit value information and expenditure shares are calculated for each household.

Using the two stage QU-AIDS model the price and income elasticity was estimated at mean level for 2011.

The trend for both price and income elasticity was identified from the estimated numbers and was extrapolated for 2019.

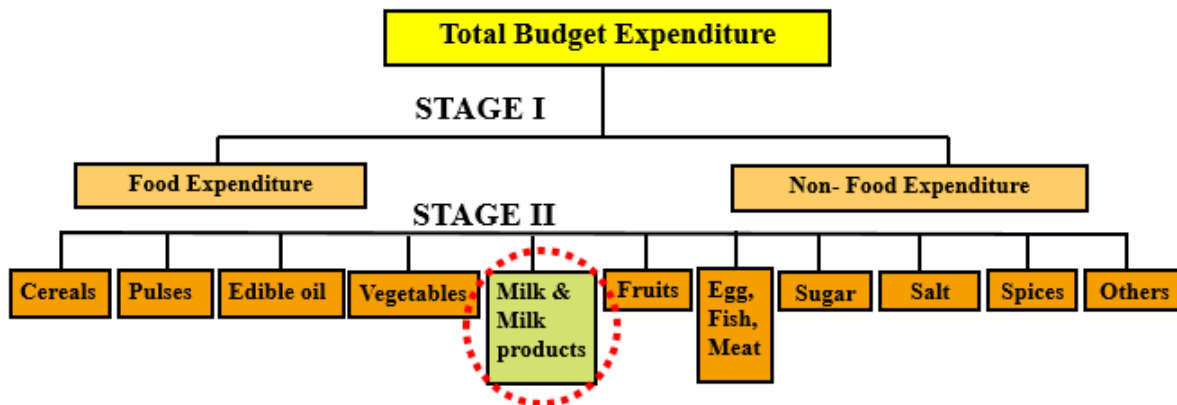
Analysis framework: QUAIDS Two-stage

The current study estimated an extended model of the AIDS model for elasticity computation. The model gives away the assumption of linearity in the expenditure function. The model assumes that there is a non-linear relationship between income and expenditure. Quadratic equation is used as a specific case to non-linear function. The model is quadratic in per capita expenditure thus the model is named as quad-AIDS model. A two-stage budgeting framework is used to model the consumption behaviour of households. The literature section explained the vast application of QUAIDS model for demand elasticity estimation of major food groups including milk and milk products (Meyer, Yu, & Abler, 2011) (Braha, Cupak, Qineti, & Pokrivcak, 2018). It was also evident from the previous studies that the projected demand numbers using QUAIDS model elasticities (in case of cereals) was found close to the actual consumption numbers (Mittal, 2010). Hence, this study used QUAIDS two-stage model for elasticity estimation- Price and income elasticity are estimated.

Two-stage QU-AIDs Model

In the first stage, the household makes decisions on how much of its total income (expenditure) is to be allocated for food consumption, conditional on consumption of the non-food goods and the household and demographic characteristics. In the second stage, the household allocates the total food expenditure among different items/groups (cereals, pulses, edible oil, vegetables, milk and milk product, fruits, eggs fish & meat, sugar, salt, spices and other food).

This framework is drawn from a working paper (Mittal, 2008).



Source: (Mittal, 2008)

Following Blundell et al. (1993), Dey (2000) and Kumar (2004), the specific functional form used in the two stages are as follows:

Stage 1: Food expenditure function

$$\ln(M) = \alpha + \gamma_1 \ln(P_f) + \gamma_2 \ln(P_{nf}) + \beta_0 \ln(Y) + \beta_1 (\ln Y)^2 + \sum \theta_j Z \quad (1)$$

Where M is the per capita food expenditure; Y is the per capita total expenditure (income); P_f is the household specific price index for food; P_{nf} is price index of non-food. Vector Z include ratio of family size, and urban dummy.

Parameter β varies as

$$\beta = \beta_0 + \beta_1 \ln(Y)$$

Equation 1 was estimated by the OLS method, and homogeneity of degree zero in prices and income was imposed by restricting

$$\gamma_1 + \gamma_2 + \beta_0 + 2\beta_1 \ln(Y) = 0 \text{ at the sample mean of } \ln(Y).$$

Deaton and Muellbauer (1980) suggest approximating the price index P by the Stone geometric price index.

$$\ln P^* = \sum_i w_i \ln p_i$$

Stage 2: Milk expenditure function

In stage 2 of the analysis, quadratic extension to Deaton and Muellbauer's (1980) almost ideal model (QUAIDS) for food demand system was used. This model is quite popular and was by in several studies for food demand model as explained in the literature section.

$$S_i = a_i + \sum_j b_{ij} \ln (FP_i) + c_{0j} \ln (M/I) + c_{1j} \ln (M/I)^2 + e_i \text{ time} \quad (2)$$

where, S_i is the share of each food group in the total food expenditure; FP_i is the price of each food group; M is the predicted per-capita food expenditure from stage 1 and I is the Stone geometric price index.

The parameters a_i , b_{ij} , c_i and e_{ik} of model were estimated by imposing the homogeneity (degree zero in prices), symmetry (cross price effects are same across commodity), and adding up (all the budget shares add up to one) restrictions.

In the second-stage estimations the share equations (seemingly unrelated regressions) was estimated jointly for all the food groups. The first variable explained the price effect (own-price and substitution-price effects are separated out), the second and third variables explained the income effect and time trend is taste and preferences. There were some factors which cannot be quantified in the total estimated change. These were urbanization, development of market infrastructure, demonstration effect, eating out, etc.

The following restrictions were econometrically imposed.

$$\text{Homogeneity: } \sum_{j=1}^n b_{ij} = 0;$$

$$\text{Symmetry: } b_{ij} = b_{ji}, \quad \frac{c_{11}}{c_{10}} = \frac{c_{21}}{c_{20}} = \dots = \frac{c_{n1}}{c_{n0}}$$

$$\text{Adding up: } \sum a_i = 1, \quad \sum_i c_{i0} = \sum_i b_{ij} = \sum_i d_i = 0$$

The homogeneity (degree zero in prices) and symmetry (cross price effects are same across the good) restrictions were imposed at sample mean. Adding up restriction (all the budget shares add up to one) was also imposed while computing the parameters of the omitted equation of the model, which was not included in the estimation.

Given the quadratic specification of the demand system (equation 1 and equation 2) a test of symmetry additionally requires that the ratio of the coefficients on the food expenditure and the square terms in food expenditure be the same for all items/groups (Blundell et al 1993). The predicted value of food expenditure obtained from stage 1 was used as the explanatory variable in the stage 2. The income and price elasticities was computed using the following formula.

Milk and milk products income elasticity from stage 2 was computed as follows:

$$\eta_i = \left(c_{i0} + \frac{2c_{i1}Ln(F)}{\omega_i} \right) + 1$$

The income elasticity of demand for an individual type of commodity η^{i^y} was estimated as the product of commodity expenditure elasticity of the individual commodity type η_i , commodity expenditure elasticity with respect to food expenditure (η^f) and food expenditure elasticity with respect to total income (η^y):

$$\eta_{i^y} = \eta_i * \eta^f * \eta^y$$

Uncompensated Price Elasticity for milk and milk products was computed using the following equation:

$$\xi_{ij} = \left(\frac{b_{ij}}{w_i} \right) - (c_{i0} + 2c_{i1}Ln(F)) \left(\frac{w_j}{w_i} \right) - k_{ij}$$

k_{ij} is Kronecker delta, which takes the value of one for own-price elasticity and zero for cross-price elasticity; w_i is the share of the i^{th} items/groups used as a weight in constructing Stone's price index.

Both income and price elasticity was computed for all the states, rural-urban sectors and union territories. The final demand projections for million plus cities used elasticity values from their

respective state's urban sector calculation. The trend of income elasticity and price elasticity were identified, using it further elasticity for 2019 and 2030 was calculated and used for projection.

Step 2: Consumption for milk and milk products for 2019.

The milk and milk products consumption for 2019 is captured from the primary survey data. Apart from liquid milk, major milk products like Ghee, Butter, Paneer, Curd etc. is covered for each state, and some region specific milk products are also taken into account, E.g. Rasgulla, Channa in Eastern India and Shrikhand in Western India). Consumption pattern of total 67 milk products are captured through the study. For approximating overall consumption of milk and milk products different approaches were used:

- 1) Household consumption included consumption from home produced and purchased from outside & consumed at home
- 2) Individual's out of home consumption included products consumed and purchased from outside home,
- 3) Non-Residential consumption included jails, armed forces settlement and students/working people hostels.

To understand the out of home consumption of each household, individual's out of home consumption values are extrapolated at member level for every household. It was done forming cluster based on the variables, state, district, socio economic classification category, gender, age from individuals' out of home consumption. Extrapolation was done for each household member excluding members having age less than 15 and members with age 60 and above.

Collected survey data has undergone several data cleaning treatments. For each state, rural-urban sector outliers in the data were identified at household level for milk and all milk products and then were treated using percentile rank classes.

Household and Non-Residential data was then extrapolated to the state level applying the weights.

Annual per capita consumption for 2019 was estimated from the survey data for milk and milk products.

Step 3: Demand projections for milk and selected milk products for 2030.

The demand projections for milk and selected milk products are computed based on variables like per capita consumption (milk/milk products), population, expenditure elasticity, price elasticity, income growth, population growth and price trend (milk/milk products).

Demand Projection Equation:

$$D_t = d_0 * N_t (1 + (y * e) + (z * p))^t$$

D_t is household demand of a commodity in year t

d₀ is per capita demand of the commodities in the base year

N_t is the projected population in year t.

y is growth in per capita income

e is the expenditure elasticities of demand for the commodity

z is the price growth

p is the own price elasticity

For million plus cities demand projection was done using urban elasticity of the respective state of that million plus city. Elasticity was not computed at million plus city level due to limitation of sample for milk and milk products at city level.

Price and Income elasticity estimates are computed from the NSSO data till 2011. Trends are identified for both income and price elasticity and was further used in projections for 2019 to 2030.

Population estimation has been done using cohort-component method. In the cohort-component method, the components of population change are projected for each cohort composed of different age intervals based on the input variables like the number of deaths and survived population over that period. The estimation was done using Census 2011 data for birth and death rate at state and district level.

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ANALYSIS

Consumption of milk and milk products in 2019

The consumption of milk and milk products in the study is captured from the survey data and further extrapolated to the universe. The results indicate that the total consumption at All India level (including household and non-residential consumption) is 162.4 million metric tonnes for milk and milk products. Household consumption includes both At Home and Out of Home consumption of milk and milk products.

Table 1 Total Consumption in 2019: Milk & Milk Products

Category		Total Consumption: Milk & Milk Products (in Million MT)
Household		160.8
	At Home	131.3
	Out of Home	29.6
Non Residential		1.6
Total (All India)		162.4

Household consumption in rural sector accounts for ~2/3rd of the total consumption. The per capita per day consumption (in ml) is higher in urban India by 43% with respect to rural India.

Table 2 Total Household Consumption and Per capita consumption in 2019 (sector-wise)

Sector	Total Consumption: Milk & Milk Products (in Million MT)	Per Capita Per Day (in ML)
Rural	95.4	280.5
Urban	65.4	402.3
All India	160.8	320.0

Based on the consumption patterns of milk and milk products across 29 states and 7 union territories, the top five milk and milk products consuming states in 2019 are Uttar Pradesh, Rajasthan, Gujarat, Maharashtra and Bihar. Uttar Pradesh with the highest share contributing 19% to the total consumption in India.

Table 3 Household Consumption of Top 5 State in milk and milk products

State	Share in total consumption
Uttar Pradesh	19%
Rajasthan	9%

Gujarat	8%
Maharashtra	7%
Bihar	7%

The share of At Home consumption is much higher as compared to the Out of Home consumption, across rural and urban areas for milk and milk products. The Out of Home consumption is higher in urban than in rural India.

Table 4 Share of At home and Out of home consumption (milk and milk products)

Sector	At Home	Out of Home	Total
Rural	84%	16%	100%
Urban	78%	22%	100%
All India	82%	18%	100%

Similar At Home versus Out of Home patterns across all are reflected the states in India. States like Uttar Pradesh, Rajasthan, Maharashtra, Bihar and Gujarat had the highest share of At Home consumption in the total At Home consumption. These 5 states together contribute approximately 50% in the total at home consumption.

Table 5 Top 5 states in At Home consumption

State	Share of at home consumption
Uttar Pradesh	20%
Rajasthan	9%
Maharashtra	7%
Bihar	7%
Gujarat	7%

Milk product has higher share than liquid milk both in rural and urban India. Urban sector has a relatively larger share in milk products when compared with rural. Liquid milk constituting directly consumed milk and milk used in tea and coffee. Milk products comprising products like curd, ghee, butter, sweets etc.

Table 6 Share of liquid milk and milk products

Sector	Liquid Milk	Milk Products
RURAL	49%	51%
URBAN	43%	57%

All India	47%	53%
-----------	-----	-----

Milk contributes significantly (about 37%) in the total consumption out of all the other products at All India level. Other than milk, milk products comprising yogurt, sweets, cheese, ice-cream, baby milk, milk powder, cream, chocolate etc. contributes ~ 20% in the total share.

Table 7 Product wise share in total household consumption (2019)

Product	Share in total consumption
Milk	37%
Curd	13%
Tea & Coffee	10%
Ghee	8%
Butter Milk	4%
Butter	3%
Lassi	2%
Paneer	3%
Other milk products	20%

Price and Income Elasticities

Both price and income elasticities have shown a declining trend over the years (2011 to 2019). Income elasticity for rural is higher (1.77 & 1.28) than urban (1.64 & 1.24) exhibiting pattern suggested in the literature. It signifies that rural households have less expenditure budget as compared to the urban ones. Uncompensated own price elasticity has an expected negative sign indicating increase in price will lead to decline in consumption.

Table 8 Income and Own Price Elasticity (Un-compensated)

Sector	Income Elasticity (NSSO 2011)	Income Elasticity 2019 (E)	Own Price Elasticity (NSSO 2011)	Own Price Elasticity 2019 (E)
Rural	1.77	1.28	-1.17	-1.14
Urban	1.64	1.24	-1.14	-1.04

Population and Income growth rates that are used for the demand projections are as follows:-

Table 9 Population and Income growth Rates

Sector	Population Growth	Income Growth
Rural	.010	0.117
Urban	.016	0.117

Demand projection for 2030

The estimated demand for 2030 at an All India level is 266.5 million metric tonnes for milk and milk products. Rural sector has estimated share of 57% in the total consumption. It is observed that rural share will decrease by 2% in 2030 from 2019. The per capita consumption in urban (in ml) remains to be higher than rural even in 2030 estimates.

Table 10 Estimated Total Consumption and Per capita consumption in 2030 (sector-wise)

Sector	Total Consumption: Milk & Milk Products (in Million MT)	Per Capita Per Day (in ML)
Rural	152.2	404
Urban	114.4	592
All India	266.5	468

The share of At Home consumption and the Out of Home consumption in 2030 is similar to that of 2019 across rural and urban areas for milk and milk products.

Table 11 Share of At home and Out of home consumption (milk and milk products)

Sector	At Home	Out of Home	Total
Rural	82%	18%	100%
Urban	78%	22%	100%
All India	80%	20%	100%

In 2030 share of consumption of milk products in rural sector is going to witness a massive jump, which will be a % higher than in urban areas. The consumption pattern is going to shift drastically in rural areas in the coming decade towards processed dairy food.

Table 12 Share of liquid milk and milk products

Sector	Liquid Milk	Milk Products
RURAL	41%	59%
URBAN	42%	58%
All India	41%	59%

The product wise consumption share in 2030 is similar to 2019 at All India level. It is observed that the share of other milk products is expected to increase ~3% in 2030.

Table 13 Product wise share in total household consumption (2019)

Product	Share in total consumption
Milk	31%
Curd	13%
Tea & Coffee	11%
Ghee	9%
Butter Milk	4%
Butter	3%
Lassi	3%
Paneer	4%
Other milk products	~23%

Other Information Areas

1.1. **Frequency of Purchasing Milk:** While most households in India purchase milk on a daily basis, this phenomenon is more frequent in urban India. In rural India, half households buy milk daily while more than 1/4th get milk from own milch animal.

Table 14: Frequency of Purchasing Milk of households in India

Among all	ALL	RURAL	URBAN
Total (Unweighted) Households	96673	44198	52475
Total (Projected to India)'000 Households	317737	209995	107743
Daily	66	53	90
Once in 2 days	1	1	1
2 times in a week	1	2	1
Once a week	2	3	1
Once in 15 days	1	2	1
Once a month	2	3	1
Once in 3 months	1	1	-
Once in 6 months	-	-	-
Do not purchase milk	25	35	5

Table 15: Split of proportion of milch vs. non consumption among non-purchase households in India

Split among those don't purchase	ALL	RURAL	URBAN
<i>Total (Unweighted) Households</i>	96673	44198	52475
<i>Total (Projected to States)'000 Households</i>	317737	209995	107743
Do not purchase milk	25	35	5
Get milk from own milch	20	28	4
Don't consume& don't purchase	5	7	1

1.2. Frequency of Consuming Milk: In line with the purchase pattern, daily consumption is more prevalent across India, however skewed more towards urban households. Less than 1/10th households in rural India do not consume milk at all, more so in Nagaland and Andaman & Nicobar which do not consume milk, neither from own milch animal nor by means of buying it from outside.

Table 16: Frequency of Consuming Milk of households in India

Among all	ALL	RURAL	URBAN
<i>Total (Unweighted) Households</i>	96673	44198	52475
<i>Total (Projected to India)'000 Households</i>	317737	2-9995	1-7743
Daily	85	80	94
Once in 2 days	2	2	2
2 times in a week	1	2	1
Once a week	2	3	1
Once in 15 days	1	2	1
Once a month	2	3	1
Once in 3 months	1	1	-

Once in 6 months	-	1	-
Do not consume milk	5	7	1

Table 17: States with highest % of households who do not consume milk

Top States with non milk consumption	
Nagaland	56
Andaman & Nicobar	54
Lakshadweep	50
Arunachal Pradesh	35
Manipur	34

1.3. Type of Milk consumed: The unorganized market contributes to consumption in nearly 3/4th households (loose milk comprises/milk from own milch animal). Another 1 in 4household consumes milk from branded milk (pouches/bottles/cartons), significantly higher in urban areas. Rajasthan, Himachal Pradesh & Uttar Pradesh have highest dependency on household milk from own milch animals.

Chart 1: Type of Milk consumed in Households of India

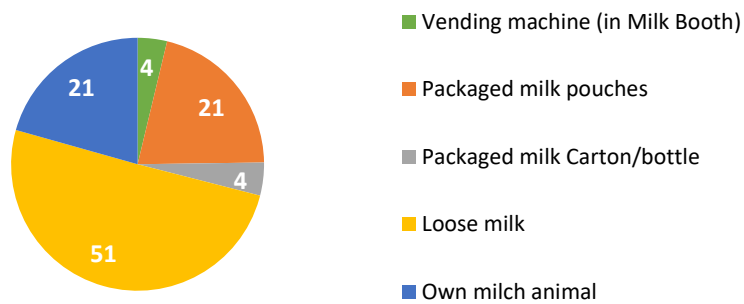


Chart 2: Type of Milk consumed in Urban & Rural Households of India

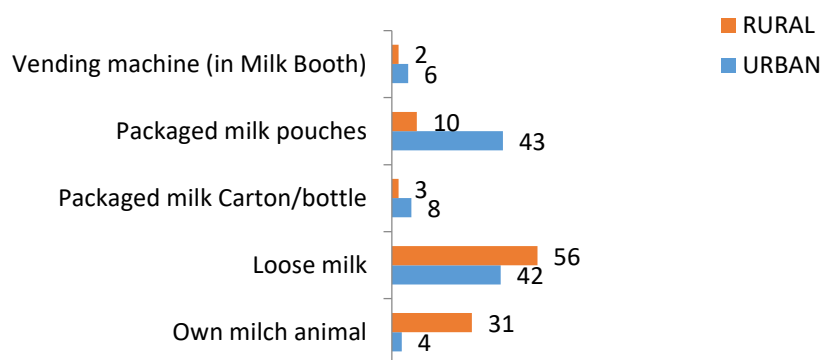


Table 18: Base of households who consume milk

Among HH who consume milk			
Base	ALL	RURAL	URBAN
Total (Unweighted) Households	90663	39790	50873
Total (Projected to India)'000 Households	301376	195136	106240

Table 19: States with highest % of households consuming milk from own milch animal

Top States with milk consumption from own milch animal	
Jammu and Kashmir	42
Rajasthan	41
Himachal Pradesh	39
Uttar Pradesh	38
Haryana	34
Madhya Pradesh	33
Uttrakhand	31
Gujarat	30

1.4. **Estimated share of Milk brands:** Amul is the leading brand of packaged milk—across rural & urban India. 2/5th of all households in India consuming packaged milk consume Amul. Mother dairy has 8% share of packaged milk consumption with stronger footing in urban areas.

Table 20: Estimated share of milk brands in India (based on estimated volume of packaged milk purchased)

Among those who purchase packaged milk	ALL	RURAL	URBAN
Amul	38	33	39
Mother dairy	6	1	8
Nandani	6	4	6
Arokya	6	9	5
Aavin	4	3	5
Vijaya	3	3	4
Milma	3	5	3
Saras	2	3	2
Sudha	2	3	2
Thirumala	2	2	2
Dodla	1	2	1
Omfed	1	3	1
Gokul	1	-	2
Sanchi	1	1	1
Amrit	1	-	1
Verka	1	-	1
Namaste India	1	-	1
Vishakha Dairy	1	1	1
Heritage	1	1	1
Shivamrut	1	2	-
Mahanand	1	-	1
Other brands	16	22	13
Can't recall	1	2	-

1.5. **Milk Source of purchase:** Loose milk, delivered to home is the primary source for procurement of milk, more so in rural households.

In 1/3rd rural households, milk is also procured directly from milch households while in another 1/3rd urban households, milk is bought from kirana stores.

Table 21: Sources of Milk in India

Among those who purchase milk	ALL	RURAL	URBAN
Total (Unweighted) Households	74689	27718	46971

Total (Projected to India)'000 Households	228594	132310	96284
Dudhia/ Milkman	40	44	33
Directly from households who have cattle	22	31	9
Kirana/General /Retail Shops	20	11	32
Local dairies (Selling Unbranded Milk)	10	9	10
Milk Booths/Parlours (Selling Branded Milk)	5	3	8
Exclusive Branded Dairy Shops	4	1	7
Khatal/Tabela/Dairy Farms	4	4	4
Pan Bidi shop/tea shop	4	2	5
Sweet shops	2	2	3
Hawker who comes for selling branded milk	2	1	3
Modern Trade Outlets	2	1	3
Online ecommerce	1	-	1

1.6. **Time of Purchase of milk:** Morning before 9am stands out as the usual as well as preferred time of purchase across more than 3/4th urban and rural households.

Table 22: Usual & Preferred time of purchase of milk in India

Among those who purchase milk	Total	RURAL	URBAN
Total (Unweighted) Households	77983	28587	49396
Total (Projected to India)'000 Households	238546	136234	102312
TIME OF PURCHASE USUALLY			
Before Morning 9am	78	77	79
After Morning 9am	28	27	28
TIME OF PURCHASE MOST PREFERRED			
Before Morning 9am	73	72	75
After Morning 9am	27	28	25

1.7. **Ease of Availability of milk:** Milk is very easily available to 2/3rd households across with comparatively more ease in urban areas.

Table 23: Ease of availability of Milk in India

	Total	RURAL	URBAN
<i>Among those who consume milk</i>			
Total (Unweighted) Households	89003	39010	49993
Total (Projected to India)'000 Households	298746	193237	105509
Need to put a lot of effort	11	13	9
Need to put some effort	25	26	24
Milk is very easily available	64	62	68

1.8. **Importance of Milk attributes:** Thickness, taste & purity stand out as most important attributes for milk at an overall level. Brand, quality & price are relatively more important among urban consumers vis-à-vis rural consumers.

The below chart also implies that fortification of milk lies low in the consideration set for buying milk across both urban and rural consumers.

Chart 3: Importance of milk attributes in India

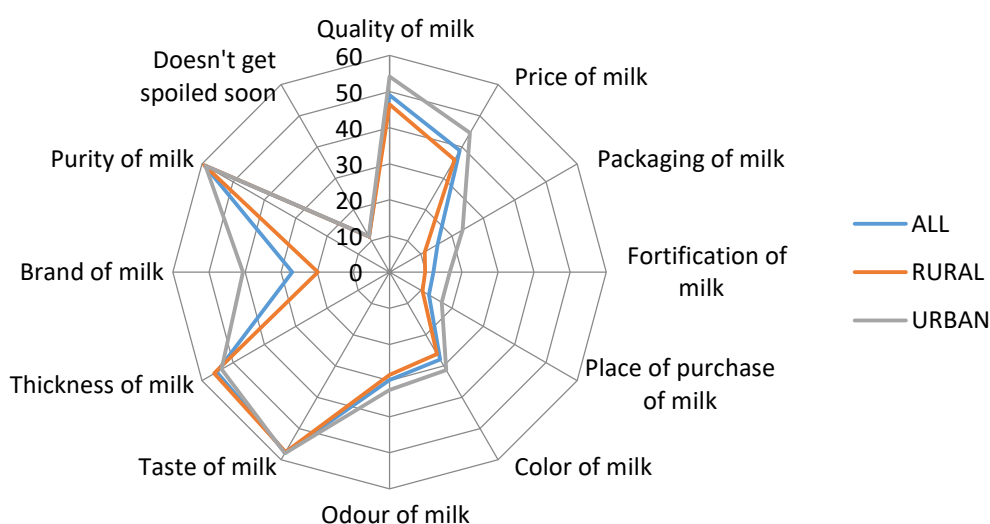


Table 24: Base of all households in India (for chart 3)

Among all	Total	RURAL	URBAN
Base			

Total (Unweighted)	96673	44198	52475
Total (Projected to India)'000 Households	317737	209995	107743

1.9. Place of consumption of products:

Tea/coffee and milk have highest consumption out of home among the common products with atleast 1/10th individuals consuming it . For lassi particularly, incidence of out of home consumption among individuals in urban is higher than rural.

Table 25: Incidence of consumption of dairy products (among individuals met)

		ALL	RURAL	URBAN
	Total Individuals met	94052	43097	50955
	Total (Projected to India)'000	311774	206180	105594
Tea /coffee	At home	52	52	53
	Outside home	10	10	10
	Didn't consume in L1M	38	39	37
Curd	At home	30	29	31
	Outside home	8	8	10
	Didn't consume in L1M	62	63	59
Butter	At home	5	4	5
	Outside home	2	2	3
	Didn't consume in L1M	93	94	92
Ghee	At home	16	14	18
	Outside home	4	3	5

	Didn't consume in L1M	81	82	77
Buttermilk / Chhas	At home	8	8	9
	Outside home	2	2	3
	Didn't consume in L1M	89	90	88
Lassi	At home	8	7	9
	Outside home	7	5	10
	Didn't consume in L1M	86	88	81
Paneer	At home	8	7	11
	Outside home	7	7	7
	Didn't consume in L1M	85	86	81
Milk	At home	46	45	47
	Outside home	11	11	12
	Didn't consume in L1M	43	44	41

1.10.1 Frequency of Out of home Consumption of Milk Products:

1.10.2 Among those who consume Tea/coffee out of home (i.e.10%), most consume it atleast once a week. For milk, 5% of individuals met consume milk out of home on a daily basis. Curd in comparison seems to be a more occasionally consumed product out of home.

Table 26: Frequency of out of home consumption of milk products in India (among individuals met)

All India	Tea /coffee	Curd	Butter	Ghee	Butter milk / Chhas	Lassi	Panee r	Milk
<i>Total Individuals met</i>	94052	94052	94052	94052	94052	94052	94052	94052
<i>Total (Weighted and Projected)'000</i>	31177 4	31177 4	31177 4	31177 4	31177 4	31177 4	31177 4	31177 4
Daily	6	1	-	1	1	-	-	5
4 - 5 times a week	1	1	-	-	-	1	-	1
2 - 3 times week	1	2	-	1	-	1	1	1
Once a week	1	3	-	1	-	2	2	2
Once in 2 - 3 weeks	1	1	-	-	-	1	1	1
Once a month	1	1	1	1	-	1	3	1
Less often than once a month	-	-	-	-	-	-	-	-
Didn't Consume Out of Home/ product in L1M	90	91	98	96	98	93	93	89

1.9.1. Out of home consumption: Tea/coffee

In urban India, most out home consumption of tea/coffee is attributed to daily consumption while in rural India, half of its out of home consumption is non-daily consumption.

Table 27: Frequency of out of home consumption of tea in India (among individuals met)

	Total	RURAL	URBAN
<i>Total Individuals met</i>	94052	43097	50955
<i>Total (Projected to India)'000</i>	311774	206180	105594
Out of Home Tea/Coffee Incidence	10	10	10
Daily	6	5	7

4 - 5 times a week	1	1	1
2 - 3 times week	1	1	1
once a week	1	2	1
Once in 2 - 3 weeks	1	1	1
Once a month	1	1	-
Less often	-	-	-
<i>Didn't Consume Out of home/ product in L1M</i>	90	90	90

1.9.2. Out of home consumption: Curd

The out of home consumption incidence as well as pattern for curd is similar across regions.

Table 28: Frequency of out of home consumption of curd in India (among individuals met)

	Total	RURAL	URBAN
<i>Total Individuals met</i>	<i>94052</i>	<i>43097</i>	<i>50955</i>
<i>Total (Projected to India)'000</i>	<i>311774</i>	<i>206180</i>	<i>105594</i>
Out of Home Curd Incidence	9	8	10
Daily	1	1	1
4 - 5 times a week	1	1	1
2 - 3 times week	2	1	2
once a week	3	3	3
Once in 2 - 3 weeks	1	1	1
Once a month	1	1	1
Less often	-	-	-
<i>Didn't Consume Out of home/ product in L1M</i>	91	92	90

1.9.3. Out of home consumption: Butter

The out of home consumption of butter among individuals is negligible across regions.

Table 29: Frequency of out of home consumption of butter in India (among individuals met)

	Total	RURAL	URBAN
Total Individuals met	94052	43097	50955
Total (Projected to India)'000	311774	206180	105594
Out of Home Butter Incidence	2	2	3
Daily	-	-	-
4 - 5 times a week	-	-	-
2 - 3 times week	-	-	-
once a week	-	-	1
Once in 2 - 3 weeks	-	-	1
Once a month	1	1	1
Less often	-	-	-
Didn't Consume Out of home/ product in L1M	98	98	97

1.9.4. Out of home consumption: Ghee

Likewise butter, the out of home consumption of ghee too is negligible across regions.

Table 30: Frequency of out of home consumption of ghee in India (among individuals met)

	Total	RURAL	URBAN
Total Individuals met	94052	43097	50955
Total (Projected to India)'000	311774	206180	105594
Out of Home Ghee Incidence	4	3	5
Daily	1	-	1

4 - 5 times a week	-	-	1
2 - 3 times week	1	1	1
once a week	1	1	1
Once in 2 - 3 weeks	-	-	1
Once a month	1	1	1
Less often	-	-	-
<i>Didn't Consume Out of home/ product in L1M</i>	96	97	95

1.9.5. Out of home consumption: Buttermilk / Chhas

The out of home consumption of buttermilk/chhas among individuals is negligible across regions.

Table 31: Frequency of out of home consumption of buttermilk/chhas in India (among individuals met)

	Total	RURAL	URBAN
<i>Total Individuals met</i>	94052	43097	50955
<i>Total (Projected to India)'000</i>	311774	206180	105594
Out of Home Buttermilk/chhas Incidence	2	2	3
Daily	1	1	-
4 - 5 times a week	-	-	-
2 - 3 times week	-	-	1
once a week	-	-	1
Once in 2 - 3 weeks	-	-	1
Once a month	-	-	-
Less often	-	-	-
<i>Didn't Consume Out of home/ product in L1M</i>	98	98	97

1.9.6. Out of home consumption: Lassi

The out of home incidence of lassi is higher in urban India vis.a.vis rural India, however consumption across is on non-daily occasions.

Table 32: Frequency of out of home consumption of lassi in India (among individuals met)

	Total	RURAL	URBAN
Total Individuals met	94052	43097	50955
Total (Projected to India)'000	311774	206180	105594
Out of Home Lassi Incidence	7	5	10
Daily	-	-	-
4 - 5 times a week	1	-	1
2 - 3 times week	1	1	2
once a week	2	2	3
Once in 2 - 3 weeks	1	1	2
Once a month	1	1	2
Less often	-	-	-
Didn't Consume Out of home/ product in L1M	93	95	90

1.9.7. Out of home consumption: Paneer

There is negligible out of home consumption of paneer across.

Table 33: Frequency of out of home consumption of paneer in India (among individuals met)

	Total	RURAL	URBAN
Total Individuals met	94052	43097	50955
Total (Projected to India)'000	311774	206180	105594

Out of Home Paneer Incidence	7	7	7
Daily	-	-	-
4 - 5 times a week	-	-	1
2 - 3 times week	1	-	1
once a week	2	1	2
Once in 2 - 3 weeks	1	1	1
Once a month	3	3	2
Less often	-	-	-
<i>Didn't Consume Out of home/ product in L1M</i>	93	93	92

1.9.8. Out of home consumption: Liquid Milk

Nearly 1/10th of individuals met across consume milk out of home across urban and rural regions, half of them consuming it on a daily basis.

Table 34: Frequency of out of home consumption of milk in India (among individuals met)

	Total	RURAL	URBAN
<i>Total Individuals met</i>	<i>94052</i>	<i>43097</i>	<i>50955</i>
<i>Total (Projected to India)'000</i>	<i>311774</i>	<i>206180</i>	<i>105594</i>
Out of Home Milk Incidence	11	11	12
Daily	5	5	7
4 - 5 times a week	1	1	1
2 - 3 times week	1	1	1
once a week	2	2	1
Once in 2 - 3 weeks	1	1	1
Once a month	1	1	1
Less often	-	-	-

Didn't Consume Out of home/ product in L1M	89	89	88
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Please note : Volume 2: Statewise & Mn+ Report is added in the annexure

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Questionnaire Flow

Home-Maker interview for total household consumption

1. Household Milk Consumption
 - a. Milk Type
 - b. Milk Source
 - c. Milk Brand
 - d. Quantity
 - e. Price
2. Consumption of other products prepared from Milk
 - a. Tea/Coffee/Milk Shake
 - b. Malai/Cream
 - i. Butter
 - ii. Ghee
 - c. Curd
 - i. Butter
 - ii. Lassi
 - iii. Butter Milk
 - d. Khoya
 - e. Paneer
3. Consumption of other milk based products in household, (*refer product list appended at the end*)
 - a. Quantity
 - b. Price
4. Festive season: Additional milk and sweets consumption

Other Information from Home-Maker

5. Importance of Milk Attributes
6. Milk production from own cattle
 - a. Type and number of Milk producing animals
 - b. Milk and Milk products selling behavior
7. Monthly House Income and Expenditure

Individual interview for Out-of-Home (own home/someone else's home) milk products consumption

1. Quantity of Out-of-Home consumption – Tea /coffee stall, hotel, restaurant, office, canteen, trust, temple etc
2. Number of functions attended per year
3. Quantity of milk products consumed in last function

Questionnaire

INTRODUCTION

KNOCK ON THE SELECTED HOUSEHOLD. ADDRESS TO ANY MEMBER IN THE HOUSEHOLD OF AGE ABOVE 18 YEARS.

INTERVIEWER SAY:

Good morning/afternoon/evening, my name is [], on behalf of and authorized by Nielsen (India) Private Limited, a Market Research Company, which is further authorised by Govt. of India for conducting a survey about Milk and Milk products. We hope that you would be willing to answer a few questions for us today.

HOME-MAKER INTERVIEW

Q1	PROGRAMME: DISPLAY OPTIONS FOR CHOOSING STATES <u>CENTRE</u>	Code 1	Route
----	---	---------------	-------

Q3	<u>AREA TYPE</u> RURAL URBAN.....	Code 1 2	Route
----	--	--------------------	-------

Q2	PROGRAMMER:- MAP AND DISPLAY OPTIONS WITHIN SELECTED STATE AND AREA TYPE <u>DISTRICT</u>	Code 1	Route
----	---	---------------	-------

Q4	PROGRAMMER - IF CODED URBAN in Q3, DISPLAY BELOW <u>WARD DETAILS</u> (R1) Ward name & no (Selected ward to be displayed in drop down) (R2) Area Name	<table border="1"> <tr> <td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td> </tr> </table>								

Q4a	PROGRAMMER - IF CODED RURAL IN Q3, DISPLAY BELOW <u>Village Name</u> (R1) Village Name (Selected village to be displayed in drop down)	<table border="1"> <tr> <td></td><td></td><td></td><td></td> </tr> </table>				

INTERVIEWER TO SAY:

Now I will be asking you some questions related to your household. Please note that these details will be used primarily for statistical purposes only.

Q5	PROGRAMMER - CONTINUE IF CODED 4 IN Q5 <u>AGENCY TERMINATION</u>	Code	Route
----	--	------	-------

<u>SHOW CARD</u> Do you or any of your family members work or operate a business in any of the following industries? [MA]		
Market Research Agency	1	
Advertising Agency	2	
Media - Newspapers/ Publications, TV and other Broadcasting channels	3	
None of the Above	4	

Q6	<u>CWE EDUCATION</u> Now, please tell me the current education Level of the Chief Wage Earner of your household?	Code	Route
	Optional Read: A private household consists of either one person living alone or a group of persons who are related by blood, marriage or adoption, commonly staying together and sharing food from the same kitchen. (Two or more friends/ colleagues living together in a house will not be considered a household. Servants and paying guests or Hostels will not be included in households.) [SA]		
	Illiterate	01	
	School up to 4 years (Upton 4th Standard)/ no schooling but literate	02	
	Schooling 5-9 years (5th - 9th Standard).....	03	
	SSC/HSC (10th-12th)	04	
	Some college but not graduate (Incl. Diploma)	05	
	Graduate General (e.g. B.A., B.Sc., B.Com).....	06	
	Post Graduate General (e.g. M.A., M.Sc., M.Com)	07	
	Graduate Professional (e.g. B.E., B.Tech)	08	
Post Graduate professional(e.g., M.Tech,MBA,CA,MBBS, LLB)	09		
Others (Pl. Specify)	10		

Q7	<u>PROGRAMMER : NCCS TO BE DERIVED FROM STANDARD LIST OF DURABLES</u> <u>DURABLE LIST</u> <u>SHOWCARD</u> Please take a look at this list and tell me which of these items do you have at in your household?	Code	Route
	Does your family own any agricultural land, by agricultural land I mean land that is currently under cultivation or plantation?		
	Optional: A private household consists of either one person living alone or a group of persons who are related by blood, marriage or adoption, commonly staying together and sharing food from the same kitchen. (Two or more friends/ colleagues living together in a house will not be considered a household. Servants and paying guests or Hostels will not be included in households.) [MA]		
	Air-conditioner	01	
	Fridge-Refrigerator (1 door or 2 Door)	02	
Washing machine	03		

Colour TV/LCD/LED/Plasma TV	04
Personal Computer / Laptop - With Internet	05
Personal Computer / Laptop - Without Internet	06
Electricity connection	07
Ceiling Fan	08
LPG stove.....	09
Two Wheeler - Scooter/ Motorcycle/Moped.....	10
Car/Jeep/Van	11
Agricultural Land	12
Radio/Transistor	13
Mobile Phone/Smart phone -- With Internet	14
Mobile Phone/Smart phone -- Without Internet	15
Bicycle	16
None of the above	17

Q8 PROGRAMMER-AUTOCODE THE NUMBER OF ITEMS FROM STANDARD NCCS LIST

TOTAL NUMBER OF DURABLES OWNED

(R1) GRAND TOTAL

Q9	PROGRAMMER : OPTIONS ARE MUTUALLY EXCLUSIVE AUTOCODE THE NCCS BASED ON Q6 & Q8 <u>NCCS Grid</u>	Code	Route
	NCCS A1	01	
	NCCS A2	02	
	NCCS A3	03	
	NCCS B1	04	
	NCCS B2	05	
	NCCS C1	06	
	NCCS C2	07	
	NCCS D1	08	
	NCCS D2	09	
	NCCS E1.....	10	
	NCCS E2	11	
	NCCS E3.....	12	

Q10a	<u>CWE OCCUPATION</u> And what best describes the current occupation of the Chief Wage Earner of your household? [SA]		
Q10b	PROGRAMMER : ASK IF CODED "RETIRED (15) IN Q10a and hide options from 13/14/15/16/17 Please tell me, what was the past occupation of CWE before retirement ?[SA]		
		Q10a	Q10b
		CWE OCCUPATION	CWE OCCUPATION BEFORE RETIREMENT
	(R1) Unskilled Worker	01	01
	(R2) Skilled worker	02	02
	(R3) Petty Trader	03	03
	(R4) Shop owner	04	04
	(R5) Businessman/ Industrialist with No employees	05	05
	(R6) Businessman/ Industrialist with 1-9 employees	06	06
	(R7) Businessman/ Industrialist with 10+ employees	07	07
	(R8) Self-employed professional	08	08
	(R9) Clerical/Salesman	09	09
	(R10) Supervisory level	10	10
	(R11) Officer/Executive - Junior	11	11
	(R12) Officer/Executive -Middle/Senior	12	12
	(R13) Housewife	13	13
	(R14) Student	14	14
	(R15) Retired	15	15
	(R16) Unemployed	16	16
	(R17) Others (Pl. Specify)	17	17

Q11	<u>GENDER OF CWE</u> Please tell me the gender of the Chief Wage Earner of your household? [SA]	Code	Route
	Male	1	
	Female	2	

Q12	PROGRAMMER: ASK FOR RURAL HOUSEHOLDS ONLY (CODED 1 IN Q3) <u>TYPE OF HOUSE</u> And What type of house do you have? [SA]	Code	Route
-----	--	------	-------

Pucca.....	1	
Semi- Pucca.....	2	
Kuchha	3	

Q14	PROGRAMMER :- TERMINATE IF CODED 2 <u>HOMEMAKER SELECTION</u> For this survey I would like to speak to one of the homemaker i.e. Person who takes all the kitchen related decisions or actively participates in kitchen related decisions of the household. Is He/she available? [SA]	Code	Route
	Yes	1	
	No.....	2	

Q15	<u>HOMEMAKER DETAILS</u> Please tell me your name, exact name and phone no. (R1) Name (R2) Exact Age(in Completed years) (R3) Phone no.
-----	--

Q16	Could you please tell me how many members are there in your household? Please exclude guests, but do include full time servants and your all family members who could be staying at your home/Army/ Air-force/ Navy / Marine corps/ Coast Guard/ training camps/hostel for various skill or education. (R1) Members	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>						

Q17a	PROGRAMMER: OPEN BOXES AS PER MEMBERS CODED IN Q16 <u>FAMILY MEMBER DETAILS</u> Please tell me the name, age in completed years and gender of each member in the household including the full time servant/s (if any) Kindly exclude guests. Please start with the youngest member. And now please tell me, who the servant among them is. [MA]																
	Q17a																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 10%;">Age</th> <th style="width: 10%;">Gender</th> <th style="width: 10%;">Male</th> <th style="width: 10%;">Female</th> <th style="width: 10%;">Servant</th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>(R1) Members</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> </tr> </tbody> </table>		Age	Gender	Male	Female	Servant	Yes	No	(R1) Members	1	2	3	4	5	6	7
	Age	Gender	Male	Female	Servant	Yes	No										
(R1) Members	1	2	3	4	5	6	7										

Q18a	PROGRAMMER: ASK FOR ALL MEMBERS OF THE HOUSEHOLD <u>MEMBER OCCUPATION AND PLACE OF STAY</u> Your household members, which you just mentioned could be staying at your home/Army/ Air-force/ Navy / Marine corps for various skill or education. For each of the family members, please tell their place of stay as I read out their names. [M
------	---

Q18b For each of the family members, please tell their occupation as I read out their names.

[MA]

Q18a. Place of Stay	same house	another house	Army/ Air-force/ Navy / Marine corps/ Coast Guard campus	any hostel	training camps for various skill / education	Others, please specify
	1	2	3	4	5	6
Q18b. Occupation	DISPLAY OCCUPATION LIST FOR ALL MEMBERS					

MILK CONSUMPTION

Now, we will talk about consumption of milk in your household.

Q19AA <u>FREQUENCY OF PURCHASING MILK</u> Please tell me how often do you buy milk for your household? [SA]	Code	Route
Twice a day (Daily)	1	
Once a day (Daily)	2	
Once in 2 days.....	3	
2 times in a week.....	4	
Once a week.....	5	
Once in 15 days.....	6	
Once a month	7	
Once in 3 months	8	
Once in 6 months	9	
Do not purchase milk	10	

<p>Q19C PROGRAMMER: IF CODED 10 IN Q19AA, DON'T ASK Q19C Open quantity for recording Litre. <u>QUANTITY OF MILK BOUGHT</u> What quantity of milk, do you purchase for your household on daily basis? Milk bought daily in household (in litres)</p>		
(R1) Milk Bought (Ltr.).....		

Q19D <u>FREQUENCY OF CONSUMING MILK</u> PROGRAMMER: If coded 10 in Q19D- DO NOT CONSUME MILK- Skip till Q33a ONLY ASK Q19A FOR THOSE CODED 1/2/3- Daily, Once in 2 days, 2 times in a week, IN Q19D option. Else skip to Q20	Code	Route
<p>Milk is used for various purposes in a household, like drinking as it is, preparing tea/coffee, preparing curd, ghee, butter etc. How often is milk used for such used for such purposes in your household? Please also include milk consumed in household from your own cattle. [SA]</p>		

Daily.....	1	
Once in 2 days.....	2	
Once a week.....	4	
Once in 15 days.....	5	
Once a month.....	6	
Once in 3 months.....	7	
Once in 6 months.....	8	
Do not consume milk.....	9	

Q19A PROGRAMMER: ONLY ASK Q19A IF CODED 1/2/3- DAILY, ONCE IN 2 DAYS, 2 TIMES IN A WEEK, IN Q19D. CAPTURE QUANTITY IN LTR IN Q19A.
QUANTITY OF MILK CONSUMED

What quantity of milk, is used for your household consumption on daily basis? Please include milk consumed in household from your own cattle also. Please tell the quantity in Litre.

Milk consumed daily in household (in litres)

(R1) Milk Consumed (Ltr.)

Q20	PROGRAMMER: IF THEY DO NOT PURCHASE MILK I.E 10 IN Q19AA- THEN DO NOT ALLOW RESPONDENT TO CODE ANYTHING EXCEPT " FROM YOUR MILCH ANIMAL".	Code	Route
	<u>TYPE OF MILK CONSUMED - PACKAGED/LOOSE</u> <u>INTERVIEWER TO READ OUT OPTIONS AND EXPLAIN</u> These days milk is available to people in various ways, other than traditional used milk. I will read out various options, please tell me which out of these apply to milk that you get for your household? [MA]		
	Through Vending machine like milk booths (Token milk)	1	
	Packaged milk Pouches, offered by various brands(sealed pouches)	2	
	Packaged milk Carton/bottle, offered by various brands	3	
	Loose milk, that Dudhia/Gwala makes available at home/ Loose milk in open pouches	4	
	From your own milch animal	5	

Q21	<u>SOURCE OF MILK</u> Thinking about the animal that produces milk for our consumption, please tell me which animal's milk do you get for your household?[MA]	Code	Route
	Cow	1	
	Buffalo	2	

Mix of cow & buffalo	3
Goat.....	4
Camel	5
Don't know	6
Others Please specify	7

Q22 PROGRAMMER: ASK IF HOUSEHOLDS CONSUMES PACKAGED MILK (2/3 IN Q20)

TYPE OF MILK VARIANT- PACKAGED MILK

These days various types of milk are available in the market like Toned milk, Double toned, full cream etc.; please tell me the type/s of milk that you consume in your household. [MA]

(R1)

Toned	01
Full Cream	02
Double Toned	03
Cow Milk (PROGRAMMER: ONLY DISPLAY IF CODED 01 IN SOURCE OF MILK)	04
Skimmed Milk	05
Premium Full Cream/High FAT milk.....	06
Standardized milk	07
Tea special/Homogenized milk.....	08
Fortified Milk (milk with added minerals and vitamins)	09
UHT milk (ultra-heat treatment or ultra-pasteurized).....	10
Don't know/ Can't say	11
IF RESPONDENT RESPONDS IN COLOUR- CODE BELOW	
Yellow pack.....	12
Blue Pack.....	13
Red pack	14
Orange Pack.....	15
Brown pack.....	16
Green pack.....	17
Purple pack	18
Pink pack	19
Other colour.....	20
Don't know pack colour	21

Q22 PROGRAMMER: ASK FOR 4 CODED IN Q20

A

TYPE OF MILK VARIANT- LOOSE MILK

These days various types of milk are available in the market like full cream, milk with cream removed etc.; please tell me the type/s of loose milk that you consume in your household. [MA]

(R1)

Full Cream	01
Milk with cream removed	02
Any other...Please specify...(PROGRAMMER PROVIDE OPEN END)	
Don't know/ Can't say	03

Q23 PROGRAMMER: FOR THOSE WHO CODE MORE THAN 1 TYPE OF MILK VARIANT IN Q22/22A. DON'T ASK IF CODED 10 IN Q19AA,

QUANTITY OF MILK VARIANT BOUGHT

Please tell me how much quantity of each type of milk is usually bought for your household?

(R1)

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Q24a PROGRAMMER: ASK FOR ALL OPTIONS CODED IN CODED IN Q22.

PRICE OF MILK (per litre)

And how much price do you pay per litre?

(R1)

Q24a

—

Q25 PROGRAMMER: ASK THOSE BUYING PACKAGED MILK (ONLY CODED 2/3 IN Q20)

BRAND OF MILK
SHOWSCREEN

Please tell me the brand of the milk you purchase for your household? [MA]

	Code	Route
Amul	01	
Britannia.....	02	
Dairy Best	03	
Dairy India (Gopal Jee).....	04	
Dairy King (Gopal Jee).....	05	
Dairy Life (Reliance)	06	
Delhi Milk Scheme	07	
Go.....	08	

Gopaljee (Ananda)	09	
Kwality Mother Dairy	10	
Nandini	11	
Neer	12	
Nestle	13	
Param	14	
Parag	15	
Paras	16	
Saras	17	
Sudha	18	
Vita	19	
Verka	20	
Namaste India	21	
Mother dairy	22	
Goverdhan	23	
Patanjali	24	
Other.. Please specify	99	

Q26	PROGRAMMER : DON'T ASK IF CODED 1/5 IN Q20. ROTATE LIST , IF CODED ONLY 4 IN Q20, HIDE OPTIONS 01/07/09/10/11/12 <u>SOURCE OF PURCHASE OF MILK</u> Now, please tell me where do you generally/usually get milk from? [MA]	Code	Route
	Branded Dairy Shops like Amul, Mother Dairy, Verka, Namaste India etc.	01	
	Local dairies	02	
	Dudhia/Gwala	03	
	Sweet shops/ Halwai	04	
	Khatal/Tabela/Dairy Farms	05	
	Directly from households which have cattle	06	
	Kirana/General store/Retail Shops	07	
	Milk Booths/Parlours(Selling branded milk)	08	
	Modern Trade Outlets/Super market/ Hypermarket/ Shopping Malls	09	
	Pan Bidi shop/tea shop	10	
	Hawker who comes to a colony daily	11	
	Online ecommerce sites or apps	12	
	Other.. Please specify	13	

Q26a	DON'T ASK FOR THOSE CODED ONLY 5 IN Q20 <u>CURRENT TIME OF PURCHASING MILK</u> Now, please tell me when do you usually purchase milk? [SA]	Q26a	Q26b
Q26b	ASK ALL <u>PREFERRED TIME OF PURCHASING MILK</u> And when what would be you preferred time to purchase milk, if it is available throughout the day? [SA] Late Morning: 9am - 12:00 noon 01 Afternoon: 12:01 pm - 3:00 pm..... 02 Late Afternoon: 3:01 pm - 6:00 pm 03 Night: 6:01 pm - 9:00 pm..... 04 Late Night: 9:01 pm - 11 pm..... 05 No specific time 06		
Q26c	ASK ALL <u>EASE OF AVAILABILITY OF MILK</u> Now we will discuss about the ease of availability of milk for your Household. I will read out some statements, please choose one which applies to you? [SA] Need to put a lot of effort 01 Need to put some effort..... 02 Milk is very easily available..... 03	Code	Route

MILK PRODUCTS PREPARED FROM MILK AT HOME
(ASKED FOR PRODUCTS LIKE, CURD, PANEER, BUTTER, BUTTERMILK, GHEE ETC.)
Now, we will talk about milk and its uses in your household.

Q27a	<u>PREPARED FROM MILK AT HOME</u> Now, please look at this list, and tell me what all is milk used for in your household these days? [MA]
Q27b	PROGRAMMER: ASK FOR EACH PRODUCT CODED IN Q27A <u>FREQUENCY OF MILK PRODUCTS PRODUCTS PREPARED</u> As I read out the milk products prepared these days in your household, please tell me how often is it prepared? [SA]
Q27c	PROGRAMMER: ASK ONLY IF CODED DAILY "1" IN Q27B FOR THE OPTIONS Ask both options in Quantity Mili-litre and Litres, Do not ask quantity for "Collect Malai/Cream" Now, please tell me how much milk (in litres) is used for each of these in your household on a daily basis? [MA]
Q27d	PROGRAMMER: ASK IF NOT CODED DAILY "1" IN Q27b Do not ask quantity for "Collect Malai/Cream" Now, please tell me how much milk (in litres) is used for each of these in your household in each occasion? [MA]

	Q27a	Q27b									Q27c		Q27d
		Daily	4 - 5 times a week	2 - 3 times week	once a week	Once in 2 - 3 weeks	Once a month	Once 2-3 month	Once 3-6 month	Less often than once in 6 months	Milk (in millilitres) used to prepare	Milk (in litres) used to prepare	In litre
(R1) For Drinking	1	1	2	3	4	5	6	7	8	9	1	2	1
Prepare Tea/Coffee/													
(R2) Milk shake etc.....	1	1	2	3	4	5	6	7	8	9	1	2	1
Collect													
(R3) Malai/Cream	1	1	2	3	4	5	6	7	8	9			
(R4) Prepare Curd	1	1	2	3	4	5	6	7	8	9	1	2	1
(R5) Prepare Khoya	1	1	2	3	4	5	6	7	8	9	1	2	1
(R6) Prepare Paneer	1	1	2	3	4	5	6	7	8	9	1	2	1
For Feeding													
(R7) Animals.....	1	1	2	3	4	5	6	7	8	9	1	2	1

Q28a CURD PRODUCTS PREPARED AT HOME

Now, please look at this list, and tell me what all is curd used for in your household these days? [MA]

Q28b PROGRAMMER: ASK Q28B TO Q28D FOR EACH OPTION IN Q28A

FREQUENCY OF CURD BASED PRODUCTS CONSUMPTION

Now please tell me how often are these products prepared with curd at your household these days? [SA]

Q28c ASK ONLY IF CODED DAILY “1” IN Q28b

Ask both options in Quantity Gms. and Kg.

Now, please tell me how much curd is used for each of these in your household on a daily basis? [SA]

Q28d ASK IF NOT CODED DAILY “1” IN Q28b

Ask both options in Quantity Gms and Kg.

Now, please tell me how much curd is used for each of these in your household in each occasion? [SA]

	Q28a	Q28b									Q28c		Q28d	
		Daily	4 - 5 times a week	2 - 3 times week	once a week	Once in 2 - 3 weeks	Once a month	Once 2-3 month	Once 3-6 month	Less often than once in 6 months	Quantity in Gms	Quantity in Kgs	Quantity in Gms.	Quantity in Kg.
(R1) Consuming it	1	1	2	3	4	5	6	7	8	9	1	2	1	2
Prepare butter														
(R2) from curd	1	1	2	3	4	5	6	7	8	9	1	2	1	2
Prepare Lassi from														
(R3) curd	1	1	2	3	4	5	6	7	8	9	1	2	1	2
Prepare Butter														
(R4) Milk from curd.....	1	1	2	3	4	5	6	7	8	9	1	2	1	2

Q30	PROGRAMMER: ASK ALL CODED 3 in Q27a <u>MALAI/CREAM CYCLE AT HOME</u> You said you collect the malai/cream (generated from boiling milk) in your household these days. Now, please tell me for how many days do you keep collecting it for further use (eg. for making butter/ghee) in your household these days? [SA]	Code	Route
	Every day, it's used to make something.....	1	
	Till 2-3 days in a week	2	
	Till 4-5 days in a week.....	3	
	Till 1 week	4	
	Till 1-2 weeks.....	5	
	More than 2 weeks	6	

Q31	PROGRAMMER: ASK ALL CODED 3 in Q27a <u>MALAI/CREAM QUANTITY IN A CYCLE AT HOME</u> You said you collect the malai/cream (generated from boiling milk) in your household (...PROGRAMMER INSERT OPTION CODED IN Q30). Now, please tell me for how much quantity is collected in total before further use in your household these days?
	(R1) Malai/ cream (in Gms)
	(R1) Malai/ cream (in Kgs.)

Q32a	PROGRAMMER: ASK ALL CODED MALAI/CREAM 4 IN Q 27a <u>MALAI/CREAM PRODUCTS (level 2)PREPARED AT HOME</u> Now, please look at this list, and tell me what all is malai/ cream used for in your household these days?[MA]
Q32b	PROGRAMMER : ASK Q32B TO Q32D FOR EACH OPTION IN Q32A <u>FREQUENCY OF MALAI/CREAM BASED PRODUCTS CONSUMPTION</u> Now please tell me how often are these products prepared with malai/ cream at your household these days? [SA]
Q32c	ASK FOR OPTIONS CODED, DAILY "1" IN Q32b Now, please tell me how much malai/cream is used for each of these in your household on a daily basis?
Q32d	ASK IF NOT CODED DAILY "1" IN Q32b Now, please tell me how much malai/cream is used for each of these in your household in each occasion?

	Q32a	Q32b									Q32c		Q32d	
	Daily	4 - 5 times a week	2 - 3 times week	once a week	Once in 2 - 3 weeks	Once a month	Once 2-3 month	Once 3-6 month	Less often than once in 6 months	Malai /Cream (in gram s) used	Malai /Cream (in kgs) used	Malai /Cream (in grams) used	Malai /Cream (in kgs) used	
(R1) Consuming it.....	1	1	2	3	4	5	6	7	8	9				
Prepare Butter (R2) from malai/ cream	1	1	2	3	4	5	6	7	8	9				

Prepare Ghee from (R3) malai/ cream.....	1	1	2	3	4	5	6	7	8	9	---	---	---	---
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OTHER MILK PRODUCTS CONSUMED AT HOME -AT HOME OR OUTSIDE
 Now, think about the products consumed in your household in the last 1 month- whether prepared in home or bought from outside.

- Q33a Now, please look at this list, and tell me which of these products were consumed in your household in the past one month. If consumed please do tell me if they were prepared in your house or bought from outside? [MA]
- Q33c PROGRAMMER: ASK FOR PRODUCTS CODED 2/3 IN Q33A
 You said you purchased these items from outside for your household consumption in the past 1 month. Please tell me how often did you purchase these from outside? [SA]
- Q33d ASK ONLY IF PRODUCT CODED DAILY "1" IN Q33c
 And, how much quantity of each of these products, did you purchase on a daily basis? [MA]
- Q33e ASK IF NOT CODED DAILY "1" IN Q33c
 And, how much quantity of each of these products, did you purchase for each occasion?
- Q33f PROGRAMMER: ASK FOR OPTION WHO GOT CODED "DON'T KNOW/CAN'T SAY"
 PLEASE SHOW OPTIONS DESCRIBED IN EXCEL LIST "PRODUCT LIST" EXAMPLE -PACK/PIECES/BOTTLES ETC.
 Please let me know whether you bought the product in pack, pieces, bottles etc.?
- Q33g Now, tell me the price you paid for each of these? PROGRAMMER: ADD DON'T KNOW/CANT SAY

Q33a				Q33c									Q33d					Q33e					Q33f			Q33g
Products consumed in HH				Frequency of Products bought from outside									Quantity of products bought on a daily basis from outside					Quantity of products bought from outside for each occasion					SKU (unknown Quantity)			Price
Prepared in the Kitchen	Bought/purchased from outside	Both-Prepared in kitchen and purchased from Outside	Did not consume in last 1 month	Daily	4-5 times a week	2-3 times a week	once a week	Once in 2-3 weeks	Once a month	Once 2-3 month	Once 3-6 month	Less often than once in 6 months	Quantity in Gms.	Quantity in Kg.	Quantity in Mili-Litre	Quantity in Litre	Don't know/Can't say	Quantity in Gms.	Quantity in Kg.	Quantity in Mili-Litre	Quantity in Litre	Don't know/Cant say	Pack	Cup	Pieces	Price paid in Rupees
1	2	3	4	2	3	3	4	5	6	7	8	9	1	2	3	4	5	1	2	3	4	5	1	2	3	1

FESTIVE CONSUMPTION
 Now we will talk about festivals celebrated in your household

Q34 **NO OF FESTIVALS DAYS**
PROGRAMMER: ALLOW 0

Now think about the festivals, traditions like Holi, Diwali, Eid, Ramadan, Christmas, Shivaratri, Navratri, Dussehra, Pujo, Ganesh Chaturthi, Lohri, Teej, Onam, Pongal, Bihu and Chatth etc where consumption of milk or milk products increases as compared to non-festive days. Taking into consideration all the festivals in one year, for how many days do you celebrate festival in your household?

(R1) Festivals

--	--

Q35 **ADDITIONAL MILK QUANTITY CONSUMED IN FESTIVE SEASON**
PROGRAMMER: DON'T ASK IF CODED 0 IN Q34

Now again think about the festivals where consumption of milk or milk products increases as compared to non-festive days. What additional quantity of milk, in litres, is bought/consumed for your household on a festival day as compared to a non-festival day?

(R1) Milk (in Mili ltr.).....

--	--

(R1) Milk (in ltr.).....

--	--

Q36 **SWEETS CONSUMED IN FESTIVE SEASON**
Now, assuming your household consumes 500 gms of sweets on a non-festival day, how much quantity of sweets is consumed on a festival day.

(R1) Sweets (in Gms.)

--	--

(R1) Sweets(in kgs)

--	--

CATEGORY NEEDS
Now, we will discuss about milk in general.

		Code	Route
Q37	PROGRAMMER : ROTATE THE OPTIONS		
	<u>IMPORTANCE OF MILK ATTRIBUTES</u>		
	Now, I will read out some milk related attributes, which people like you have mentioned are important while getting milk for household consumption. As I read out please tell me which of these is important for you? [MA]		
	Quality of milk	01	
	Price of milk.....	02	
	Packaging of milk	03	
	Fortification of milk, like added Vitamins and mineral	04	
	Source of milk Place of purchase of milk	05	
	Colour of milk.....	06	
	Odour of milk.....	07	
	Taste of milk	08	
	Thickness of milk.....	09	
	Brand of milk	10	

Purity of milk	11	
Doesn't get spoiled soon.....	12	

Q38 PROGRAMMER: ASK FOR ONLY THOSE ATTRIBUTES CODED IN Q37. GIVE OPTION TO RANK 1-3
RANKED IMPORTANCE OF MILK ATTRIBUTES
 You said the following milk related statements are important for you. Now, please rank top 3 statements in order of importance, rank 1 being the most important..... Followed by rank 2 and so on...

(R1)	RANK

Q39 <u>FORTIFICATION</u> Are you aware of that milk can be fortified with vitamins and minerals before it is sold to you?[SA]	Code	Route
Yes	1	
No.....	2	

MILK FROM OWN CATTLE
 Now we will discuss about milk production in your household

Q40 <u>MILK PRODUCING HOUSEHOLD</u> Do you have a milk producing animal in your household? [SA]	Code	Route
Yes	1	
No	2	

INTERVIEWER TO SAY:
 Now I will be asking you some questions related to the milk produced in your household.

Q41 PROGRAMMER: ASK IF CODED 1 -YES IN Q40
NUMBER OF TOTAL MILCH ANIMALS
 Please tell me the number of milk producing animal(s) in your household?

(R1) Number of milk producing animals-

--	--	--

Q42 PROGRAMMER: ASK IF CODED ATLEAST 1 IN Q41, IF CODED 1 IN Q41, ALLOW ONLY 1 OPTION TO SELECT IN Q42 <u>TYPE OF MILK PRODUCING ANIMALS</u> Now, please tell me which milch animal(s) do you have? From milch animal I mean, those animals who have given birth to child atleast once. [MA]	Code	Route
Cow	1	
Buffalo	2	

Goat.....	3	
Camel	4	
Others.....	5	

Q43 PROGRAMMER: ASK FOR OPTIONS CODED IN Q42. SHOW ERROR IF CODED 0 FOR ANY OF THE ABOVE CODED ANIMALS IN Q42
NUMBER OF MILK PRODUCING ANIMALS
 Now, please tell me the number of each of these milk producing animal(s) you have?

(R1) Cow			
(R2) Buffalo			
(R3) Goat.....			
(R4) Camel			
(R5) Others.....			

Q44 PROGRAMMER: THE VALUE AGAINST EACH ANIMAL MUST BE EQUAL OR LESS THAN Q43
NUMBER OF ACTIVE MILK PRODUCING CATTLE
 Please tell me among these milk producing animal(s), how many are presently in-milk in your household?

(R1) Cow			
(R2) Buffalo			
(R3) Goat.....			
(R4) Camel			
(R5) Others.....			

Q45 PROGRAMMER: ASK FOR EACH ANIMAL CODED ATLEAST 1 IN Q44
QUANTITY OF MILK PRODUCED
 How much milk, in litres do each of your animals presently in milk produce on daily basis?

(R1) Milk produced by Cows presently in milk (in litres).....		
(R2) Milk produced by Buffalo presently in milk (in litres).....		
(R3) Milk produced by Goat presently in milk (in litres).....		
(R4) Milk produced by Camel presently in milk (in litres).....		

Q46 **QUANTITY OF MILK CONSUMED**
 Out of the total milk produced in your household do you use for your household consumption?

(R1) Quantity of Milk consumed daily (in ltrs)			
---	--	--	--

Q47 PROGRAMMER: ASK THOSE WHOSE CONSUMPTION IS LESS THAN PRODUCTION

PURPOSE OF EXCESS MILK

And, what do you do with surplus milk? [MA]

	Code
Sell milk to dairy cooperatives	01
Sell milk locally	02
Sell milk to Dudhia/ Gwala/ milkman	03
Sell milk to private dairy	04
Sell milk to Branded Dairy Cooperatives like Amul, Mother dairy etc.	05
Sell milk to Private/Local dairies	06
Sell milk directly to consumers	08
Sell milk to Khatal/Tabela/Dairy Farms.....	09
To retailers/ shops	10
Sell milk products made of it	11
Waste it.....	12
Others	13

Q48 PROGRAMMER: ASK if coded in Q47

QUANTITY OF MILK SOLD

And, what quantity of milk do you sell daily, in litres?

(R1) Milk sold (in litres)

Q49 PROGRAMMER: ASK if coded in Q47

PRICE OF MILK SOLD

And, how much price per litre do you charge for milk that you sell?

(R1) Price per litre (in Rupees)

Q50 PROGRAMMER: ASK IF CODED 11 IN Q47 I.E SELL MILK PRODUCTS

TYPE OF MILK PRODUCTS SOLD

INTERVIEWER: DO NOT SHOW SCREEN.

You said you sell milk products made of the excess milk produced by your cattle. Please tell me which product/s do you make and sell?

[MA]

	Code	Route
Ghee	1	
Butter.....	2	
Curd.....	3	
Sweets	4	
Others	5	

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Q51	PROGRAMMER: ASK FOR ALL PRODUCTS CODED IN Q50 <u>QUANTITY OF MILK BASED PRODUCTS SOLD</u> And, what quantity of milk products made of own produced milk do you sell on a weekly basis, [MA]	Code	Route
	Ghee(in kg)	1	
	Butter (in kg)	2	
	Curd(in kg)	3	
	Sweets(in kg).....	4	
	Others	5	

Q52	PROGRAMMER: ASK IF CODED 11 IN Q47 i.e. SELL MILK/ MILK PRODUCTS <u>PLACES OF SALE OF MILK & MILK BASED PRODUCTS SOLD</u> Now, please tell me to whom do you sell the milk products made from the excess milk? [MA]	Code	Route
	Branded Dairy Cooperatives like Amul, Mother dairy etc.	1	
	Private/Local dairies.....	2	
	Dudhia/Gwala	3	
	Sweetmeat shops/small private milk aggregators/confectionaries	4	
	Khatal/Tabela/Dairy Farms	5	
	To retailers/ shops	6	
	Directly to consumers	7	
Others	8		

DEMOGRAPHICS

INTERVIEWER TO SAY:
We need this information only to classify different households into groups. I assure this information would be treated strictly confidential.

Q55	<u>SHOWSCREEN</u> <u>MONTHLY HOUSEHOLD INCOME</u> By looking at the screen, please tell me what is the average MONTHLY income of your household?	Code	Route
	Read out: Please take into account the income of all the members of the household from all sources such as salary, wages, business profits, sale of agricultural produce or from livestock / poultry etc. plus any other sources of income such as rent, dividend / interest from your investments.		

PROBE EXPLAIN “We need this information only to classify different households into groups. I assure that this information would be treated strictly confidential.” [SA]		
Up to Rs. 2500 (upto twenty five hundred per month)	01	
Rs. 2,501 - 5,000	02	
Rs. 5,001 - 10,000	03	
Rs. 10,001 - 15,000	04	
Rs. 15,001 - 25,000	05	
Rs. 25,001 - 50,000	06	
Rs. 50,001 - 75,000	07	
Rs. 75,001 - 1,00,000	08	
Rs. 1,00,001 - 2,50,000	09	
Rs. 2,50,001 - 5,00,000	10	
Rs. 5,00,001 - 10,00,000	11	
More than Rs. 10,00,000 (More than 10 lakhs per month)	12	
No Cash Income	13	
Not disclosed / Refused	14	

INDIVIDUAL INTERVIEW

Now , I will talk to another person within your household

Q56	PROGRAMMER:DISPLAY THE NAMES AND AGE OF THOSE ABOVE 15 AND BELOW 60 (IN Q17a) WHO ARE STAYING AT HOME (IN Q18a) HERE. SKIP IF CODED NONE TO AFTER Q64	Code	Route
	<u>INDIVIDUAL MEMBER SELECTION DETAILS</u> MEMBERS ABOVE AGE 15 AND BELOW 60- STAYING AT HOME.		
	Please tell me from this list, who all will be available at home for interview at this time? [SA]		
	1	
	None	2	

Q58 **INDIVIDUAL DETAILS**
INTERVIEWER TO SAY TO INDIVIDUAL:

Good morning/afternoon/evening, my name is [], from [VENDOR NAME] on behalf of and authorized by Nielsen (India) Private Limited, a Market Research Company, which is further authorised by Govt. of India for conducting a survey about your consumption regarding Milk and Milk products. We hope that you would be willing

to answer a few questions for us today.

--

- Q59a** Now, I will read out names of milk/milk products, please tell me which of these products were consumed by you in the past 1 month, it could be consumed by you in your house or outside? [MA]
- Q59b** PROGRAMMER: ASK FOR EACH PRODUCT CODED IN Q59A
As I read out the milk and milk products consumed by you in past 1 month, please tell me how often did you consume this product whether at home or outside?[SA]
- Q59c** PROGRAMMER:ASK FOR ALL PRODUCTS CODED DAILY "1" IN Q59b
Now, tell me the quantity of each of these items that you consume on a daily basis?
- Q59d** PROGRAMMER:ASK IF NOT CODED DAILY "1" IN Q59b
Now, tell me the quantity of each of these items that you consume on each occasion?

	Q59a	Q59b									Q59c	Q59d
	Daily	4 - 5 times a week	2 - 3 times week	once a week	Once in 2 - 3 weeks	Once a month	Once 2-3 month	Once 3-6 month	Less often than once in 6 months	Daily quantity	Quantity consumed in each occasion	
(R1)	1	1	2	3	4	5	6	7	8	9	----	---

Q60a PROGRAMMER : SHOW OPTIONS CODED IN Q59A

Now please tell me, among the products you consumed in the last 1 month, which of these products did you consumed at your home/someone's home and which of these did you got for your consumption out of home i.e. Tea/coffee stall, hotel, restaurant, office, canteen, trust, temple etc.? [A]

	Q60a		
	Consumed at your or someone's home	Consumed out of Home	Both at your or someone's home and outside
	(R1)	1	2

- Q61a** PROGRAMMER: ASK FOR ALL PRODUCTS CODED 2/3 in Q60
You said you consumed some milk products out of home eg. Tea/coffee stall, hotel, restaurant, office, canteen, trust, temple etc. And consumed them in past 1 month. Please tell me how often did you consume each of these products out of home? [SA]
- Q61b** PROGRAMMER: ASK IF CODED IN "1 DAILY" IN Q61A
You said you consumed some milk products out of home eg. Tea/coffee stall, hotel, restaurant, office, canteen, trust, temple etc. And consumed them in past 1 month. Please tell me how much quantity of each of these products did you consume out of home on a daily basis?

Q61c PROGRAMMER: ASK IF NOT CODED IN "1 DAILY" IN Q61A
 You said you consumed some milk products out of home eg. Tea/coffee stall, hotel, restaurant, office, canteen, trust, temple etc. And consumed them in past 1 month. Please tell me how much quantity of each of these products did you consume out of home on each occasion? [MA]

	Q61a							Q61b	Q61c
	Daily	4 - 5 times a week	2 - 3 times a week	once a week	Once in 2 - 3 weeks	Once a month	Less often than once a month	Daily quantity	Quantity consumed in each occasion
(R1)	1	2	3	4	5	6	7	--	1

Q62 **No of Functions attended per year**
 Now think about the various functions like marriage, parties, Mundan, shradh, anniversary ceremonies etc. In one year, for how many such functions do you attend?

.....

Q63 PROGRAMMER: IF CODED 0 IN Q62 SKIP QUESTION Q63 AND Q64
 Now, please look at this list, and tell me which of these products you consumed at the most recent function you attended. [MA]

.....

Code Route

1

Q64 ASK FOR ALL PRODUCTS CODED IN Q63 Now, tell me the quantity in grams/litres, of each of these products did you consume in the last such occasion?

(R1)

Milk Products List

HOUSEHOLD CONSUMPTION	INDIVIDUAL CONSUMPTION
Milk	Milk
Curd	Curd
Butter	Butter
Ghee	Ghee
Buttermilk / Chhas	Buttermilk / Chhas
Flavoured milk/ Milk Shake	Flavoured milk/ Milk Shake
Lassi	Lassi
Milk powder / Dairy Whitener	-
Baby milk/ Formula milk powder	-
Ice-cream	Ice-cream
Cheese spread etc.	Cheese spread etc.
Cheese cube, slices etc.	Cheese cube, slices etc.
Paneer	Paneer
Mishto Doi	Mishto Doi

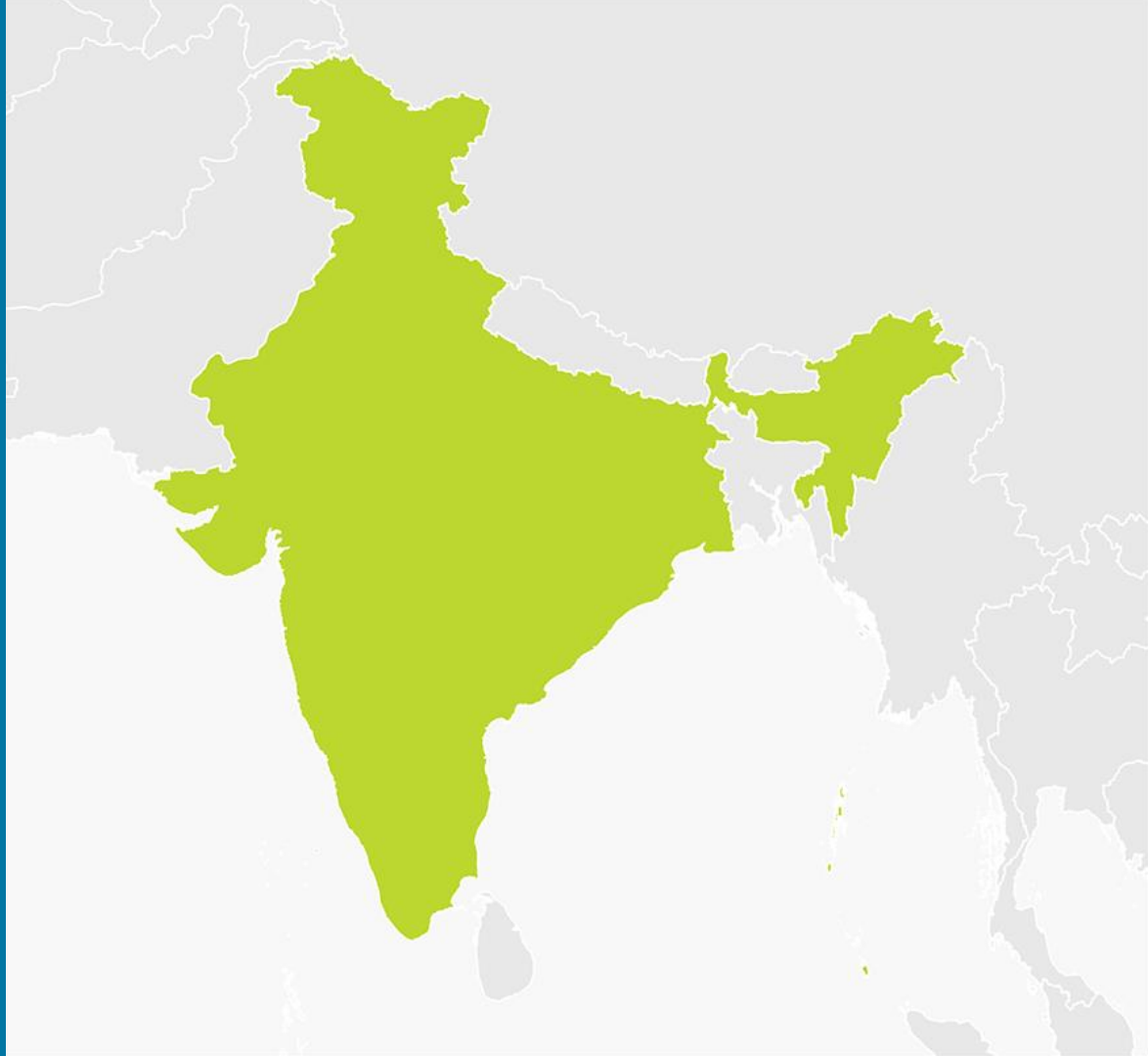
Probiotic milk like Yakult, Nutri Fit etc.	Probiotic milk like Yakult, Nutri Fit etc.
Cream	-
Flavoured Yogurt	Flavoured Yogurt
Tea /coffee	Tea /coffee
Chocolate	Chocolate
Sweetened Condensed Milk (Milkmaid/ Mithai mate)	-
Khoya/Mava	-
Custard	Custard
Basundi	Basundi
Burfi	Burfi
Chhena based sweets like chennopodo, chenna murkhi , Cham etc.	Chhena based sweets like chennopodo, chenna murkhi , Cham etc.
Dodha	Dodha
Doodhiya Kheech	Doodhiya Kheech
Dudh petha	Dudh petha
Fruit cream	Fruit cream
Gulab Jamun	Gulab Jamun
Kalakand/ Mawa Mishri/Kesariya Mishri Mava	Kalakand/ Mawa Mishri/Kesariya Mishri Mava
Kheer/ Phirni/ Payasam/Kheeranand/Palada Pradhaman	Kheer/ Phirni/ Payasam/Kheeranand/Palada Pradhaman
Kopra Pak/ Coconut Barfi	Kopra Pak/ Coconut Barfi
Kulfi	Kulfi
Kunda	Kunda
Lounglatta	Lounglatta
Milk Cake	Milk Cake
Milk food drink powder like Bournvita, Boost, Horlicks etc.	Milk food drink powder like Bournvita, Boost, Horlicks etc.
Mohanbhog	Mohanbhog
Mysore Pak	Mysore Pak
Patishapta	Patishapta
Peda	Peda
Pinni	Pinni
Pyosari	Pyosari
Rabri	Rabri
Rasgulla	Rasgulla
Rasmalai	Rasmalai
Rshapooli	Rshapooli
Sael Roti	Sael Roti
Sandesh	Sandesh
Sewai / Vermielli/ Shir Sewain/Khurma	Sewai / Vermielli/ Shir Sewain/Khurma
Shahi tukda	Shahi tukda
Shrikhand	Shrikhand
Thongba	Thongba
Kaju ki Barfi	Kaju ki Barfi
Anarsa	Anarsa
Chandrakala/Gujia	Chandrakala/Gujia
Churma	Churma
Gond ke Ladoo	Gond ke Ladoo

Ghevar	Ghevar
Kheer Kadam	Kheer Kadam
Any type of Halwa made in desi ghee	Any type of Halwa made in desi ghee
Any type of Ladoo made in desi ghee	Any type of Ladoo made in desi ghee
Bouli/ Khees	Bouli/ Khees
Dahi Vada/Dahi Chat/ Rajkachuri / Dahi Bhalla	Dahi Vada/Dahi Chat/ Rajkachuri / Dahi Bhalla
Jalebi /Imarti made in Desi Ghee	Jalebi /Imarti made in Desi Ghee
Malpua	Malpua
Badusha/Balushahi	Badusha/Balushahi

ANNEXURE



**State and Union
Territories
SNAPSHOT**



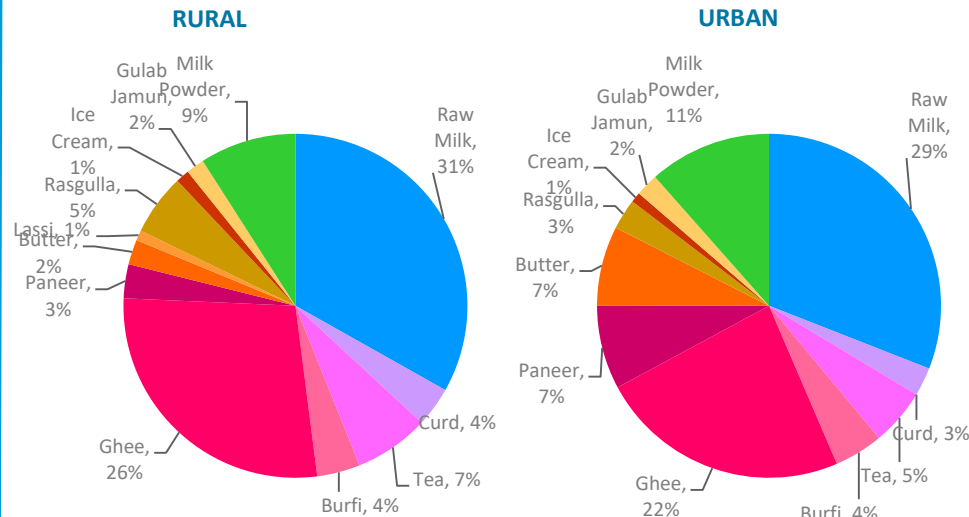
ANDAMAN & NICOBAR

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home		Out of Home	Per Capita (ml)
LLPD	RURAL	0.2	0.22	0.15	0.07	87
	URBAN	0.2	0.31	0.24	0.06	191
	TOTAL	0.4	0.52	0.39	0.13	128
%	RURAL	61%	100%	68%	32%	
	URBAN	39%	100%	80%	20%	
	TOTAL	100%	100%	75%	25%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home		Out of Home	Per Capita (ml)
LLPD	RURAL	0.3	0.43	0.29	0.15	165
	URBAN	0.2	0.32	0.26	0.07	178
	TOTAL	0.4	0.76	0.54	0.21	170
%	RURAL	59%	100%	66%	34%	
	URBAN	41%	100%	80%	20%	
	TOTAL	100%	100%	72%	28%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.08	0.14	38%	62%
URBAN	0.10	0.20	34%	66%

PRODUCT SHARE (2019)



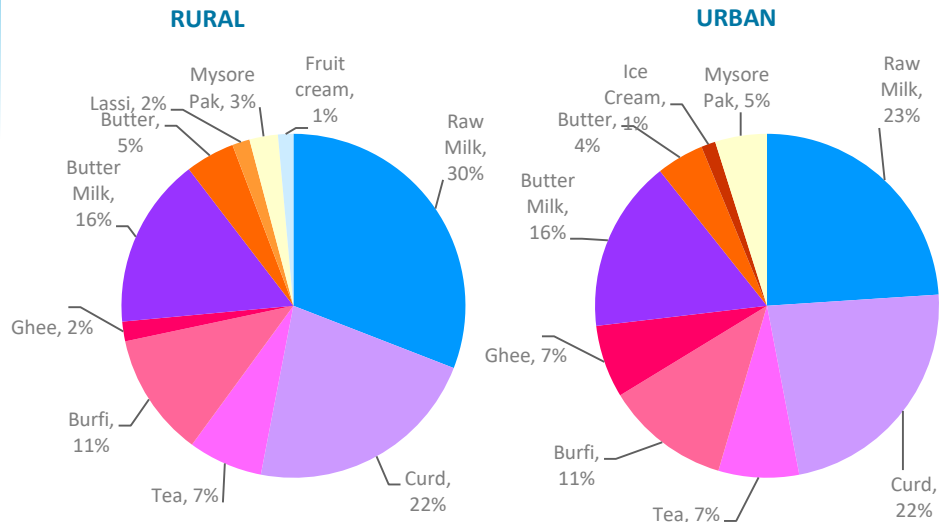
ANDHRA PRADESH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	36.7	89.09	72.47	16.62	243
	URBAN	16.5	45.98	36.52	9.46	279
	TOTAL	53.2	135.07	108.99	26.08	254
%	RURAL	69%	100%	81%	19%	
	URBAN	31%	100%	79%	21%	
	TOTAL	100%	100%	81%	19%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	39.1	132.82	108.59	24.23	339
	URBAN	19.1	81.86	64.80	17.06	428
	TOTAL	58.3	214.69	173.39	41.30	368
%	RURAL	67%	100%	82%	18%	
	URBAN	33%	100%	79%	21%	
	TOTAL	100%	100%	81%	19%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	32.75	56.34	37%	63%
URBAN	14.01	31.97	30%	70%

PRODUCT SHARE (2019)



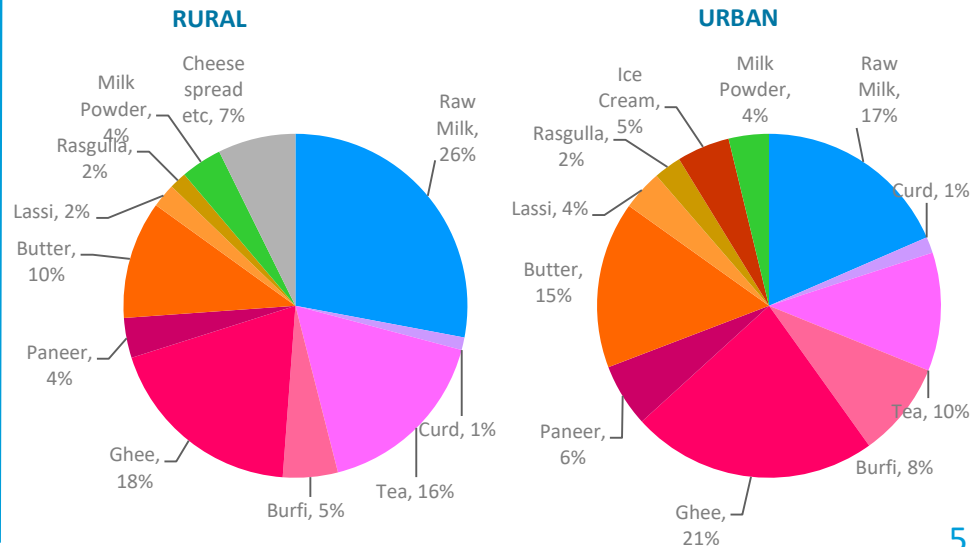
ARUNACHAL PRADESH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	1.2	1.55	1.18	0.37	130
	URBAN	0.4	0.68	0.55	0.12	180
	TOTAL	1.6	2.22	1.73	0.49	142
%	RURAL	76%	100%	76%	24%	
	URBAN	24%	100%	82%	18%	
	TOTAL	100%	100%	78%	22%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	1.4	3.72	2.80	0.91	273
	URBAN	0.5	1.18	0.97	0.22	248
	TOTAL	1.8	4.90	3.77	1.13	267
%	RURAL	74%	100%	75%	25%	
	URBAN	26%	100%	82%	18%	
	TOTAL	100%	100%	77%	23%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.64	0.90	42%	58%
URBAN	0.19	0.49	27%	73%

PRODUCT SHARE (2019)

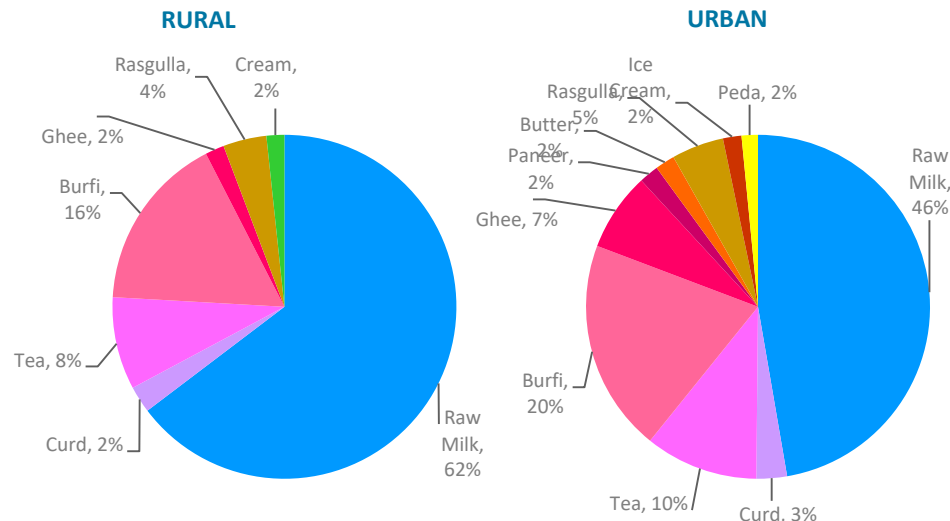


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	29.5	37.58	29.87	7.71	128
	URBAN	5.2	10.31	8.29	2.02	196
	TOTAL	34.7	47.89	38.16	9.73	138
%	RURAL	85%	100%	79%	21%	
	URBAN	15%	100%	80%	20%	
	TOTAL	100%	100%	80%	20%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	33.1	64.23	50.50	13.72	194
	URBAN	6.5	25.64	20.55	5.10	393
	TOTAL	39.6	89.87	71.05	18.82	227
%	RURAL	84%	100%	79%	21%	
	URBAN	16%	100%	80%	20%	
	TOTAL	100%	100%	79%	21%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	26.28	11.29	70%	30%
URBAN	5.83	4.48	57%	43%

PRODUCT SHARE (2019)

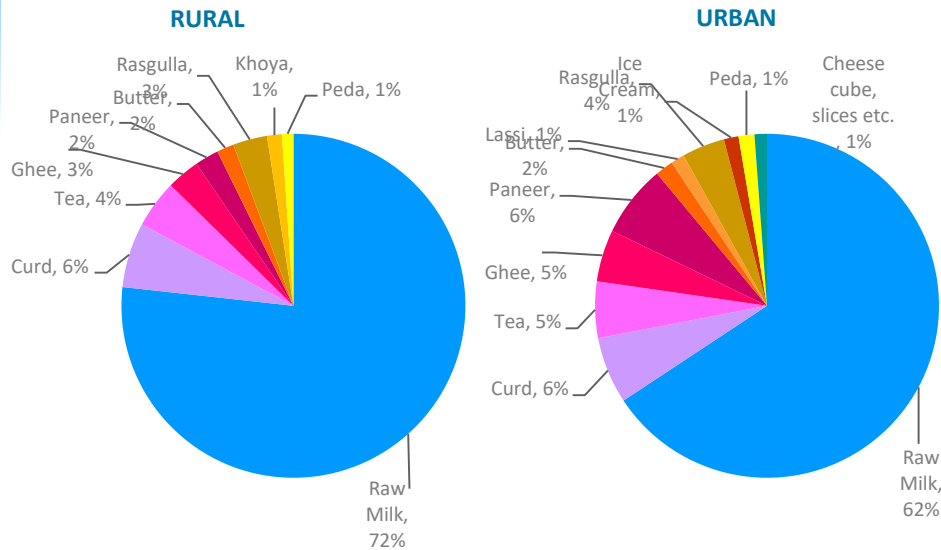


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	105.0	245.92	219.83	26.09	234
	URBAN	14.5	41.83	32.72	9.11	288
	TOTAL	119.5	287.74	252.55	35.19	241
%	RURAL	88%	100%	89%	11%	
	URBAN	12%	100%	78%	22%	
	TOTAL	100%	100%	88%	12%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	122.9	450.92	392.70	58.22	367
	URBAN	18.8	84.77	65.32	19.45	452
	TOTAL	141.7	535.69	458.02	77.67	378
%	RURAL	87%	100%	87%	13%	
	URBAN	13%	100%	77%	23%	
	TOTAL	100%	100%	86%	14%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)					
	Sector	LLPD		%	
		Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
		RURAL	186.52	59.39	76%
URBAN	27.98	13.85	67%	33%	

PRODUCT SHARE (2019)



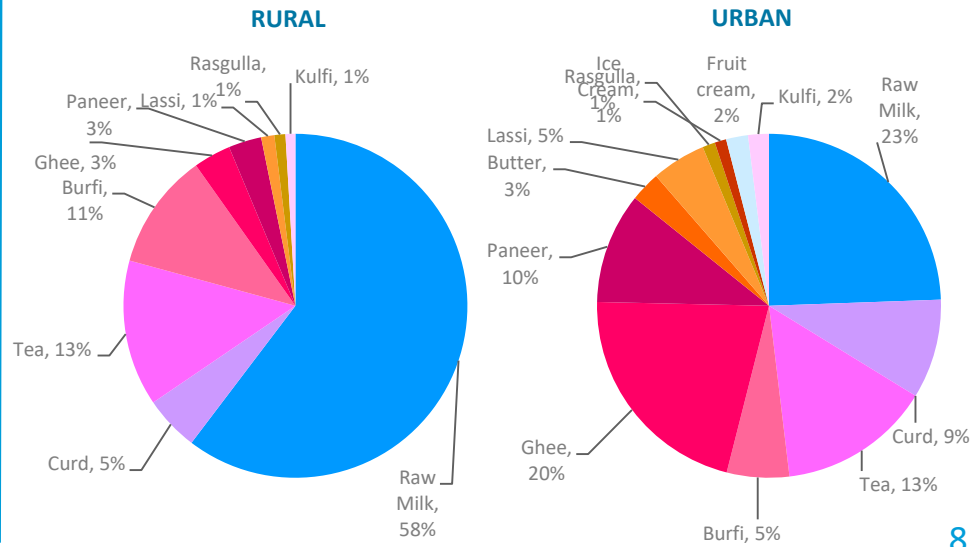
CHANDIGARH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.03	0.09	0.06	0.03	290
	URBAN	1.1	7.30	5.59	1.71	661
	TOTAL	1.1	7.38	5.65	1.74	651
%	RURAL	3%	100%	68%	32%	
	URBAN	97%	100%	77%	23%	
	TOTAL	100%	100%	76%	24%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.0	0.14	0.10	0.05	422
	URBAN	1.2	14.27	10.95	3.32	1184
	TOTAL	1.2	14.41	11.04	3.37	1163
%	RURAL	3%	100%	68%	32%	
	URBAN	97%	100%	77%	23%	
	TOTAL	100%	100%	77%	23%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.06	0.03	72%	28%
URBAN	2.61	4.69	36%	64%

PRODUCT SHARE (2019)



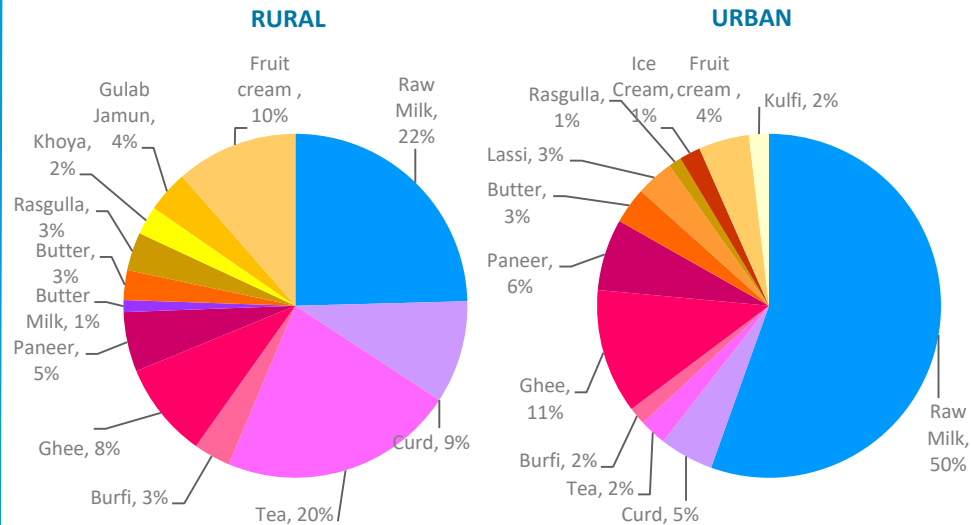
CHATTISGARH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	21.6	11.21	6.58	4.63	52
	URBAN	7.1	14.56	10.88	3.68	205
	TOTAL	28.7	25.77	17.46	8.31	90
%	RURAL	75%	100%	59%	41%	
	URBAN	25%	100%	75%	25%	
	TOTAL	100%	100%	68%	32%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	24.4	16.65	9.18	7.47	68
	URBAN	8.8	25.83	18.85	6.98	292
	TOTAL	33.3	42.48	28.03	14.45	128
%	RURAL	73%	100%	55%	45%	
	URBAN	27%	100%	73%	27%	
	TOTAL	100%	100%	66%	34%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	4.67	6.54	42%	58%
URBAN	7.64	6.92	52%	48%

PRODUCT SHARE (2019)



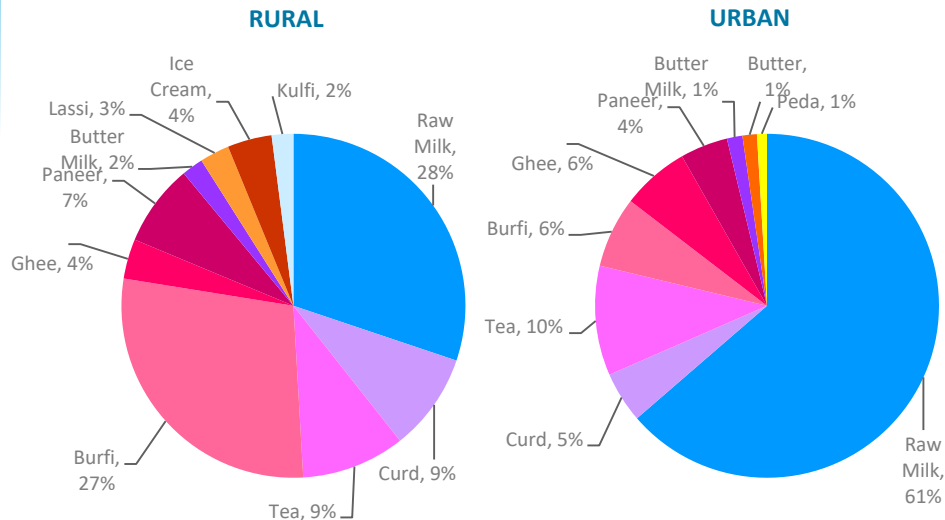
DADRA AND NAGAR HAVELI

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD	RURAL	0.2	0.13	0.09	0.04	65
	URBAN	0.2	0.70	0.60	0.10	366
	TOTAL	0.4	0.83	0.69	0.14	211
%	RURAL	51%	100%	67%	33%	
	URBAN	49%	100%	86%	14%	
	TOTAL	100%	100%	83%	17%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD	RURAL	0.2	0.25	0.17	0.08	110
	URBAN	0.2	1.34	1.14	0.19	565
	TOTAL	0.5	1.59	1.31	0.27	341
%	RURAL	49%	100%	67%	33%	
	URBAN	51%	100%	86%	14%	
	TOTAL	100%	100%	83%	17%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.05	0.08	37%	63%
URBAN	0.50	0.20	71%	29%

PRODUCT SHARE (2019)



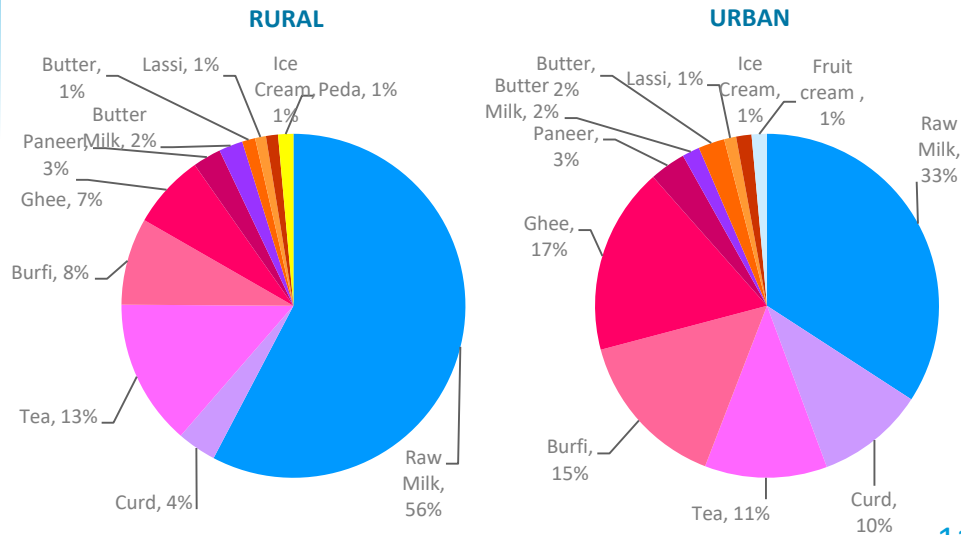
DAMAN AND DIU

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.1	0.11	0.10	0.01	171
	URBAN	0.2	0.71	0.62	0.08	345
	TOTAL	0.3	0.82	0.72	0.10	303
%	RURAL	24%	100%	88%	12%	
	URBAN	76%	100%	88%	12%	
	TOTAL	100%	100%	88%	12%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.1	0.14	0.12	0.02	199
	URBAN	0.2	1.41	1.24	0.17	596
	TOTAL	0.3	1.55	1.36	0.19	504
%	RURAL	23%	100%	87%	13%	
	URBAN	77%	100%	88%	12%	
	TOTAL	100%	100%	88%	12%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.08	0.03	70%	30%
URBAN	0.31	0.39	44%	56%

PRODUCT SHARE (2019)



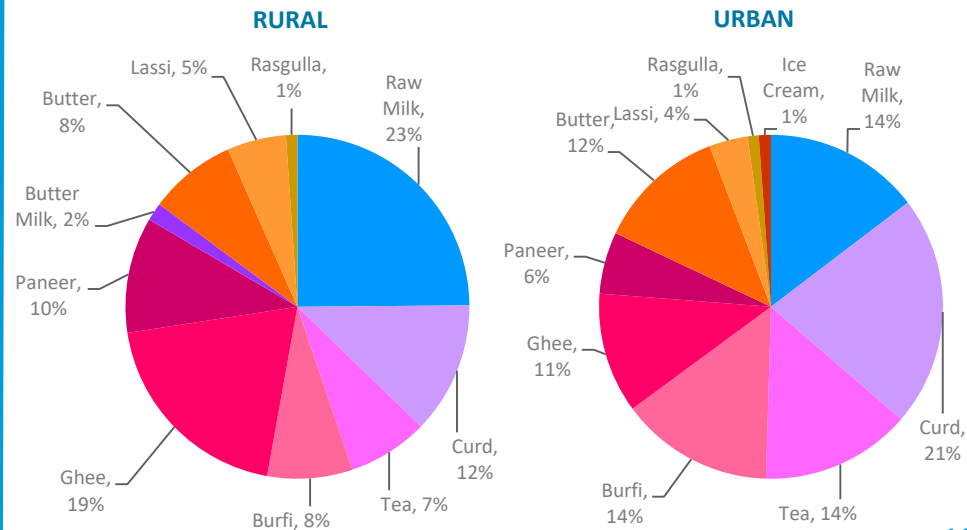
DELHI

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.4	1.65	1.30	0.34	389
	URBAN	18.1	109.54	91.43	18.11	606
	TOTAL	18.5	111.19	92.74	18.45	601
%	RURAL	2%	100%	79%	21%	
	URBAN	98%	100%	83%	17%	
	TOTAL	100%	100%	83%	17%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.4	2.78	2.18	0.60	650
	URBAN	20.4	170.68	142.82	27.86	837
	TOTAL	20.8	173.47	145.00	28.47	833
%	RURAL	2%	100%	78%	22%	
	URBAN	98%	100%	84%	16%	
	TOTAL	100%	100%	84%	16%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.50	1.15	30%	70%
URBAN	30.38	79.16	28%	72%

PRODUCT SHARE (2019)

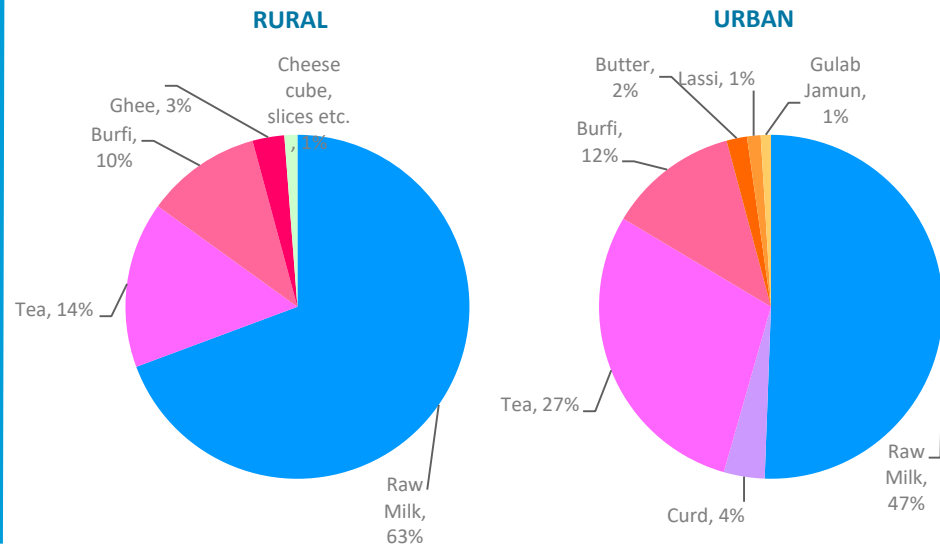


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	0.6	1.20	1.15	0.05	213
	URBAN	1.0	3.04	2.73	0.31	305
	TOTAL	1.6	4.24	3.88	0.36	271
%	RURAL	36%	100%	96%	4%	
	URBAN	64%	100%	90%	10%	
	TOTAL	100%	100%	92%	8%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	0.6	0.86	0.82	0.05	148
	URBAN	1.1	2.63	2.37	0.27	236
	TOTAL	1.7	3.50	3.18	0.31	205
%	RURAL	34%	100%	95%	5%	
	URBAN	66%	100%	90%	10%	
	TOTAL	100%	100%	91%	9%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.92	0.28	77%	23%
URBAN	2.27	0.77	75%	25%

PRODUCT SHARE (2019)



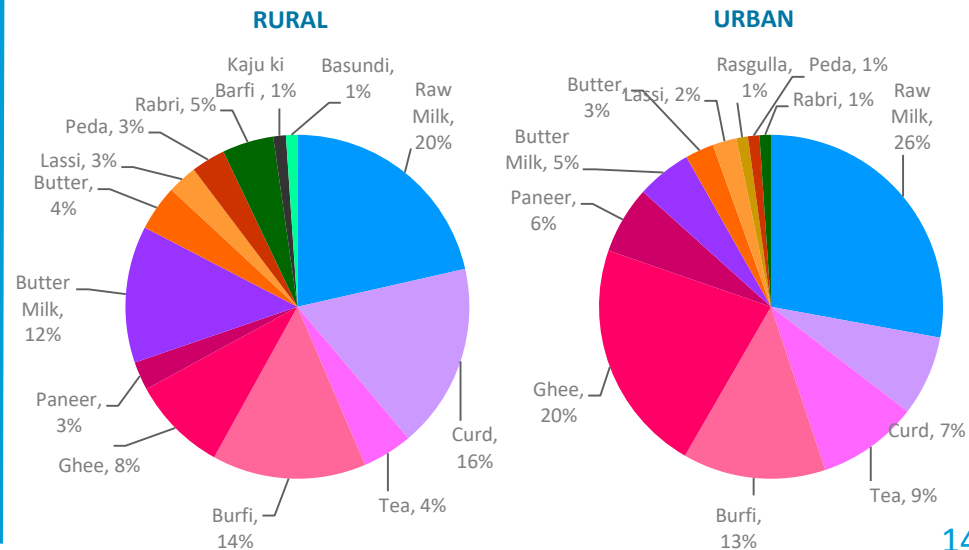
GUJARAT

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	37.2	162.46	124.08	38.38	436
	URBAN	29.3	165.62	115.75	49.87	565
	TOTAL	66.6	328.07	239.82	88.25	493
%	RURAL	56%	100%	76%	24%	
	URBAN	44%	100%	70%	30%	
	TOTAL	100%	100%	73%	27%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	40.6	305.97	229.09	76.88	754
	URBAN	34.4	338.90	237.93	100.97	985
	TOTAL	75.0	644.87	467.02	177.85	860
%	RURAL	54%	100%	75%	25%	
	URBAN	46%	100%	70%	30%	
	TOTAL	100%	100%	72%	28%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	39.50	122.96	24%	76%
URBAN	57.36	108.26	35%	65%

PRODUCT SHARE (2019)

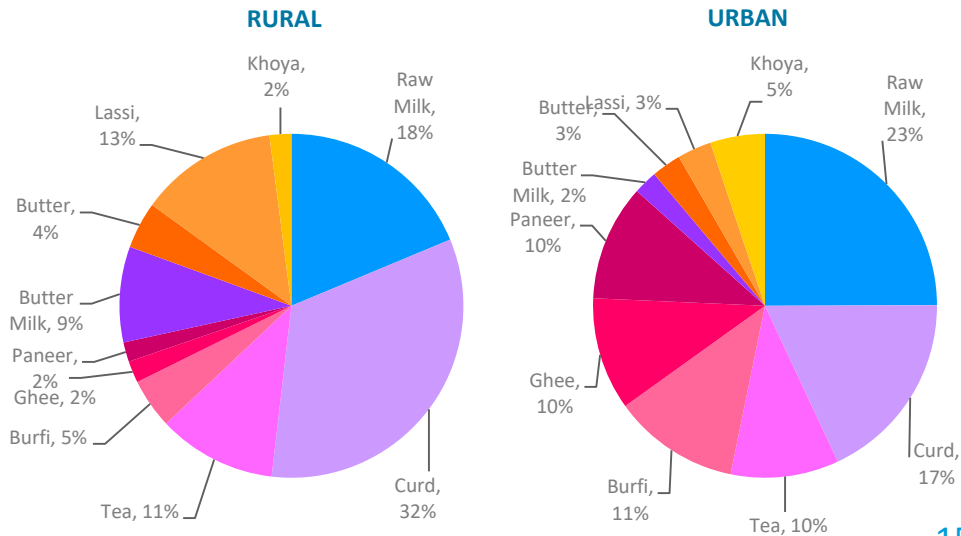


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	17.8	149.75	139.77	9.98	839
	URBAN	10.3	88.19	70.72	17.47	858
	TOTAL	28.1	237.94	210.49	27.45	846
%	RURAL	63%	100%	93%	7%	
	URBAN	37%	100%	80%	20%	
	TOTAL	100%	100%	88%	12%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	19.6	234.33	218.64	15.68	1194
	URBAN	12.4	159.36	127.77	31.59	1288
	TOTAL	32.0	393.69	346.41	47.28	1230
%	RURAL	61%	100%	93%	7%	
	URBAN	39%	100%	80%	20%	
	TOTAL	100%	100%	88%	12%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	43.63	106.11	29%	71%
URBAN	28.91	59.28	33%	67%

PRODUCT SHARE (2019)



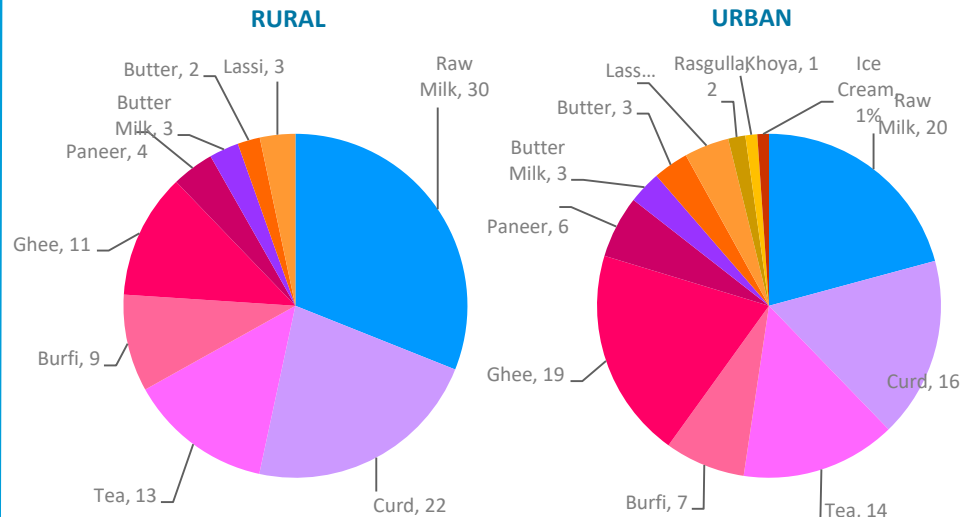
HIMACHAL PRADESH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.8	5.36	4.83	0.52	689
	TOTAL	7.3	34.49	32.24	2.25	473
	RURAL	89%	100%	94%	6%	
%	URBAN	11%	100%	90%	10%	
	TOTAL	100%	100%	93%	7%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.9	7.37	6.63	0.74	821
	TOTAL	7.8	41.51	38.58	2.93	530
	RURAL	89%	100%	94%	6%	
%	URBAN	11%	100%	90%	10%	
	TOTAL	100%	100%	93%	7%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	12.62	16.51	43%	57%
URBAN	1.82	3.53	34%	66%

PRODUCT SHARE (2019)



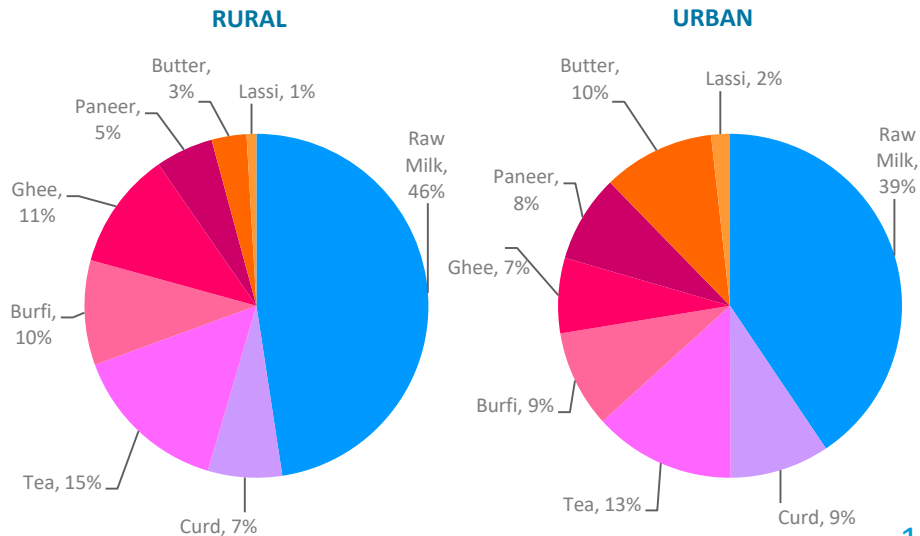
JAMMU AND KASHMIR

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	9.8	43.26	38.94	4.32	440
	URBAN	4.1	21.19	19.25	1.94	520
	TOTAL	13.9	64.45	58.20	6.25	464
%	RURAL	71%	100%	90%	10%	
	URBAN	29%	100%	91%	9%	
	TOTAL	100%	100%	90%	10%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	11.8	42.17	37.33	4.84	357
	URBAN	5.2	29.14	26.44	2.70	559
	TOTAL	17.0	71.30	63.77	7.54	419
%	RURAL	69%	100%	89%	11%	
	URBAN	31%	100%	91%	9%	
	TOTAL	100%	100%	89%	11%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	26.35	16.90	61%	39%
URBAN	10.99	10.20	52%	48%

PRODUCT SHARE (2019)

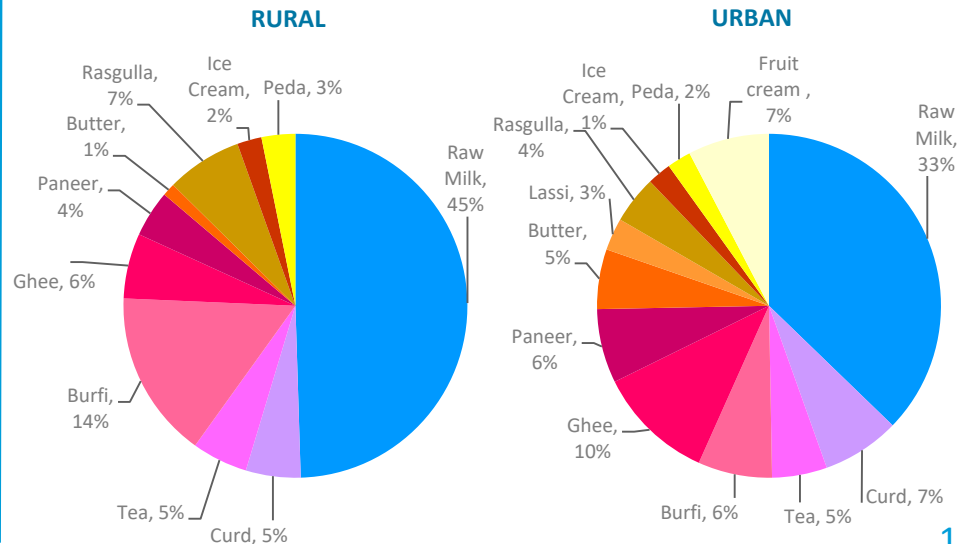


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	27.9	47.62	33.54	14.08	170
	URBAN	9.4	32.21	21.92	10.29	341
	TOTAL	37.4	79.83	55.46	24.37	214
%	RURAL	75%	100%	70%	30%	
	URBAN	25%	100%	68%	32%	
	TOTAL	100%	100%	69%	31%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	31.9	59.84	39.71	20.13	187
	URBAN	11.7	42.44	28.63	13.81	364
	TOTAL	43.6	102.28	68.34	33.94	235
%	RURAL	73%	100%	66%	34%	
	URBAN	27%	100%	67%	33%	
	TOTAL	100%	100%	67%	33%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	23.81	23.81	50%	50%
URBAN	12.14	20.07	38%	62%

PRODUCT SHARE (2019)

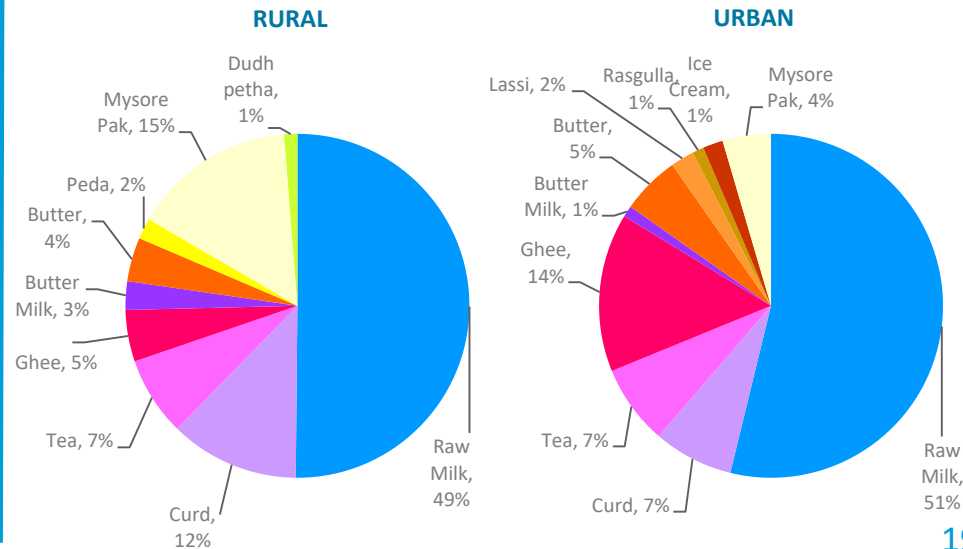


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	39.2	97.87	73.11	24.77	250
	URBAN	26.7	104.22	82.94	21.28	391
	TOTAL	65.9	202.09	156.05	46.04	307
%	RURAL	60%	100%	75%	25%	
	URBAN	40%	100%	80%	20%	
	TOTAL	100%	100%	77%	23%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	41.5	112.40	78.32	34.08	271
	URBAN	30.9	175.51	138.94	36.58	568
	TOTAL	72.4	287.91	217.25	70.66	398
%	RURAL	57%	100%	70%	30%	
	URBAN	43%	100%	79%	21%	
	TOTAL	100%	100%	75%	25%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	54.59	43.28	56%	44%
URBAN	60.45	43.77	58%	42%

PRODUCT SHARE (2019)



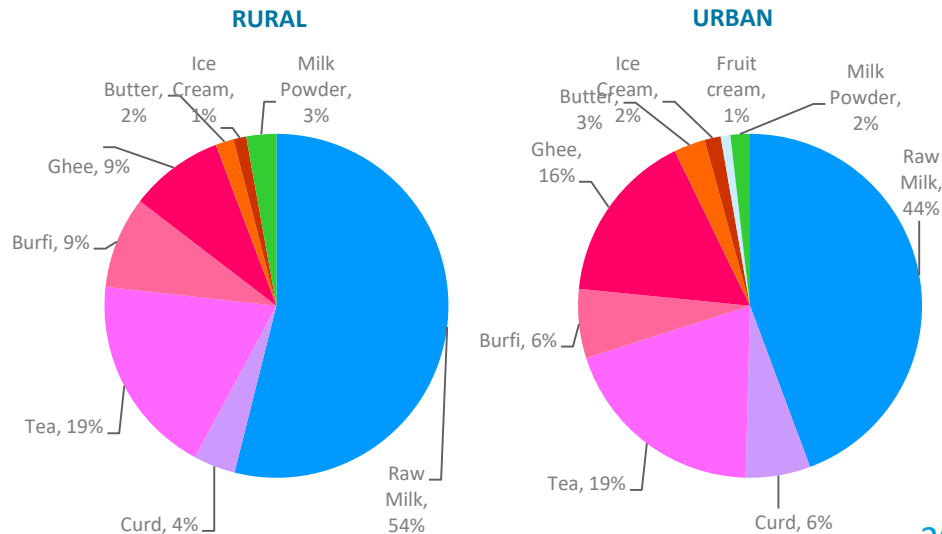
KERALA

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
	URBAN	17.8	41.42	38.33	3.09	233
	TOTAL	36.0	76.07	71.71	4.36	211
	RURAL	51%	100%	96%	4%	
%	URBAN	49%	100%	93%	7%	
	TOTAL	100%	100%	94%	6%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
	URBAN	20.3	45.58	42.13	3.45	224
	TOTAL	39.5	73.91	69.20	4.71	187
	RURAL	49%	100%	96%	4%	
%	URBAN	51%	100%	92%	8%	
	TOTAL	100%	100%	94%	6%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	25.07	9.58	72%	28%
URBAN	26.16	15.25	63%	37%

PRODUCT SHARE (2019)

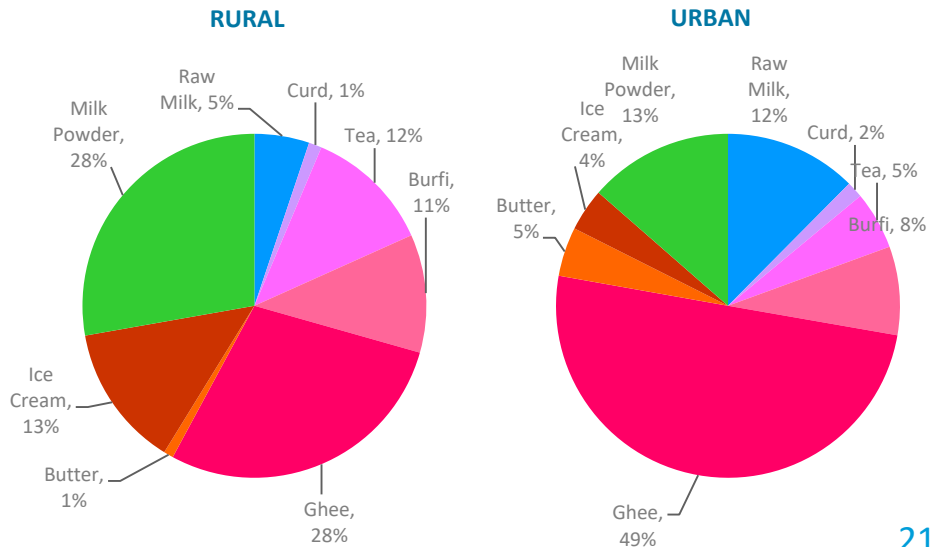


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.1	0.07	0.06	0.01	114
	TOTAL	0.1	0.08	0.07	0.01	110
	RURAL	21%	100%	76%	24%	
%	URBAN	79%	100%	90%	10%	
	TOTAL	100%	100%	88%	12%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.1	0.10	0.09	0.01	136
	TOTAL	0.1	0.11	0.10	0.01	125
	RURAL	19%	100%	76%	24%	
%	URBAN	81%	100%	90%	10%	
	TOTAL	100%	100%	88%	12%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.00	0.01	17%	83%
URBAN	0.01	0.06	17%	83%

PRODUCT SHARE (2019)



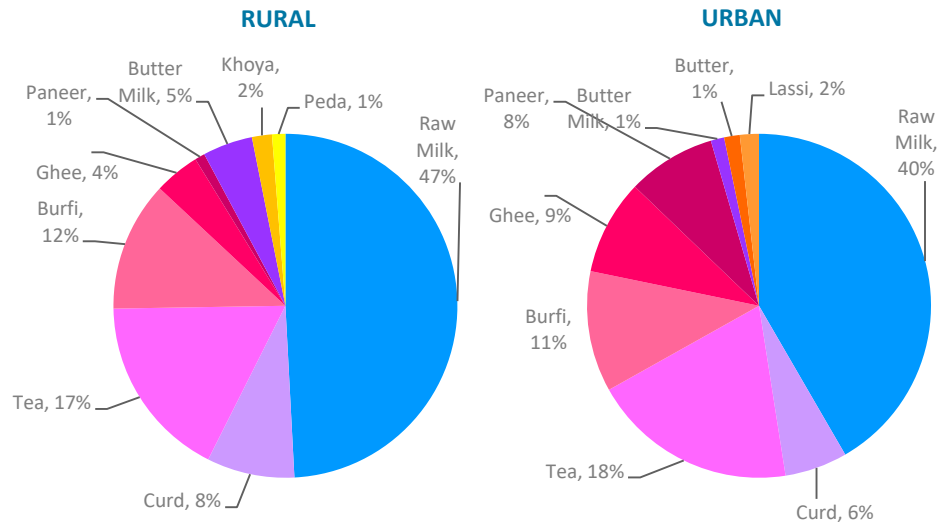
MADHYA PRADESH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	58.1	122.91	108.06	14.85	212
	URBAN	23.7	74.13	58.98	15.15	313
	TOTAL	81.8	197.04	167.04	30.00	241
%	RURAL	71%	100%	88%	12%	
	URBAN	29%	100%	80%	20%	
	TOTAL	100%	100%	85%	15%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	65.7	361.07	316.05	45.02	550
	URBAN	29.1	231.29	182.56	48.73	796
	TOTAL	94.7	592.37	498.61	93.75	625
%	RURAL	69%	100%	88%	12%	
	URBAN	31%	100%	79%	21%	
	TOTAL	100%	100%	84%	16%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	78.37	44.55	64%	36%
URBAN	42.99	31.13	58%	42%

PRODUCT SHARE (2019)



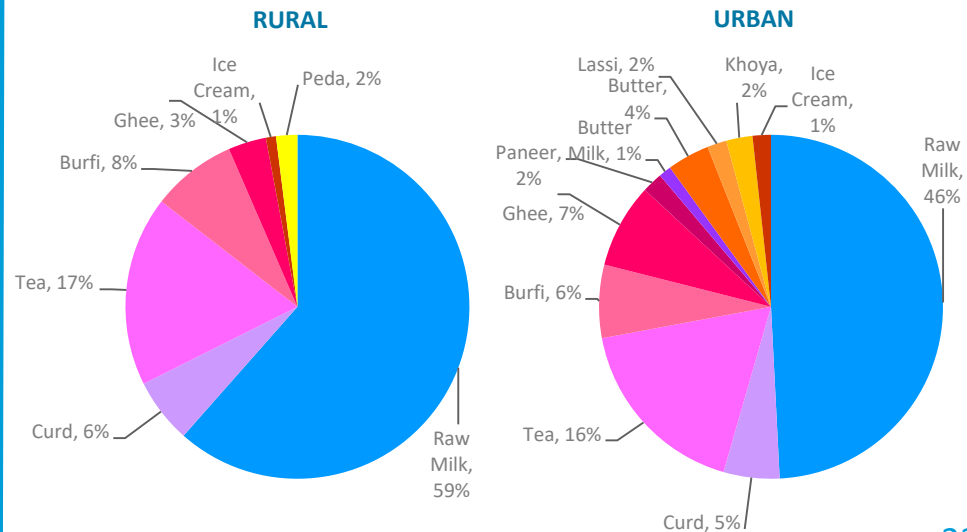
MAHARASHTRA

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	65.7	104.81	93.19	11.62	159
	URBAN	57.5	185.01	150.72	34.29	322
	TOTAL	123.2	289.83	243.92	45.91	235
%	RURAL	53%	100%	89%	11%	
	URBAN	47%	100%	81%	19%	
	TOTAL	100%	100%	84%	16%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	71.2	135.94	118.60	17.34	191
	URBAN	66.9	325.68	264.14	61.54	487
	TOTAL	138.1	461.62	382.74	78.88	334
%	RURAL	52%	100%	87%	13%	
	URBAN	48%	100%	81%	19%	
	TOTAL	100%	100%	83%	17%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	79.15	25.66	76%	24%
URBAN	115.10	69.91	62%	38%

PRODUCT SHARE (2019)

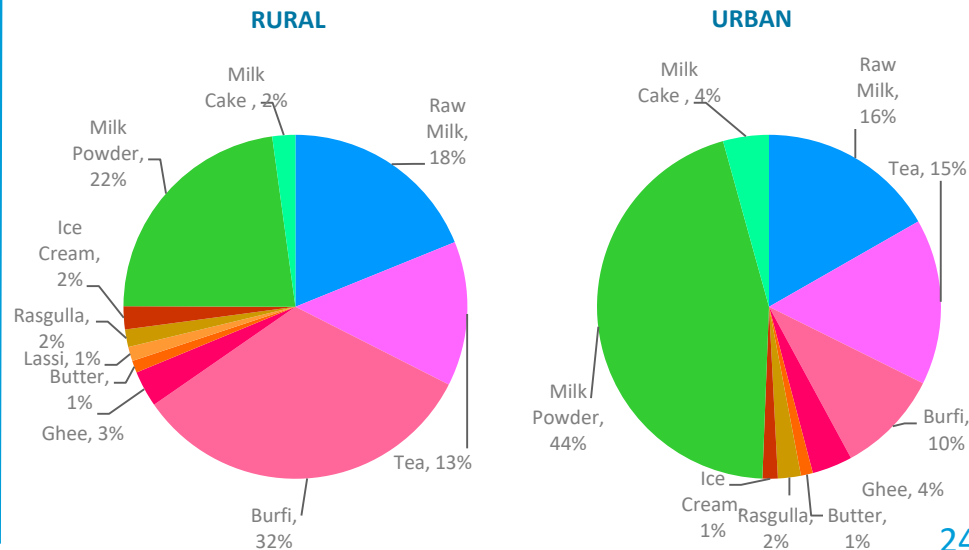


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	1.9	1.04	0.77	0.27	54
	URBAN	0.9	0.62	0.45	0.16	68
	TOTAL	2.8	1.65	1.23	0.43	59
%	RURAL	68%	100%	74%	26%	
	URBAN	32%	100%	74%	26%	
	TOTAL	100%	100%	74%	26%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	2.1	2.35	1.78	0.58	111
	URBAN	1.1	1.16	0.87	0.30	105
	TOTAL	3.2	3.52	2.64	0.87	109
%	RURAL	66%	100%	76%	24%	
	URBAN	34%	100%	74%	26%	
	TOTAL	100%	100%	75%	25%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.33	0.71	32%	68%
URBAN	0.19	0.42	31%	69%

PRODUCT SHARE (2019)

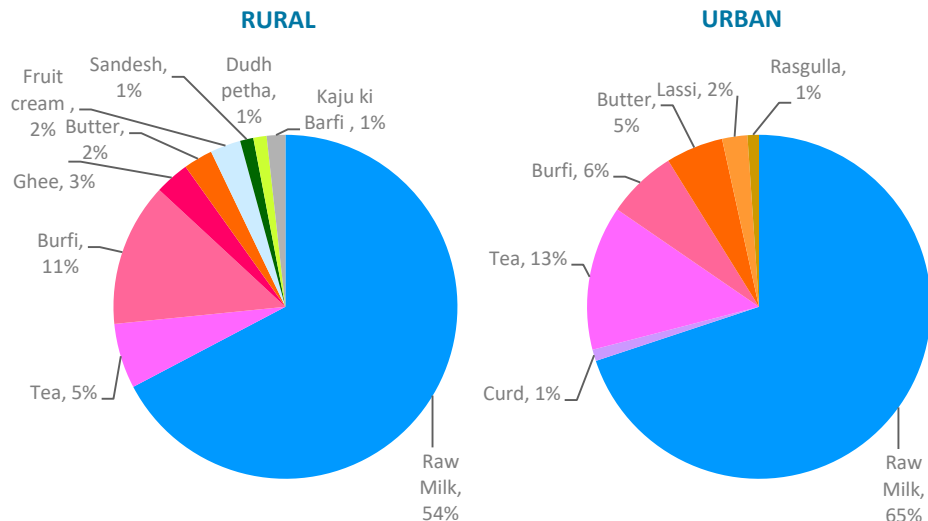


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	2.7	1.95	1.53	0.41	71
	URBAN	0.7	0.53	0.37	0.16	72
	TOTAL	3.5	2.48	1.90	0.58	71
%	RURAL	79%	100%	79%	21%	
	URBAN	21%	100%	69%	31%	
	TOTAL	100%	100%	77%	23%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	3.2	1.12	0.93	0.20	35
	URBAN	1.0	0.38	0.27	0.11	39
	TOTAL	4.2	1.50	1.19	0.31	36
%	RURAL	77%	100%	83%	17%	
	URBAN	23%	100%	70%	30%	
	TOTAL	100%	100%	79%	21%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	1.15	0.80	59%	41%
URBAN	0.41	0.12	77%	23%

PRODUCT SHARE (2019)



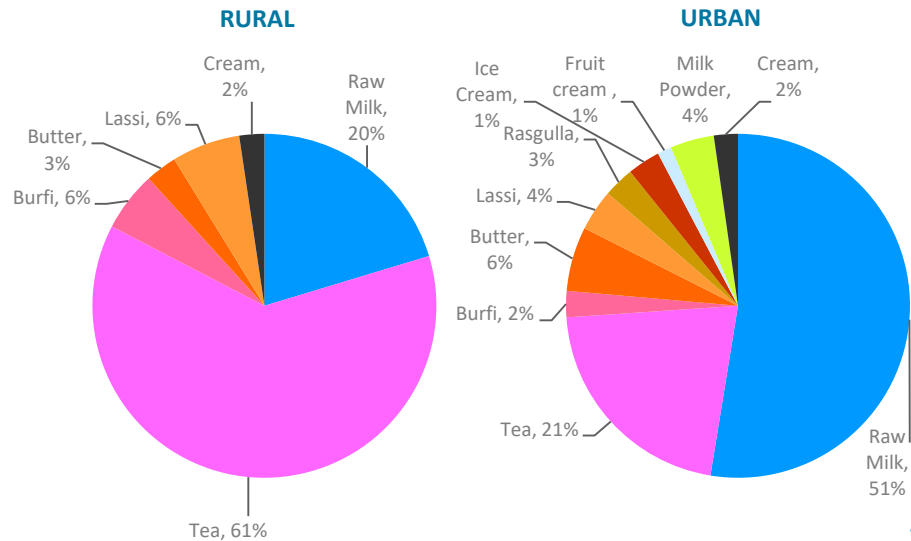
MIZORAM

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.6	0.23	0.16	0.07	39
	URBAN	0.6	0.92	0.57	0.35	144
	TOTAL	1.2	1.15	0.73	0.42	94
%	RURAL	48%	100%	70%	30%	
	URBAN	52%	100%	62%	38%	
	TOTAL	100%	100%	64%	36%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.7	2.05	1.50	0.56	312
	URBAN	0.8	4.53	2.85	1.68	601
	TOTAL	1.4	6.58	4.35	2.23	466
%	RURAL	47%	100%	73%	27%	
	URBAN	53%	100%	63%	37%	
	TOTAL	100%	100%	66%	34%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.19	0.04	81%	19%
URBAN	0.66	0.26	72%	28%

PRODUCT SHARE (2019)



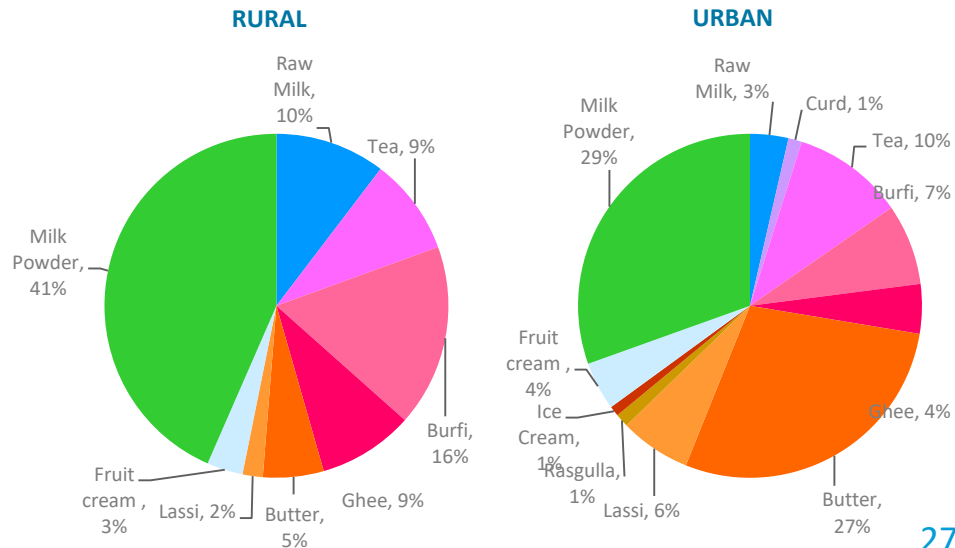
NAGALAND

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.7	1.02	0.76	0.26	151
	TOTAL	2.2	2.22	1.71	0.51	100
	RURAL	70%	100%	79%	21%	
%	URBAN	30%	100%	74%	26%	
	TOTAL	100%	100%	77%	23%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	0.8	1.97	1.46	0.51	237
	TOTAL	2.6	3.89	3.00	0.90	151
	RURAL	68%	100%	80%	20%	
%	URBAN	32%	100%	74%	26%	
	TOTAL	100%	100%	77%	23%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.22	0.98	18%	82%
URBAN	0.14	0.89	13%	87%

PRODUCT SHARE (2019)



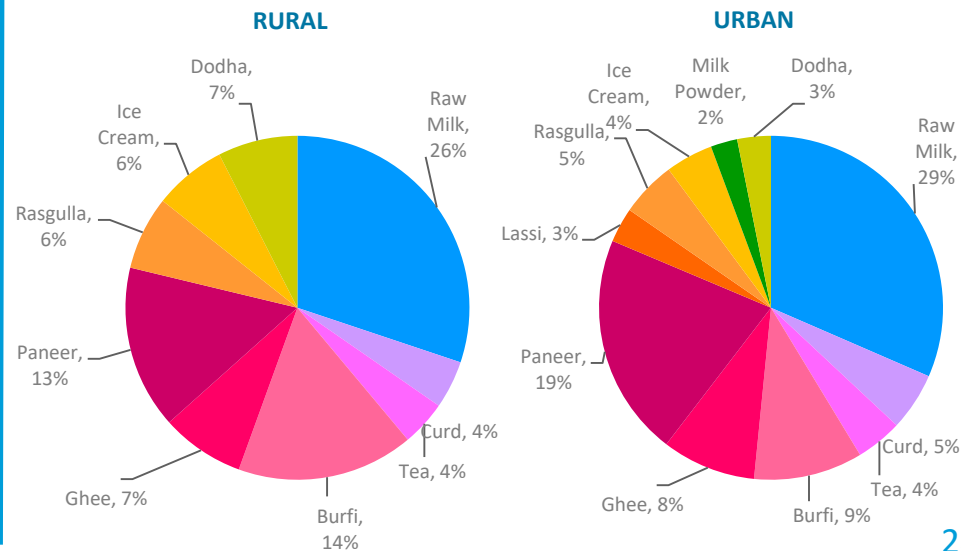
ODISHA

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	36.6	65.49	34.53	30.95	179
	URBAN	7.9	24.19	15.59	8.60	307
	TOTAL	44.5	89.67	50.12	39.55	201
%	RURAL	82%	100%	53%	47%	
	URBAN	18%	100%	64%	36%	
	TOTAL	100%	100%	56%	44%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	38.8	170.54	86.06	84.48	440
	URBAN	9.1	44.66	28.52	16.14	490
	TOTAL	47.9	215.20	114.57	100.63	450
%	RURAL	81%	100%	50%	50%	
	URBAN	19%	100%	64%	36%	
	TOTAL	100%	100%	53%	47%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	19.54	45.95	30%	70%
URBAN	7.95	16.24	33%	67%

PRODUCT SHARE (2019)



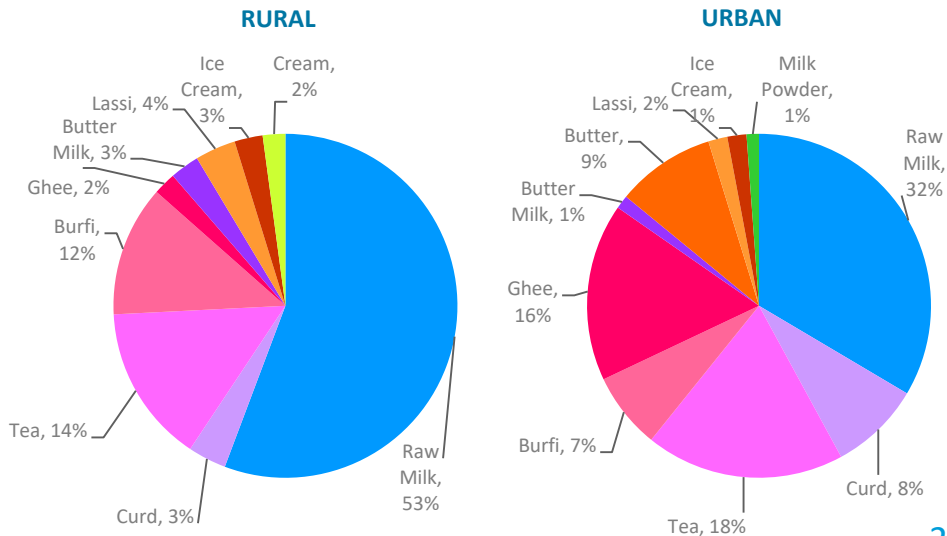
PUDUCHERRY

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.4	0.99	0.81	0.18	252
	URBAN	0.9	4.89	4.38	0.51	533
	TOTAL	1.3	5.88	5.19	0.69	449
%	RURAL	30%	100%	82%	18%	
	URBAN	70%	100%	90%	10%	
	TOTAL	100%	100%	88%	12%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	0.4	0.54	0.43	0.11	140
	URBAN	1.0	4.39	3.93	0.46	437
	TOTAL	1.4	4.94	4.36	0.58	354
%	RURAL	28%	100%	79%	21%	
	URBAN	72%	100%	89%	11%	
	TOTAL	100%	100%	88%	12%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	0.66	0.33	66%	34%
URBAN	2.42	2.48	49%	51%

PRODUCT SHARE (2019)



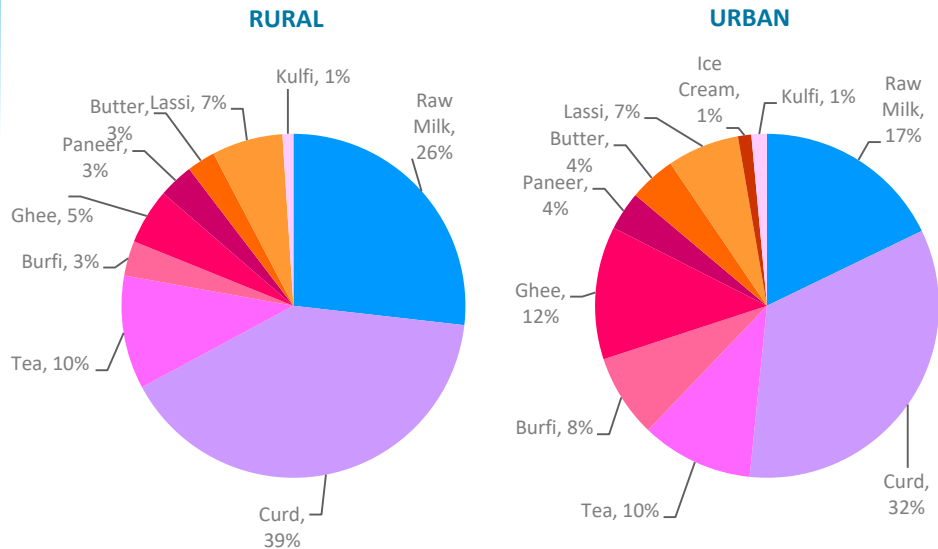
PUNJAB

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	18.2	119.76	110.29	9.47	657
	URBAN	11.7	74.34	62.36	11.98	634
	TOTAL	30.0	194.10	172.65	21.45	648
%	RURAL	61%	100%	92%	8%	
	URBAN	39%	100%	84%	16%	
	TOTAL	100%	100%	89%	11%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	19.4	133.61	122.26	11.34	689
	URBAN	13.6	99.61	83.39	16.22	733
	TOTAL	33.0	233.21	205.65	27.56	707
%	RURAL	59%	100%	92%	8%	
	URBAN	41%	100%	84%	16%	
	TOTAL	100%	100%	88%	12%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	43.70	76.06	36%	64%
URBAN	20.21	54.13	27%	73%

PRODUCT SHARE (2019)



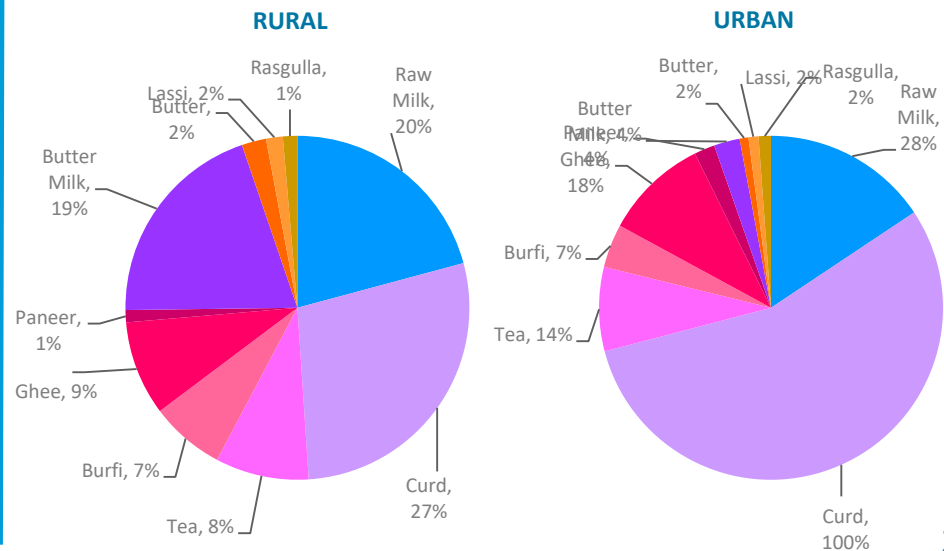
RAJASTHAN

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	56.7	274.72	244.00	30.71	485
	URBAN	20.2	117.06	81.27	35.79	579
	TOTAL	76.9	391.78	325.28	66.50	510
%	RURAL	74%	100%	89%	11%	
	URBAN	26%	100%	69%	31%	
	TOTAL	100%	100%	83%	17%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	63.7	383.47	338.68	44.79	602
	URBAN	24.9	174.07	120.70	53.37	699
	TOTAL	88.5	557.53	459.38	98.16	630
%	RURAL	72%	100%	88%	12%	
	URBAN	28%	100%	69%	31%	
	TOTAL	100%	100%	82%	18%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	77.63	197.09	28%	72%
URBAN	49.82	67.24	43%	57%

PRODUCT SHARE (2019)

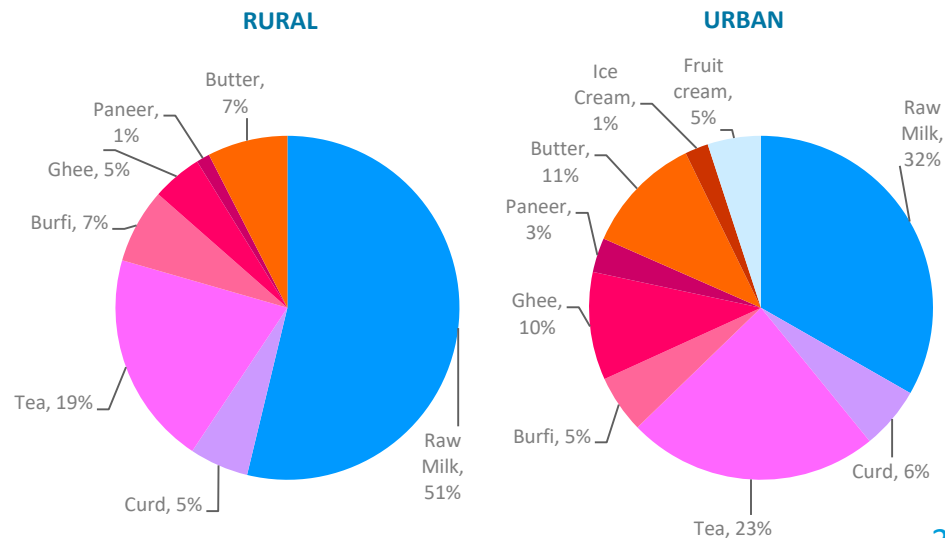


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	0.5	1.44	1.13	0.30	304
	URBAN	0.2	0.65	0.46	0.18	381
	TOTAL	0.6	2.08	1.60	0.48	324
%	RURAL	74%	100%	79%	21%	
	URBAN	26%	100%	72%	28%	
	TOTAL	100%	100%	77%	23%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	0.5	1.10	0.90	0.20	223
	URBAN	0.2	0.74	0.53	0.21	382
	TOTAL	0.7	1.84	1.43	0.41	268
%	RURAL	72%	100%	81%	19%	
	URBAN	28%	100%	72%	28%	
	TOTAL	100%	100%	78%	22%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	1.01	0.42	71%	29%
URBAN	0.35	0.30	54%	46%

PRODUCT SHARE (2019)



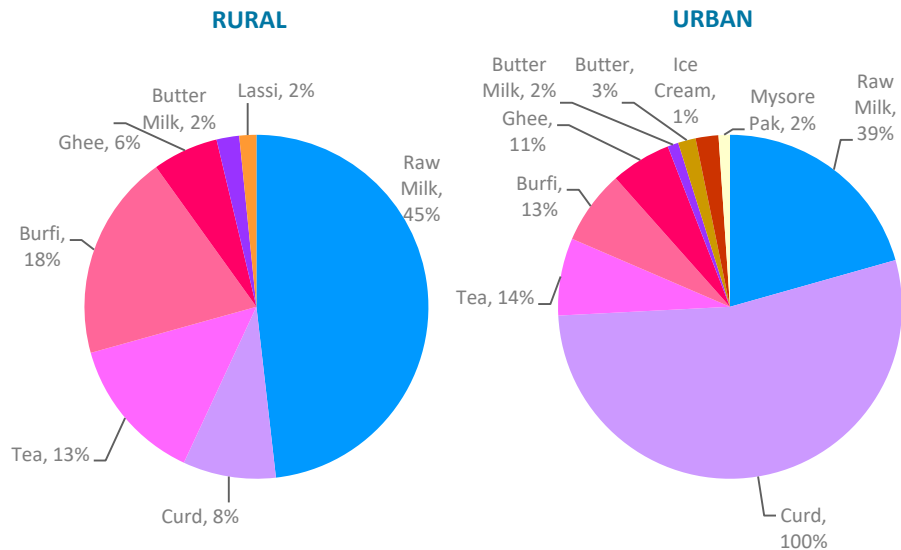
TAMIL NADU

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
	URBAN	38.7	130.44	99.14	31.30	337
	TOTAL	77.4	240.79	186.19	54.60	311
	RURAL	50%	100%	79%	21%	
%	URBAN	50%	100%	76%	24%	
	TOTAL	100%	100%	77%	23%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
	URBAN	43.9	155.10	117.51	37.59	353
	TOTAL	84.6	249.92	190.95	58.97	295
	RURAL	48%	100%	77%	23%	
%	URBAN	52%	100%	76%	24%	
	TOTAL	100%	100%	76%	24%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	64.15	46.20	58%	42%
URBAN	67.95	62.48	52%	48%

PRODUCT SHARE (2019)



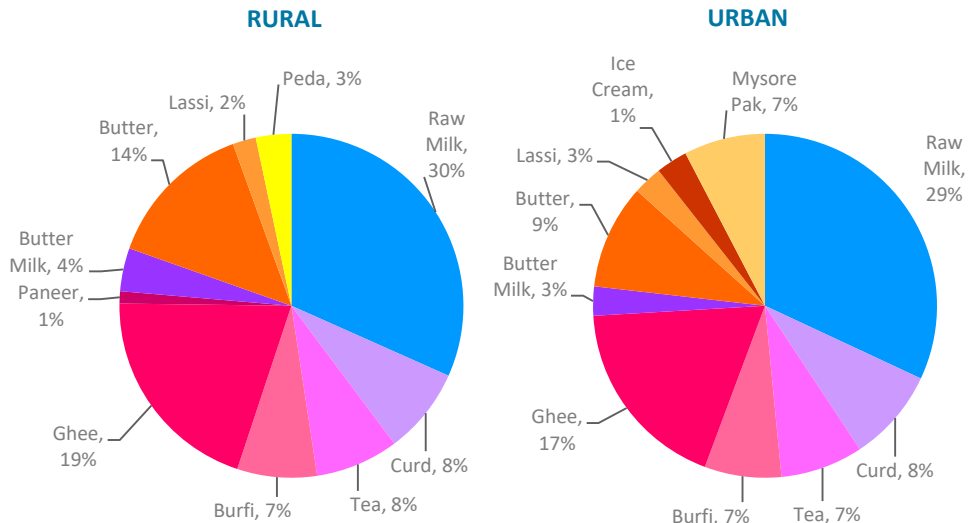
TELANGANA

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	23.1	76.68	46.00	30.68	332
	URBAN	15.4	77.32	52.07	25.25	501
	TOTAL	38.5	154.00	98.07	55.93	400
%	RURAL	60%	100%	60%	40%	
	URBAN	40%	100%	67%	33%	
	TOTAL	100%	100%	64%	36%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	25.1	115.74	68.41	47.32	462
	URBAN	18.0	138.97	93.06	45.91	772
	TOTAL	43.1	254.71	161.47	93.23	591
%	RURAL	58%	100%	59%	41%	
	URBAN	42%	100%	67%	33%	
	TOTAL	100%	100%	63%	37%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	29.03	47.64	38%	62%
URBAN	28.09	49.23	36%	64%

PRODUCT SHARE (2019)

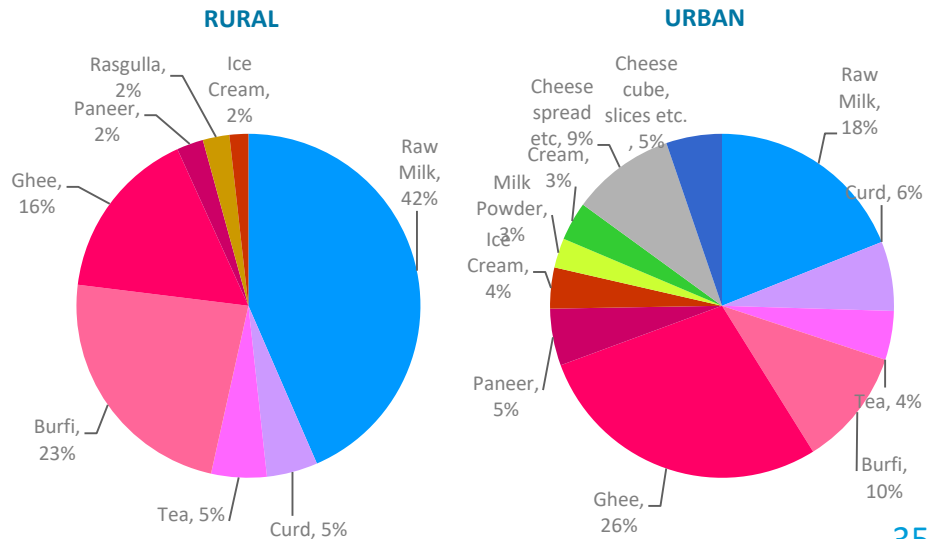


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	1.1	2.46	2.07	0.39	216
	TOTAL	4.1	4.89	3.72	1.17	120
	RURAL	72%	100%	68%	32%	
%	URBAN	28%	100%	84%	16%	
	TOTAL	100%	100%	76%	24%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
	URBAN	1.4	9.64	8.11	1.52	686
	TOTAL	4.7	14.83	11.79	3.03	318
	RURAL	70%	100%	71%	29%	
%	URBAN	30%	100%	84%	16%	
	TOTAL	100%	100%	80%	20%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	1.14	1.30	47%	53%
URBAN	0.54	1.92	22%	78%

PRODUCT SHARE (2019)



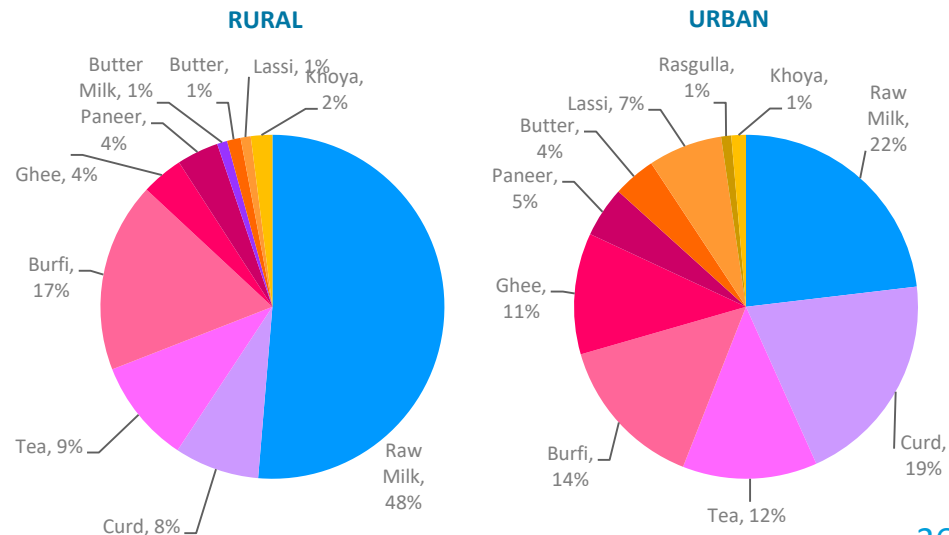
UTTAR PRADESH

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	170.3	542.16	463.82	78.34	318
	URBAN	53.1	263.13	220.84	42.29	496
	TOTAL	223.4	805.29	684.66	120.63	360
%	RURAL	76%	100%	86%	14%	
	URBAN	24%	100%	84%	16%	
	TOTAL	100%	100%	85%	15%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	190.7	896.31	751.00	145.30	470
	URBAN	65.8	493.68	413.55	80.12	750
	TOTAL	256.5	1389.98	1164.56	225.43	542
%	RURAL	74%	100%	84%	16%	
	URBAN	26%	100%	84%	16%	
	TOTAL	100%	100%	84%	16%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	311.92	230.24	58%	42%
URBAN	89.32	173.81	34%	66%

PRODUCT SHARE (2019)

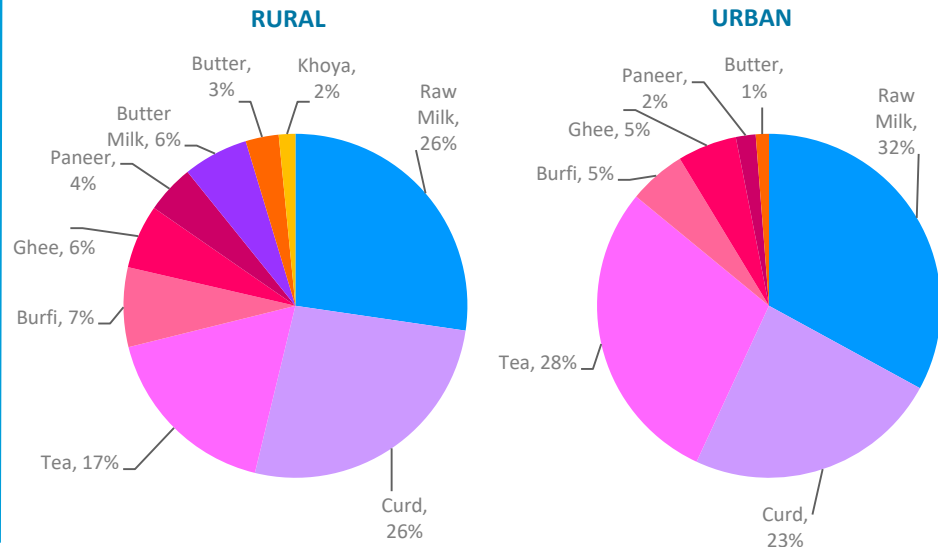


ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	7.7	34.04	31.04	3.00	442
	URBAN	3.6	13.94	12.87	1.06	384
	TOTAL	11.3	47.98	43.91	4.07	423
%	RURAL	68%	100%	91%	9%	
	URBAN	32%	100%	92%	8%	
	TOTAL	100%	100%	92%	8%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	RURAL	8.6	34.15	30.98	3.16	396
	URBAN	4.5	18.19	16.77	1.42	405
	TOTAL	13.1	52.33	47.75	4.58	399
%	RURAL	66%	100%	91%	9%	
	URBAN	34%	100%	92%	8%	
	TOTAL	100%	100%	91%	9%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	14.62	19.42	43%	57%
URBAN	8.37	5.57	60%	40%

PRODUCT SHARE (2019)



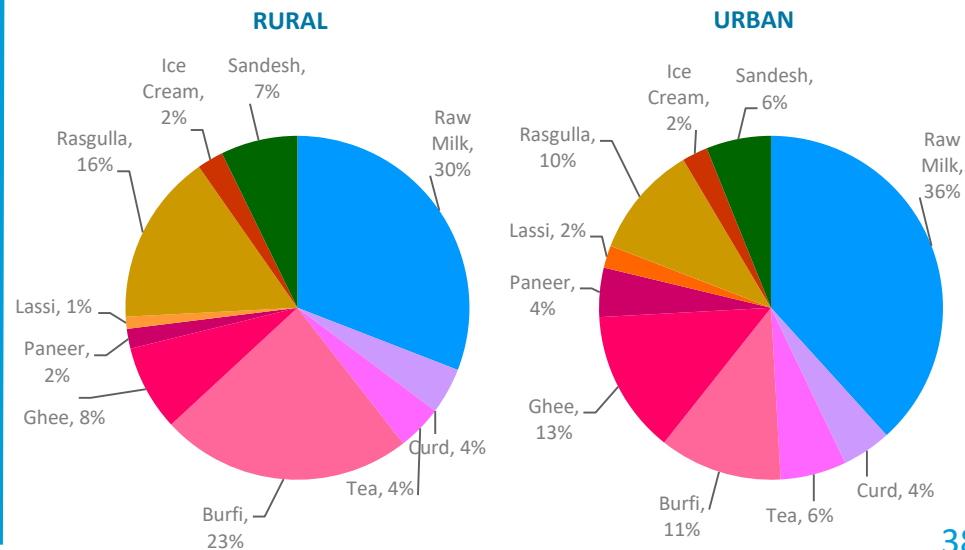
WEST BENGAL

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	66.0	122.86	96.91	25.95	186
	URBAN	33.0	77.69	59.75	17.94	235
	TOTAL	99.0	200.55	156.66	43.89	203
%	RURAL	67%	100%	79%	21%	
	URBAN	33%	100%	77%	23%	
	TOTAL	100%	100%	78%	22%	

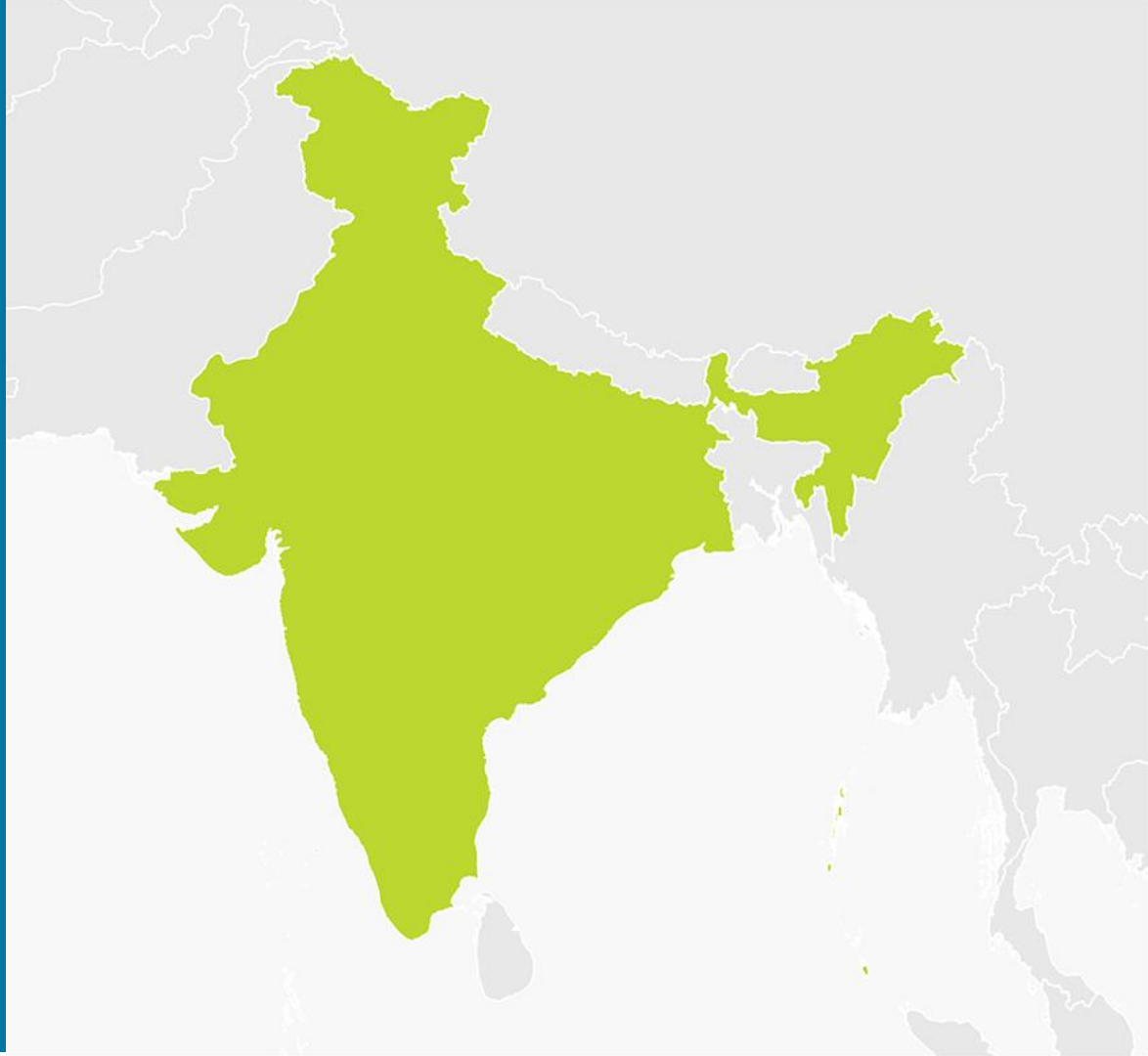
PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
	Sector	Population	HH Consumption	Consumption		Per Capita (ml)
				At Home	Out of Home	
LLPD	RURAL	71.0	217.49	165.24	52.25	306
	URBAN	38.5	129.70	98.47	31.22	337
	TOTAL	109.5	347.19	263.72	83.47	317
%	RURAL	65%	100%	76%	24%	
	URBAN	35%	100%	76%	24%	
	TOTAL	100%	100%	76%	24%	

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
RURAL	41.79	81.07	34%	66%
URBAN	32.88	44.81	42%	58%

PRODUCT SHARE (2019)



**Analysis of million
plus population
cities**



VISHAKHAPATNAM (MN+)

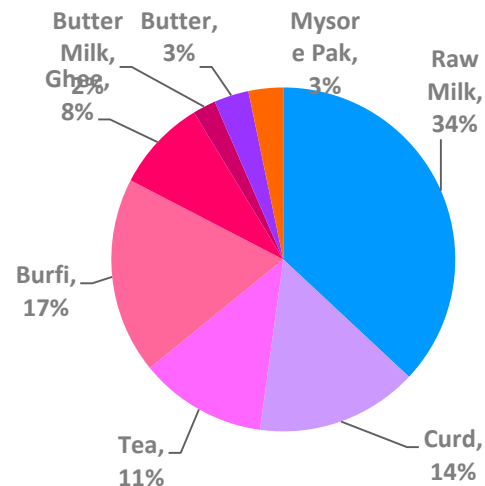
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.99	5.39	4.33	1.06	271	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.36	8.83	6.51	2.32	375	
% URBAN		100	74%	26%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.43	2.95	45%	55%

PRODUCT SHARE (2019)

URBAN



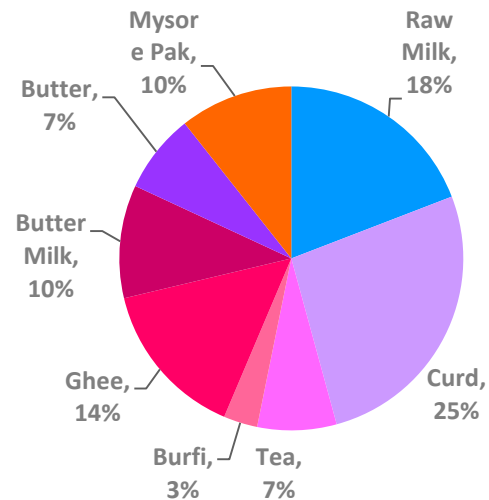
VIJAYAWADA UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.81	5.40	4.19	1.21	298	
% URBAN		100	78%	22%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.31	10.95	8.28	2.67	473	
% URBAN		100	76%	24%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.31	4.09	24%	76%

PRODUCT SHARE (2019) URBAN



GUWAHATI UA (MN+)

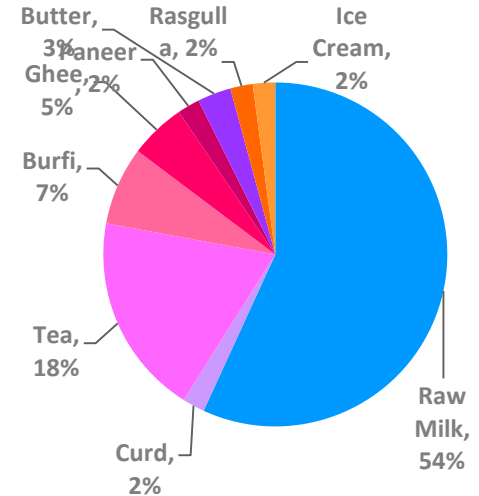
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.08	1.81	1.43	0.38	168	
% URBAN		100	79%	21%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.23	4.73	3.68	1.05	385	
% URBAN		100	78%	22%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.29	0.51	72%	28%

PRODUCT SHARE (2019)

URBAN



PATNA UA (MN+)

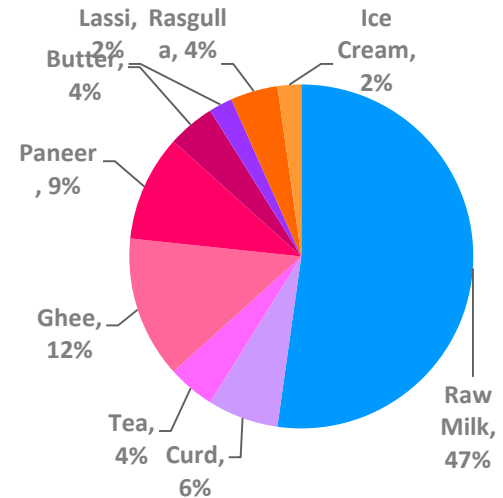
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.23	8.62	6.64	1.98	387	
% URBAN		100	77%	23%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.44	20.62	15.58	5.03	844	
% URBAN		100	76%	24%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.42	4.20	51%	49%

PRODUCT SHARE (2019)

URBAN



CHANDIGARH UA (MN+)

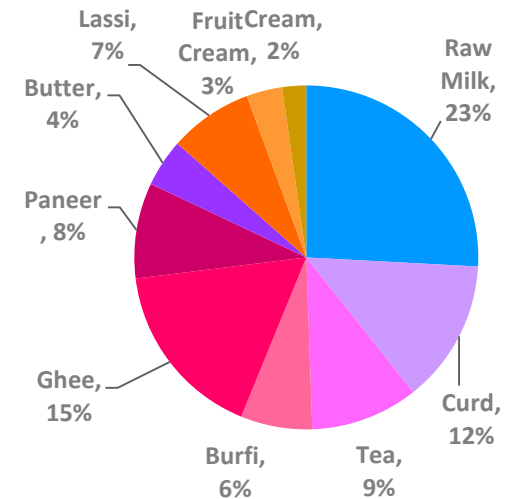
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.11	8.11	5.67	2.44	729	
% URBAN		100	70%	30%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.22	15.90	11.05	4.85	1299	
% URBAN		100	69%	31%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.60	5.51	32%	68%

PRODUCT SHARE (2019)

URBAN



DURG-BHILAINAGAR UA (MN+)

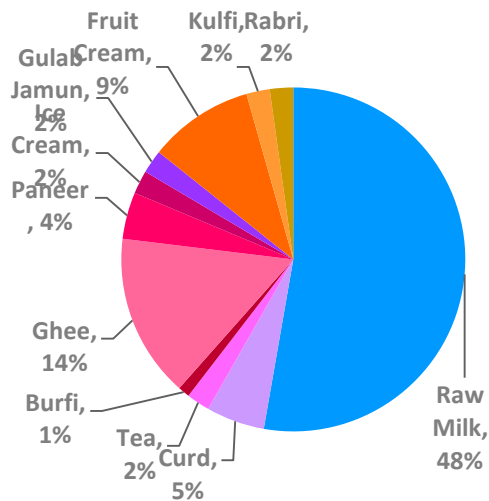
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.26	2.67	1.86	0.81	212	
% URBAN		100	70%	30%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.34	1.33	50%	50%

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.55	5.15	3.33	1.82	332	
% URBAN		100	65%	35%		

PRODUCT SHARE (2019)

URBAN



RAIPUR UA (MN+)

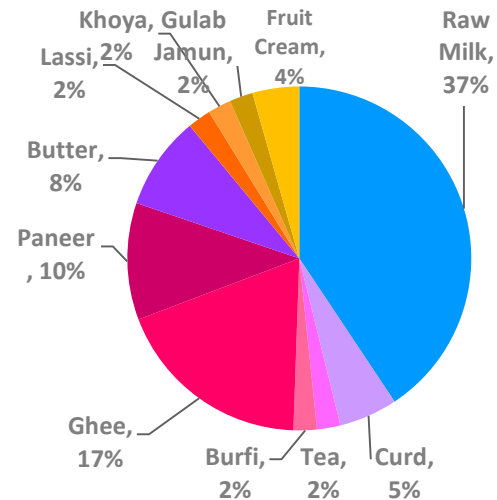
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.42	3.86	3.10	0.76	272	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.88	7.41	5.84	1.56	394	
% URBAN		100	79%	21%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.50	2.36	39%	61%

PRODUCT SHARE (2019)

URBAN



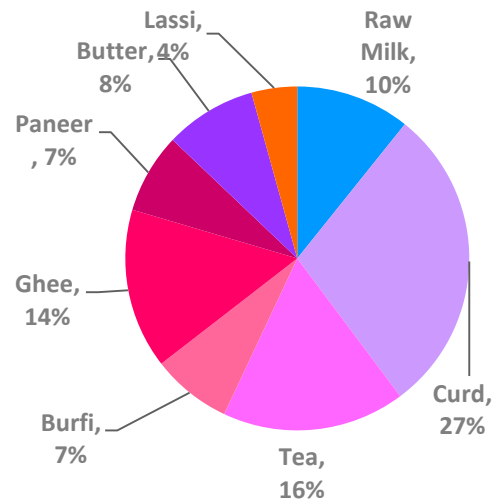
DELHI UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	17.94	104.41	87.60	16.81	582	
% URBAN		100	84%	16%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	19.32	170.02	143.45	26.57	880	
% URBAN		100	84%	16%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	26.76	77.65	26%	74%

PRODUCT SHARE (2019)
URBAN



AHMEDABAD UA (MN+)

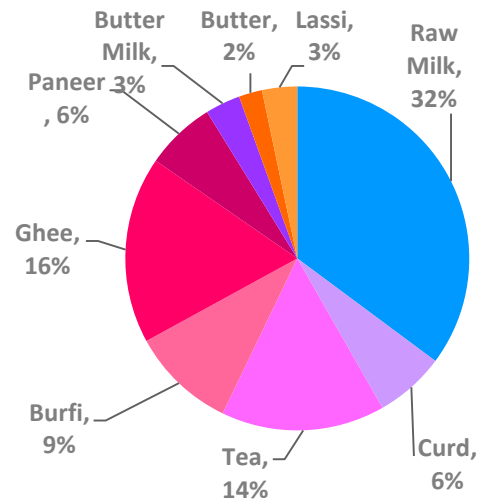
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	7.20	31.79	20.43	11.36	441	
% URBAN		100	64%	36%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	8.37	64.89	40.79	24.10	775	
% URBAN		100	63%	37%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	14.47	17.32	46%	54%

PRODUCT SHARE (2019)

URBAN



RAJKOT UA (MN+)

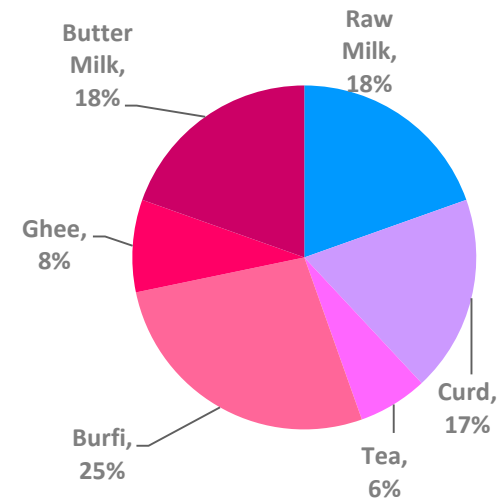
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.65	10.20	8.01	2.19	618	
% URBAN		100	79%	21%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.03	20.38	15.68	4.70	1005	
% URBAN		100	77%	23%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.49	7.71	24%	76%

PRODUCT SHARE (2019)

URBAN



SURAT UA (MN+)

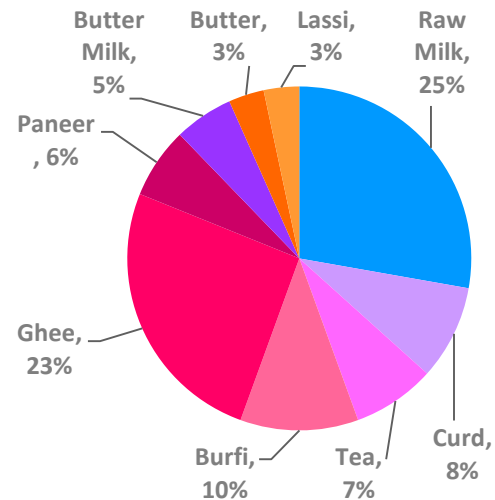
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	5.30	33.05	23.67	9.39	624	
% URBAN		100	72%	28%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	6.29	67.84	47.88	19.95	1079	
% URBAN		100	71%	29%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	10.47	22.59	32%	68%

PRODUCT SHARE (2019)

URBAN



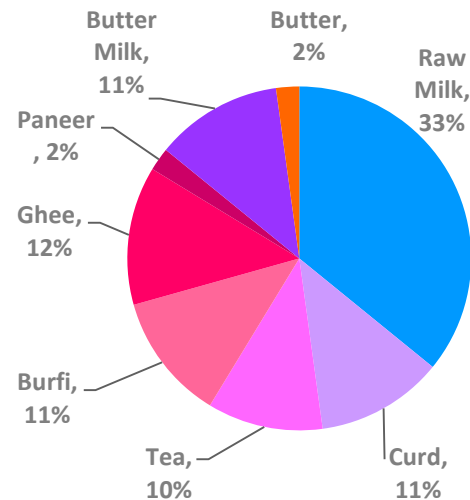
VADODARA UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.09	9.05	6.15	2.90	432	
% URBAN		100	68%	32%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.48	18.96	12.82	6.13	765	
% URBAN		100	68%	32%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.87	5.17	43%	57%

PRODUCT SHARE (2019) URBAN



FARIDABAD (M CORP.) (MN+)

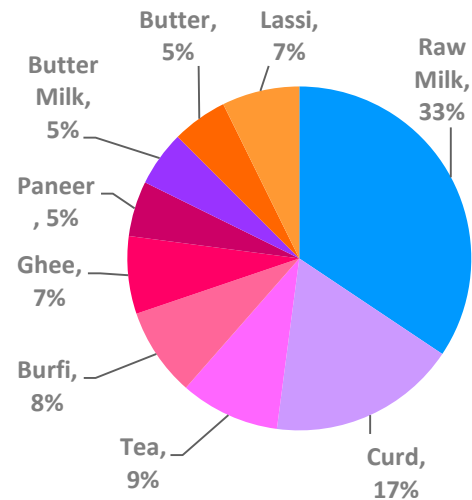
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.64	12.29	8.82	3.48	748	
% URBAN		100	72%	28%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.97	21.98	15.90	6.08	1115	
% URBAN		100	72%	28%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	5.10	7.20	41%	59%

PRODUCT SHARE (2019)

URBAN



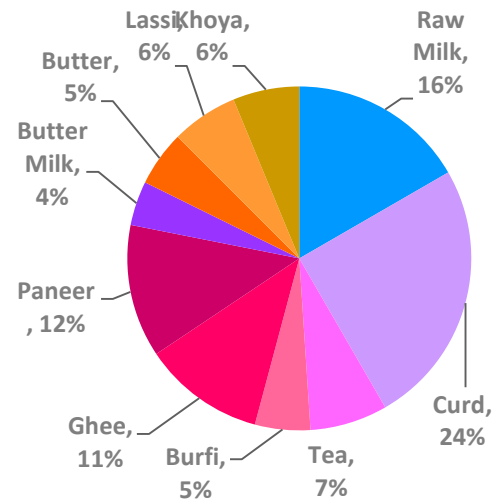
GURGAON UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.15	13.95	12.08	1.87	1216	
% URBAN		100	87%	13%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.53	26.67	23.33	3.34	1747	
% URBAN		100	87%	13%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.13	10.82	22%	78%

PRODUCT SHARE (2019)
URBAN



SRINAGAR UA (MN+)

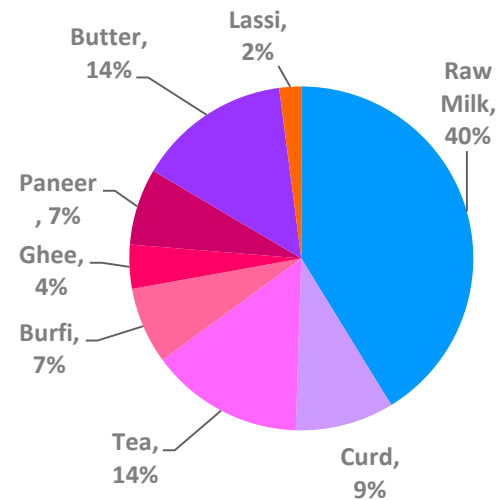
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.52	7.54	6.92	0.62	498	
% URBAN		100	92%	8%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.89	10.72	9.84	0.88	566	
% URBAN		100	92%	8%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.11	3.43	54%	46%

PRODUCT SHARE (2019)

URBAN



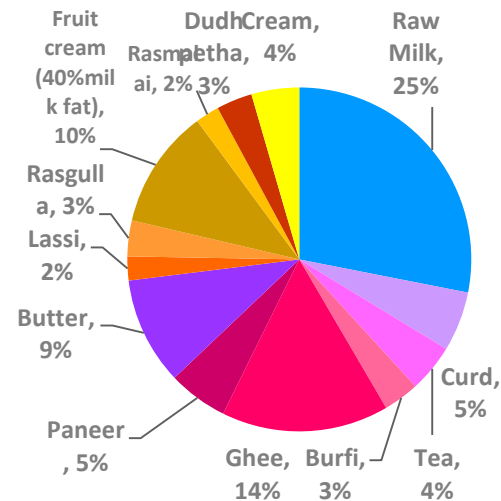
DHANBAD UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.39	6.47	4.76	1.71	466	
% URBAN		100	74%	26%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.65	10.03	7.37	2.65	607	
% URBAN		100	74%	26%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.91	4.55	30%	70%

PRODUCT SHARE (2019) URBAN



JAMSHEDPUR UA (MN+)

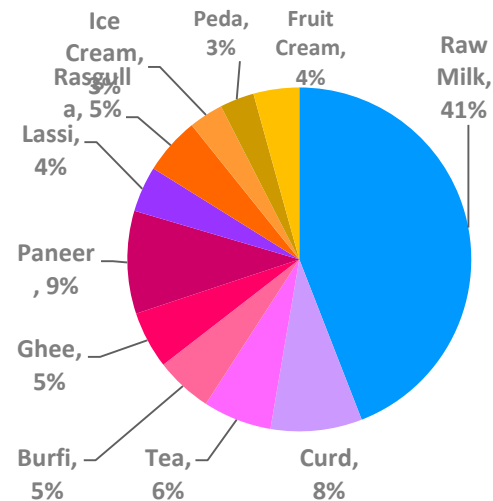
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.55	4.58	2.68	1.89	295	
% URBAN		100	59%	41%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.84	6.26	3.35	2.90	340	
% URBAN		100	54%	46%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.15	2.43	47%	53%

PRODUCT SHARE (2019)

URBAN



RANCHI UA (MN+)

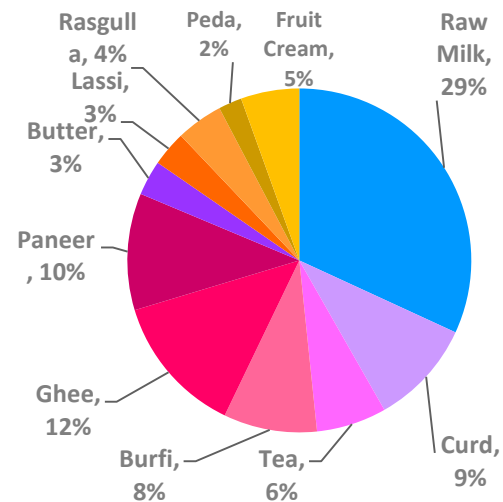
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.34	5.13	3.74	1.39	383	
% URBAN		100	73%	27%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.65	7.06	4.95	2.11	429	
% URBAN		100	70%	30%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.77	3.37	34%	66%

PRODUCT SHARE (2019)

URBAN



BANGALORE UA (MN+)

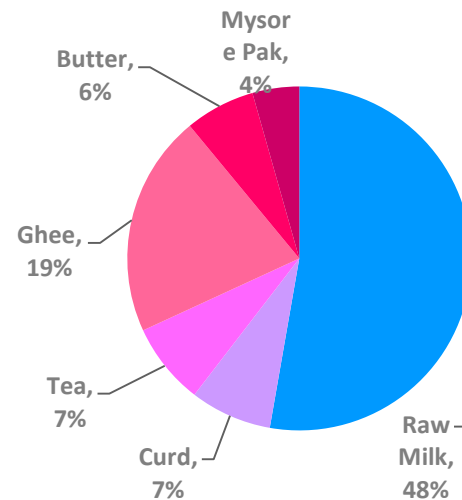
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	9.67	41.78	33.64	8.14	432	
% URBAN		100	81%	19%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	11.28	73.90	59.41	14.49	655	
% URBAN		100	80%	20%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	22.91	18.87	55%	45%

PRODUCT SHARE (2019)

URBAN



HUBLI-DHARWAD (M CORP.) (MN+)

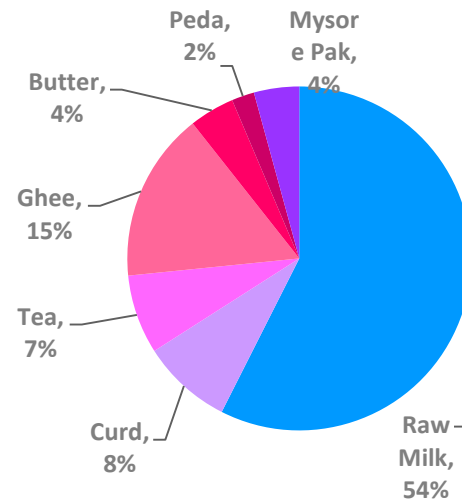
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.07	3.84	3.08	0.76	360	
% URBAN		100	80%	20%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.36	1.49	61%	39%

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.24	6.60	5.23	1.36	533	
% URBAN		100	79%	21%		

PRODUCT SHARE (2019)

URBAN



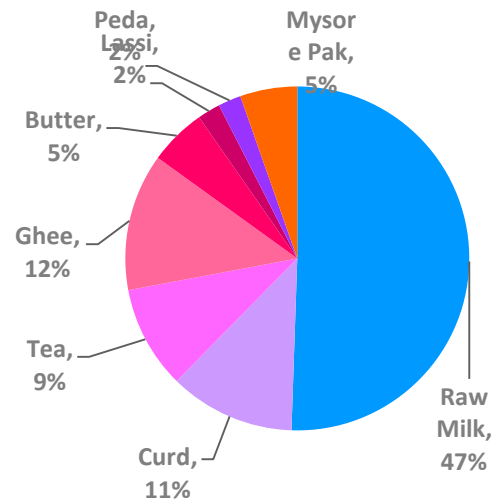
MYSORE UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.13	4.55	3.66	0.89	404	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.32	7.92	6.28	1.64	602	
% URBAN		100	79%	21%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.55	1.99	56%	44%

PRODUCT SHARE (2019)
URBAN



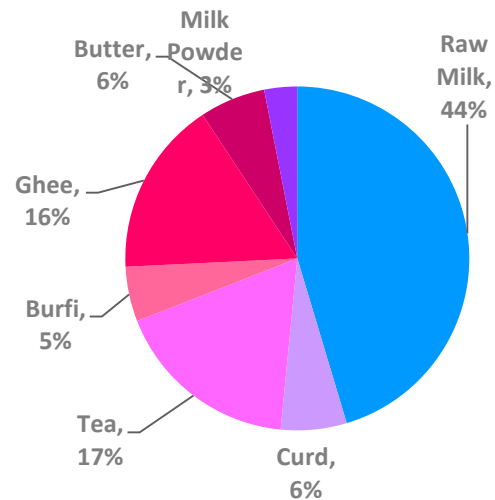
KANNUR UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.89	4.43	4.14	0.29	235	
% URBAN		100	93%	7%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.24	5.13	4.76	0.37	229	
% URBAN		100	93%	7%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.70	1.73	61%	39%

PRODUCT SHARE (2019)
URBAN



KOCHI UA (MN+)

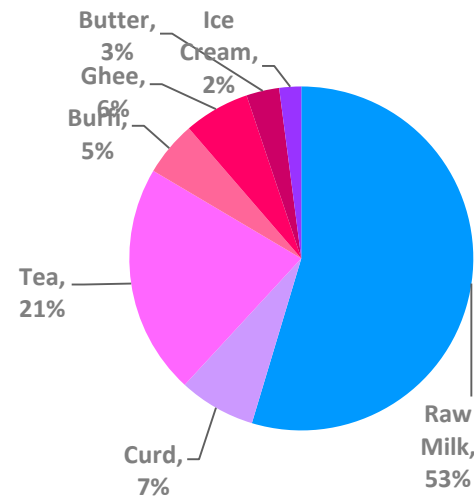
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.31	5.49	5.10	0.39	237	
% URBAN		100	93%	7%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.57	6.15	5.65	0.50	240	
% URBAN		100	92%	8%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.03	1.46	73%	27%

PRODUCT SHARE (2019)

URBAN



KOLLAM UA (MN+)

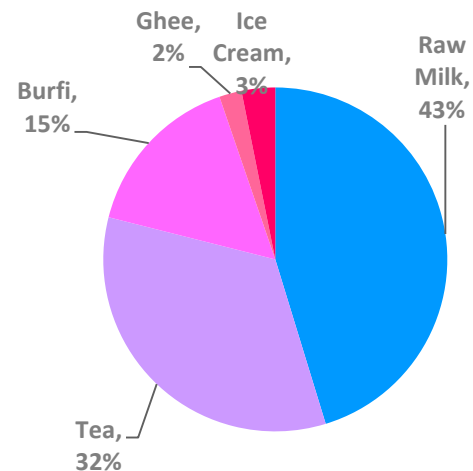
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.24	2.58	2.35	0.23	208	
% URBAN		100	91%	9%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.41	2.74	2.45	0.29	195	
% URBAN		100	90%	10%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.94	0.64	75%	25%

PRODUCT SHARE (2019)

URBAN



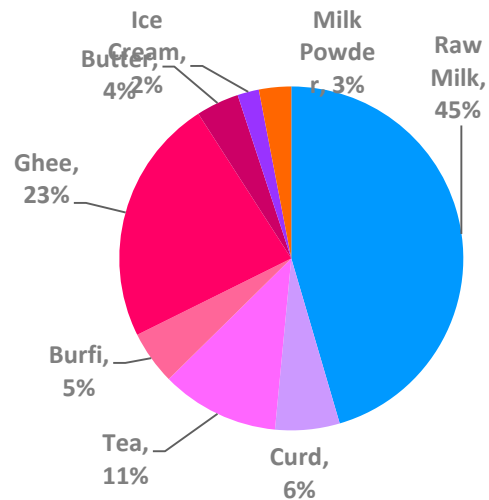
KOZHIKODE UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.29	5.50	5.06	0.44	240
%	URBAN		100	92%	8%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.65	6.16	5.63	0.54	233
%	URBAN		100	91%	9%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.07	2.43	56%	44%

PRODUCT SHARE (2019)
URBAN



MALAPPURAM UA (MN+)

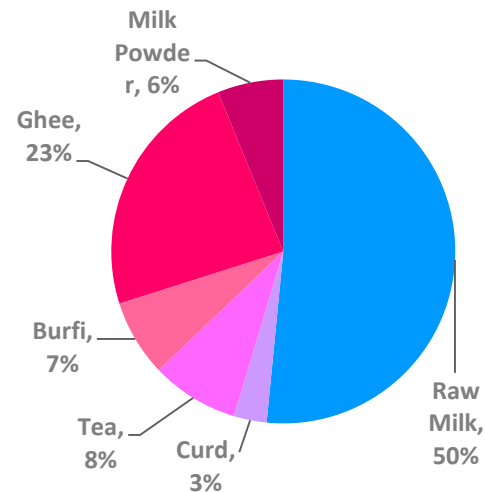
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.04	3.12	2.79	0.33	153	
% URBAN		100	89%	11%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.55	3.38	2.97	0.41	132	
% URBAN		100	88%	12%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.81	1.31	58%	42%

PRODUCT SHARE (2019)

URBAN



THIRUVANANTHAPURAM UA (MN+)

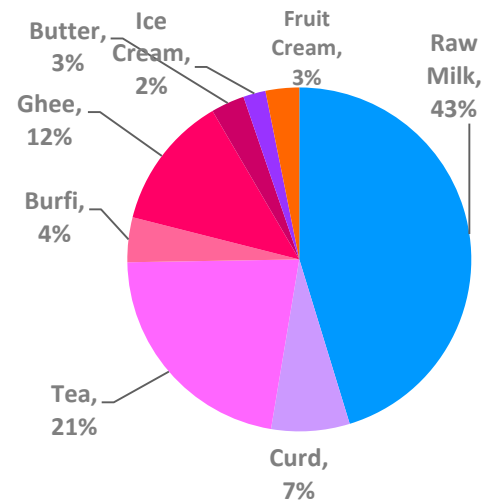
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.84	4.99	4.39	0.60	271	
% URBAN		100	88%	12%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.05	5.69	4.91	0.79	277	
% URBAN		100	86%	14%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.23	1.76	65%	35%

PRODUCT SHARE (2019)

URBAN



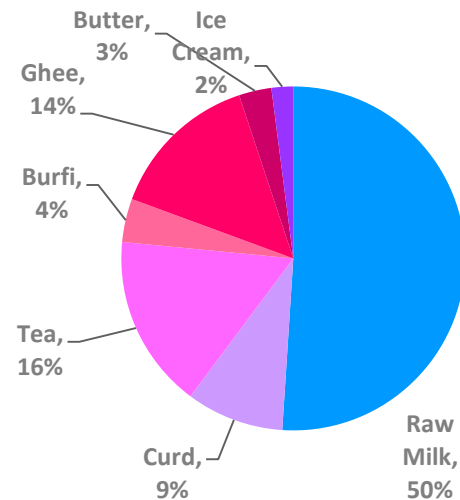
THRISSUR UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.05	4.55	4.15	0.41	222	
% URBAN		100	91%	9%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.31	5.08	4.58	0.51	220	
% URBAN		100	90%	10%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.99	1.56	66%	34%

PRODUCT SHARE (2019) URBAN



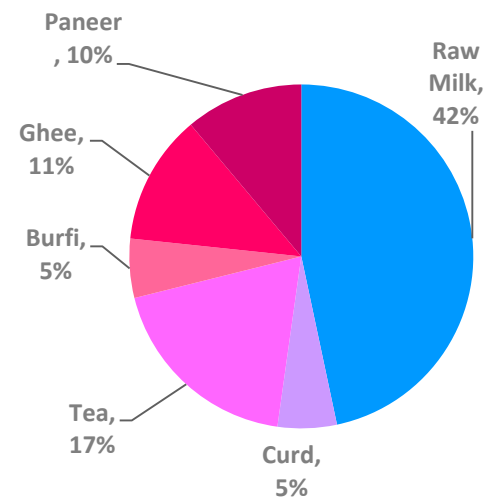
BHOPAL UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.18	6.97	5.42	1.55	319
%	URBAN		100	78%	22%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.61	22.15	17.08	5.07	849
%	URBAN		100	77%	23%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.11	2.86	59%	41%

PRODUCT SHARE (2019) URBAN



GWALIOR UA (MN+)

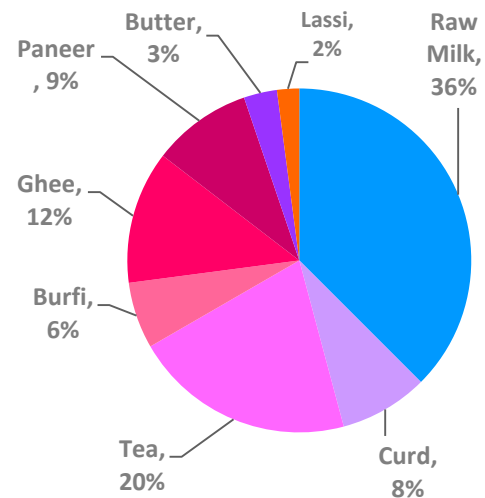
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.24	4.75	3.76	0.99	381	
% URBAN		100	79%	21%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.44	15.09	11.90	3.19	1047	
% URBAN		100	79%	21%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.66	2.09	56%	44%

PRODUCT SHARE (2019)

URBAN



INDORE UA (MN+)

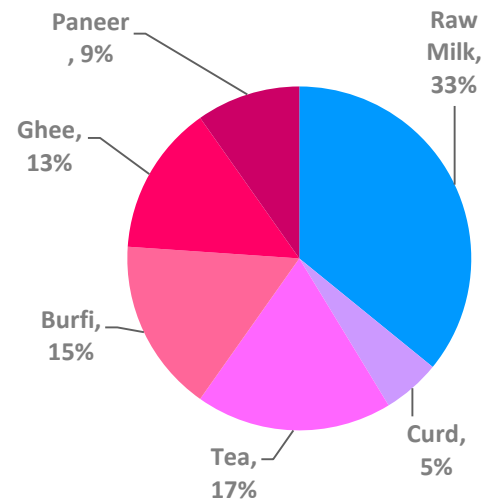
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.48	9.64	7.81	1.83	389	
% URBAN		100	81%	19%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.91	28.86	22.76	6.10	993	
% URBAN		100	79%	21%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.78	4.86	50%	50%

PRODUCT SHARE (2019)

URBAN



JABALPUR UA (MN+)

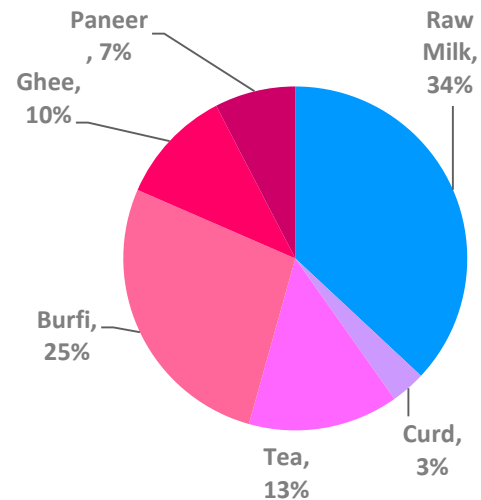
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.42	5.10	4.10	1.00	360	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.61	14.36	11.03	3.32	892	
% URBAN		100	77%	23%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.40	2.70	47%	53%

PRODUCT SHARE (2019)

URBAN



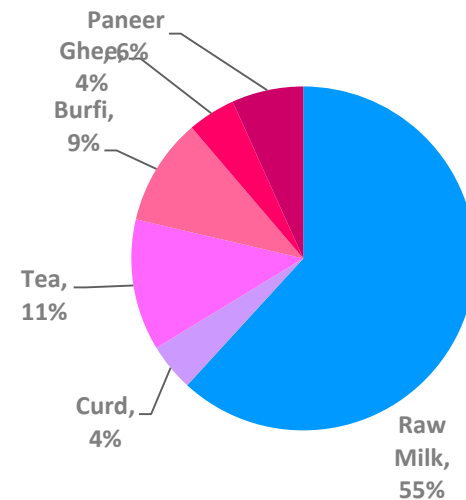
AURANGABAD UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.36	3.94	3.15	0.79	289	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.59	6.70	5.22	1.48	421	
% URBAN		100	78%	22%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.59	1.35	66%	34%

PRODUCT SHARE (2019) URBAN



GREATER MUMBAI UA (MN+)

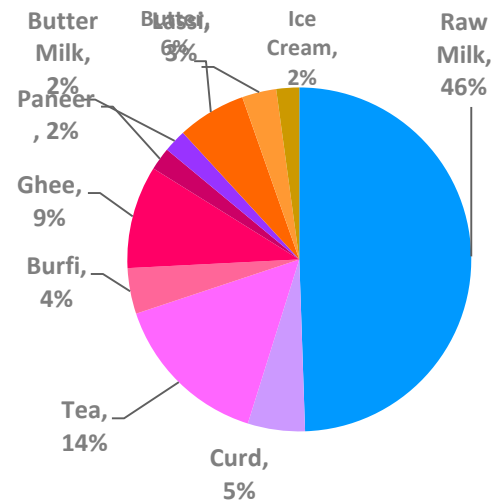
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	19.70	67.13	54.83	12.29	341
%	URBAN		100	82%	18%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	21.29	125.30	101.39	23.91	589
%	URBAN		100	81%	19%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	40.47	26.66	60%	40%

PRODUCT SHARE (2019)

URBAN



NAGPUR UA (MN+)

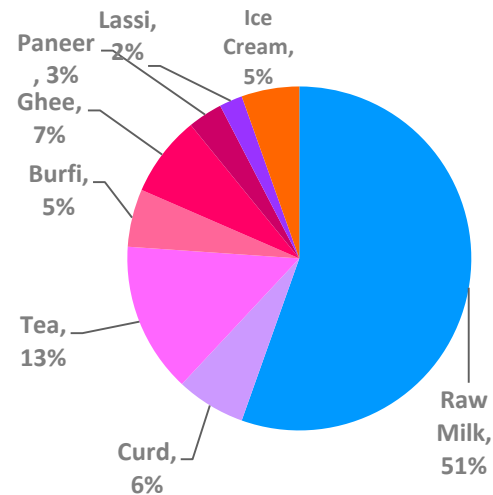
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.75	7.44	5.92	1.53	271
%	URBAN		100	79%	21%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	3.07	13.24	10.23	3.01	432
%	URBAN		100	77%	23%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.78	2.66	64%	36%

PRODUCT SHARE (2019)

URBAN



NASHIK UA (MN+)

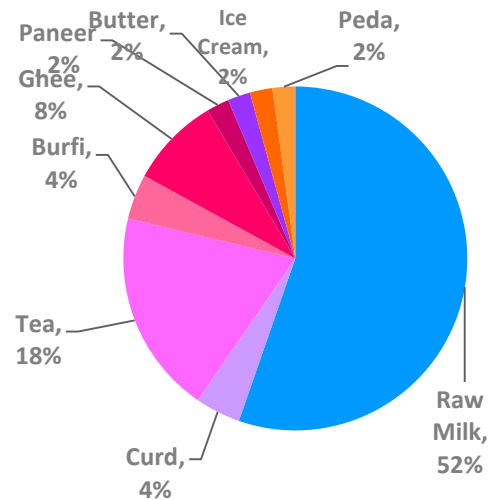
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.89	5.09	4.20	0.89	270	
% URBAN		100	83%	17%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.35	9.02	7.33	1.69	383	
% URBAN		100	81%	19%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.57	1.52	70%	30%

PRODUCT SHARE (2019)

URBAN



PUNE UA (MN+)

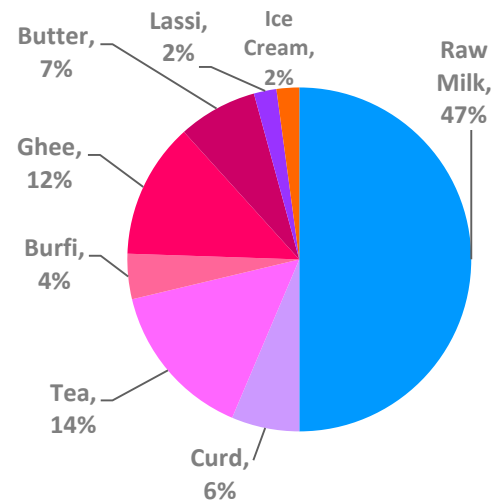
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	5.81	19.70	16.04	3.67	339
%	URBAN		100	81%	19%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	6.86	36.00	29.05	6.94	524
%	URBAN		100	81%	19%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	11.94	7.76	61%	39%

PRODUCT SHARE (2019)

URBAN



SOLAPUR (M CORP.) (MN+)

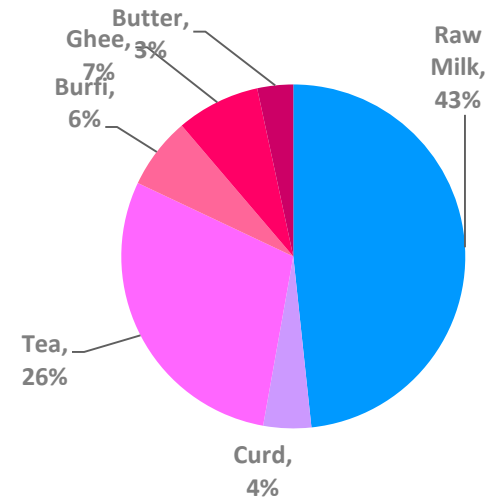
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.09	3.51	2.93	0.58	322	
% URBAN		100	83%	17%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.29	6.33	5.22	1.12	492	
% URBAN		100	82%	18%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.45	1.06	70%	30%

PRODUCT SHARE (2019)

URBAN



VASAI-VIRAR CITY (M CORP) (MN+)

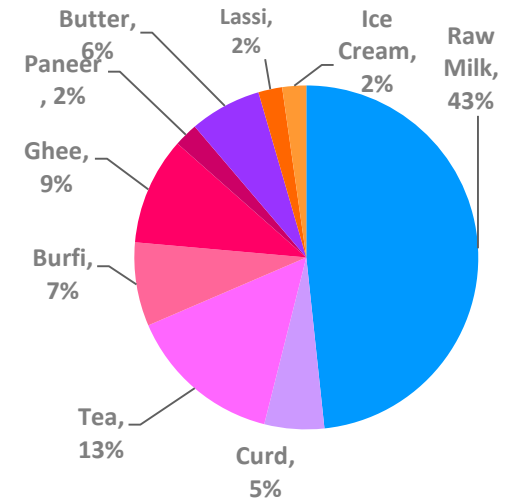
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.30	8.41	7.00	1.41	366	
% URBAN		100	83%	17%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	4.92	13.59	11.15	2.45	276	
% URBAN		100	82%	18%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.76	3.65	57%	43%

PRODUCT SHARE (2019)

URBAN



BHUBANESWAR UA (MN+)

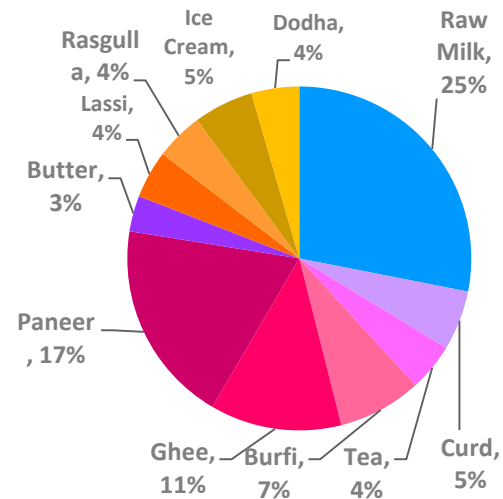
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.02	3.92	2.51	1.41	384	
% URBAN		100	64%	36%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.21	7.32	4.40	2.92	604	
% URBAN		100	60%	40%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.17	2.75	30%	70%

PRODUCT SHARE (2019)

URBAN



AMRITSAR UA (MN+)

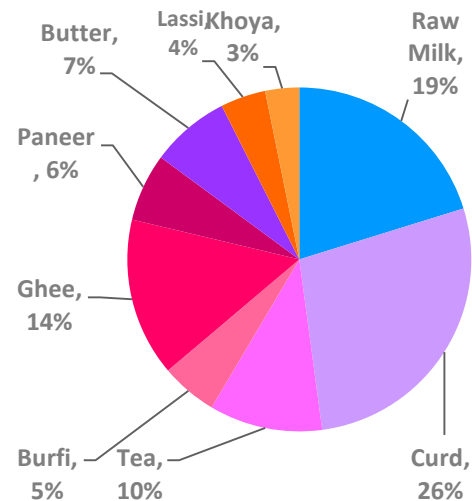
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.33	7.35	6.08	1.27	554	
% URBAN		100	83%	17%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.53	10.25	8.45	1.80	671	
% URBAN		100	82%	18%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.12	5.22	29%	71%

PRODUCT SHARE (2019)

URBAN



JALANDHAR UA (MN+)

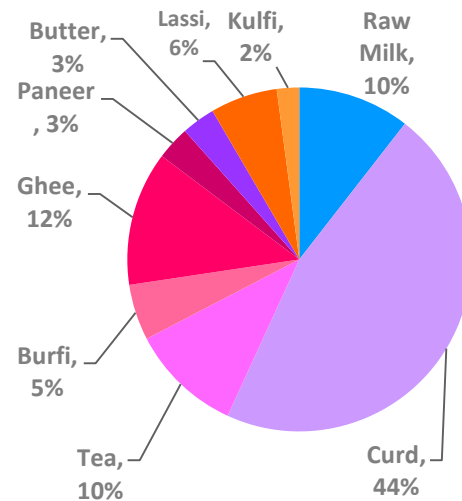
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	0.98	7.68	6.71	0.96	784	
% URBAN		100	87%	13%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.12	10.31	8.96	1.35	920	
% URBAN		100	87%	13%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.56	6.12	20%	80%

PRODUCT SHARE (2019)

URBAN



LUDHIANA (M CORP.) (MN+)

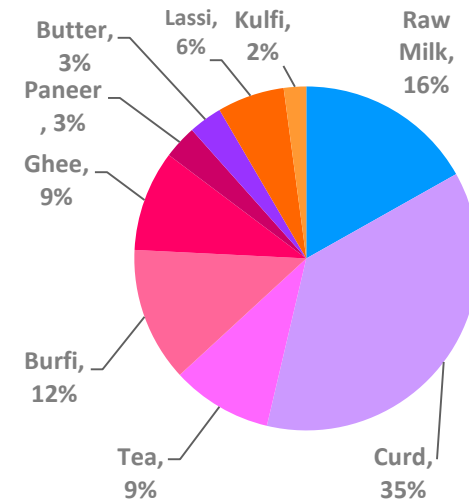
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.76	11.29	9.82	1.47	641	
% URBAN		100	87%	13%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.94	14.60	12.53	2.07	751	
% URBAN		100	86%	14%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.86	8.43	25%	75%

PRODUCT SHARE (2019)

URBAN



JAIPUR (M CORP.) (PART) (MN+)

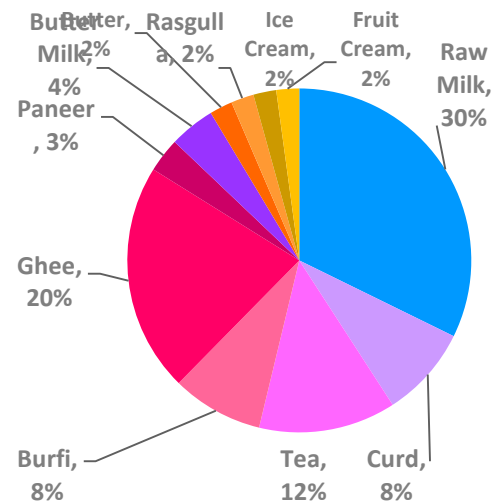
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.53	22.86	15.00	7.85	647	
% URBAN		100	66%	34%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	4.20	34.41	22.43	11.98	819	
% URBAN		100	65%	35%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	9.48	13.38	41%	59%

PRODUCT SHARE (2019)

URBAN



JODHPUR UA (MN+)

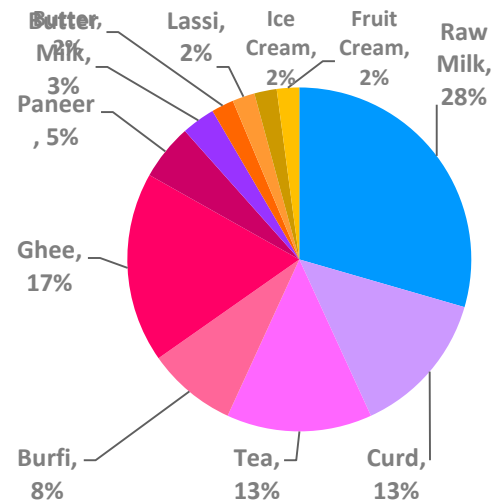
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.38	8.68	5.89	2.79	630	
% URBAN		100	68%	32%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.72	12.99	8.74	4.25	753	
% URBAN		100	67%	33%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.51	5.18	40%	60%

PRODUCT SHARE (2019)

URBAN



KOTA (M CORP.) (MN+)

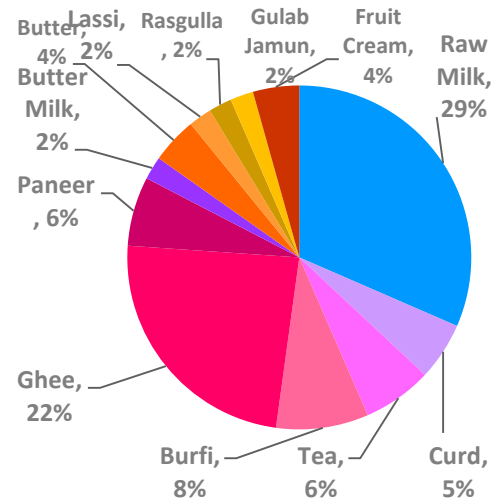
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.18	9.76	6.14	3.62	825	
% URBAN		100	63%	37%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.45	14.83	9.17	5.67	1022	
% URBAN		100	62%	38%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	3.41	6.35	35%	65%

PRODUCT SHARE (2019)

URBAN



CHENNAI UA (MN+)

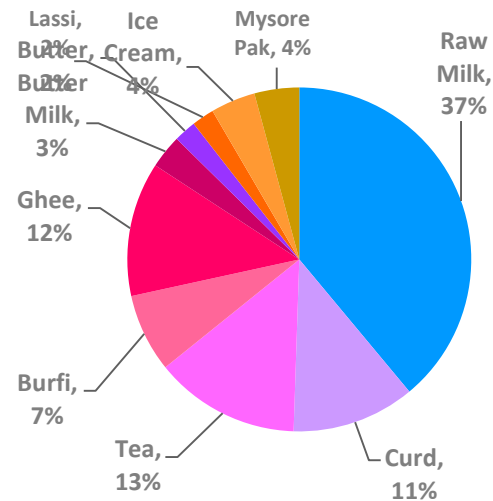
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	9.81	32.09	24.00	8.09	327	
% URBAN		100	75%	25%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	11.38	38.94	27.74	11.20	342	
% URBAN		100	71%	29%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	15.96	16.13	50%	50%

PRODUCT SHARE (2019)

URBAN



COIMBATORE UA (MN+)

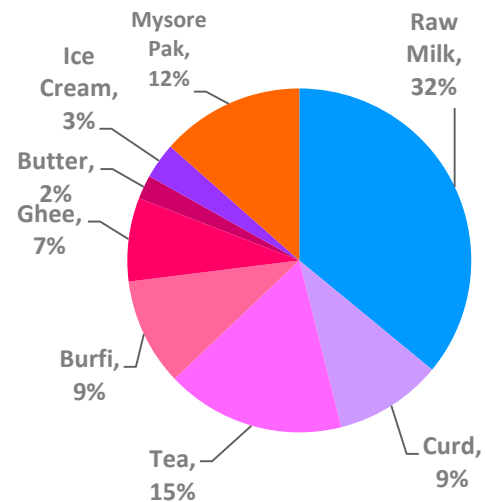
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.39	9.45	6.49	2.96	395
%	URBAN		100	69%	31%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	2.73	11.60	7.47	4.13	424
%	URBAN		100	64%	36%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.43	5.01	47%	53%

PRODUCT SHARE (2019)

URBAN



MADURAI UA (MN+)

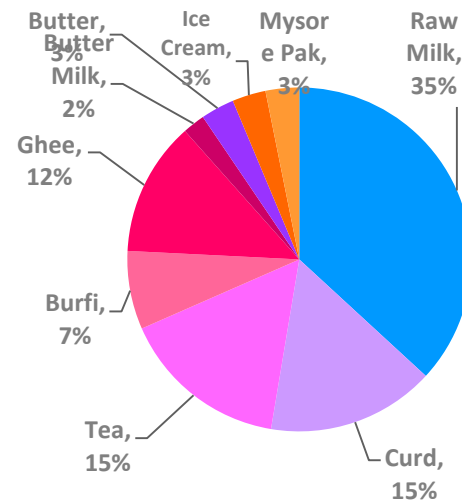
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.61	4.93	3.72	1.21	306	
% URBAN		100	76%	24%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.81	5.95	4.32	1.64	329	
% URBAN		100	73%	27%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.45	2.48	50%	50%

PRODUCT SHARE (2019)

URBAN



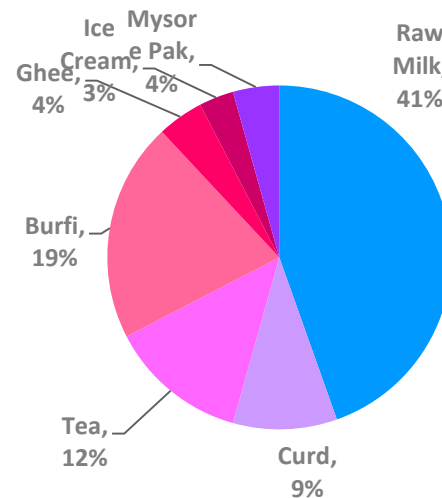
SALEM UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.03	3.40	2.53	0.88	331	
% URBAN		100	74%	26%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.18	3.66	2.48	1.18	310	
% URBAN		100	68%	32%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.82	1.59	53%	47%

PRODUCT SHARE (2019)
URBAN



TIRUCHIRAPPALLI UA (MN+)

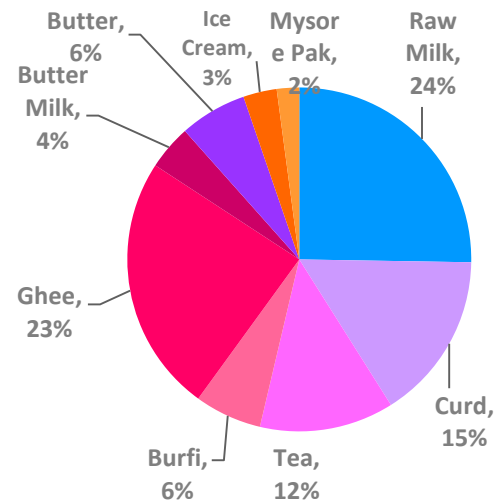
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.12	4.45	3.55	0.90	398	
% URBAN		100	80%	20%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.24	5.67	4.45	1.22	457	
% URBAN		100	78%	22%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.60	2.85	36%	64%

PRODUCT SHARE (2019)

URBAN



TIRUPPUR UA (MN+)

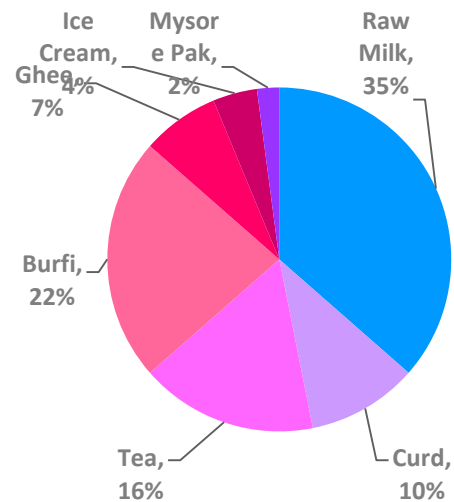
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.15	3.85	2.93	0.92	333	
% URBAN		100	76%	24%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.43	4.02	2.77	1.25	281	
% URBAN		100	69%	31%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.98	1.87	51%	49%

PRODUCT SHARE (2019)

URBAN



HYDERABAD UA (MN+)

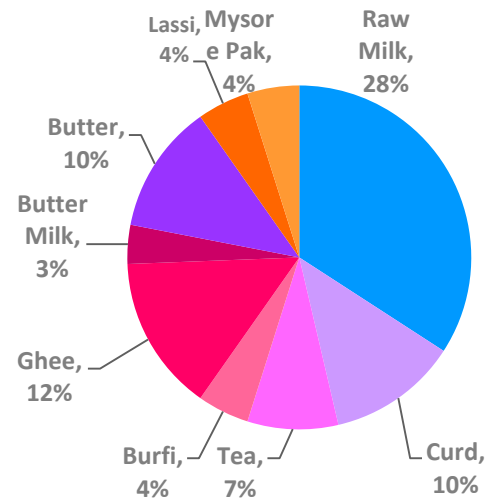
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	8.75	39.18	25.78	13.40	448	
% URBAN		100	66%	34%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	10.25	76.80	48.20	28.61	749	
% URBAN		100	63%	37%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	13.86	25.32	35%	65%

PRODUCT SHARE (2019)

URBAN



AGRA UA (MN+)

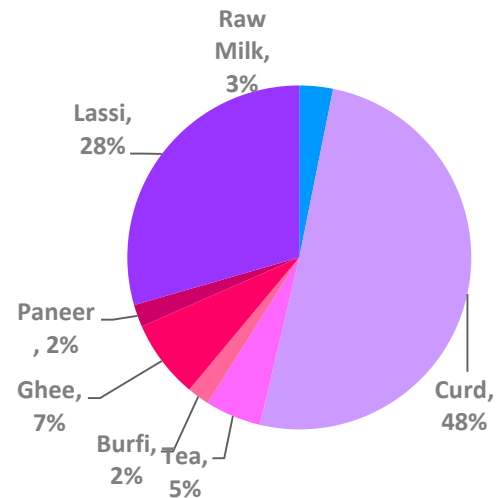
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.11	23.86	22.47	1.39	1132	
% URBAN		100	94%	6%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	2.62	45.03	42.25	2.78	1718	
% URBAN		100	94%	6%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.99	21.88	8%	92%

PRODUCT SHARE (2019)

URBAN



ALIGARH UA (MN+)

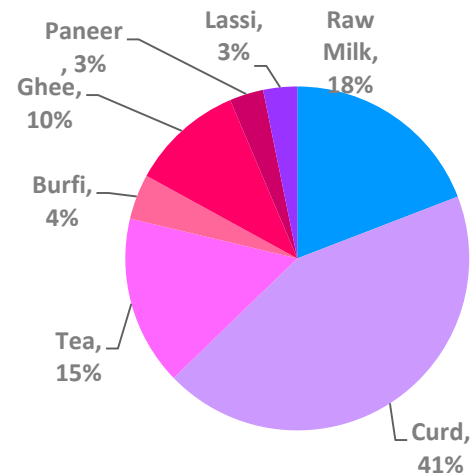
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.10	5.57	4.90	0.67	507	
% URBAN		100	88%	12%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.37	10.46	9.14	1.32	763	
% URBAN		100	87%	13%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.84	3.73	33%	67%

PRODUCT SHARE (2019)

URBAN



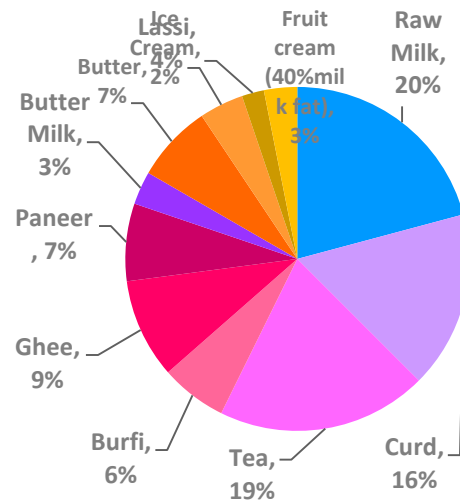
ALLAHABAD UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.46	5.69	4.39	1.30	390	
% URBAN		100	77%	23%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.81	11.34	8.67	2.67	626	
% URBAN		100	76%	24%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.23	3.46	39%	61%

PRODUCT SHARE (2019) URBAN



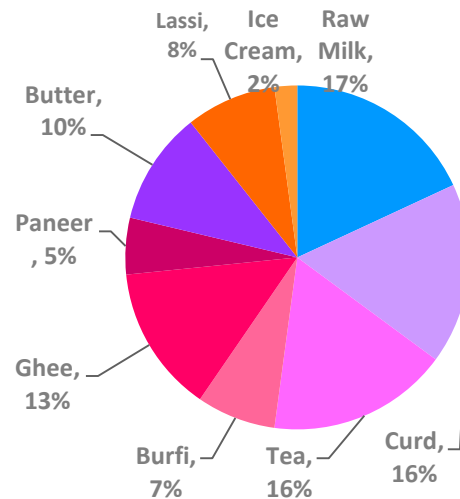
BAREILLY UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.16	5.22	4.41	0.81	449	
% URBAN		100	84%	16%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.41	10.33	8.69	1.64	731	
% URBAN		100	84%	16%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.70	3.52	33%	67%

PRODUCT SHARE (2019)
URBAN



GHAZIABAD UA (MN+)

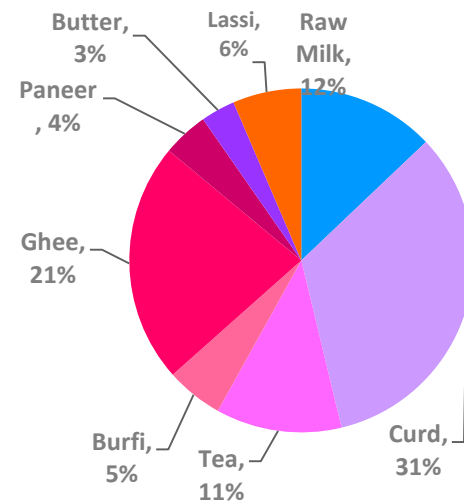
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.18	20.21	17.81	2.40	635	
% URBAN		100	88%	12%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	4.54	37.44	32.79	4.65	825	
% URBAN		100	88%	12%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.72	15.49	23%	77%

PRODUCT SHARE (2019)

URBAN



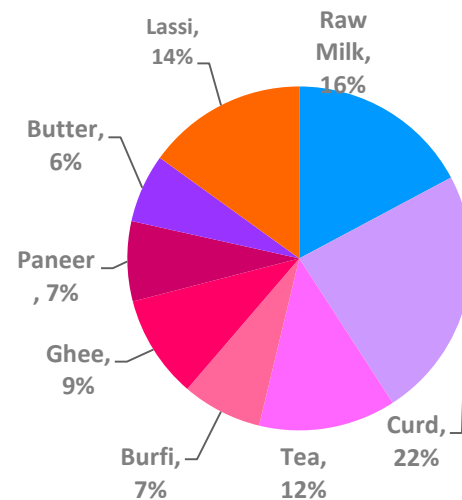
KANPUR UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.23	16.46	14.02	2.45	509	
% URBAN		100	85%	15%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.65	32.10	27.08	5.03	880	
% URBAN		100	84%	16%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	4.64	11.83	28%	72%

PRODUCT SHARE (2019) URBAN



LUCKNOW UA (MN+)

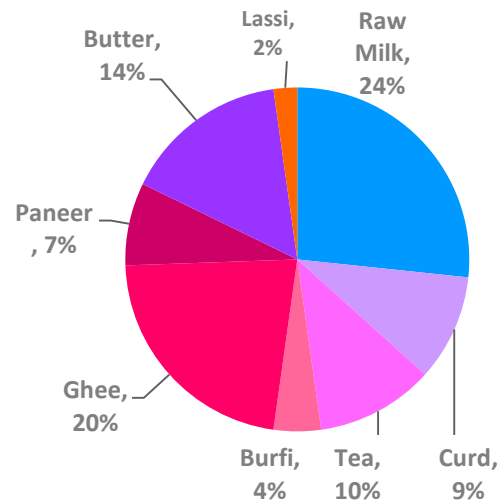
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.19	15.19	12.40	2.79	476	
% URBAN		100	82%	18%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	3.55	31.59	25.86	5.73	889	
% URBAN		100	82%	18%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	5.10	10.09	34%	66%

PRODUCT SHARE (2019)

URBAN



MEERUT UA (MN+)

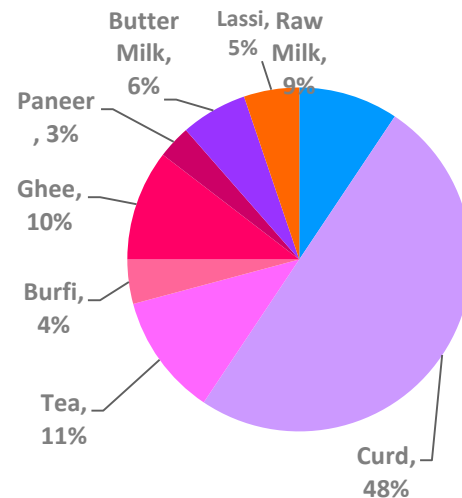
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	1.64	11.47	10.30	1.17	701
%	URBAN		100	90%	10%	

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector		Population	HH Consumption	At Home	Out of Home	Per Capita (ml)
LLPD	URBAN	1.94	22.67	20.28	2.39	1171
%	URBAN		100	89%	11%	

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.23	9.24	19%	81%

PRODUCT SHARE (2019)

URBAN



MORADABAD (M CORP.) (MN+)

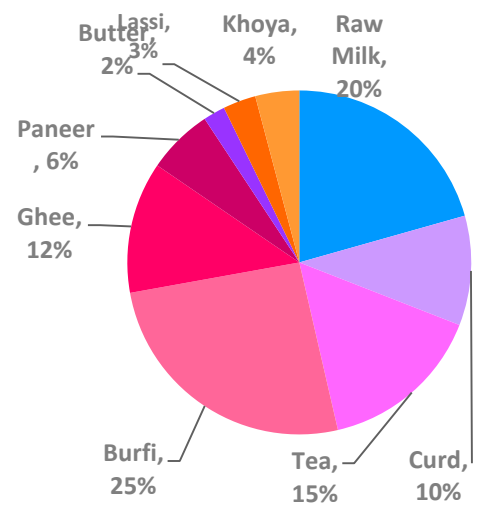
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.13	6.73	5.77	0.96	597	
% URBAN		100	86%	14%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.50	11.35	9.52	1.83	758	
% URBAN		100	84%	16%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.34	4.39	35%	65%

PRODUCT SHARE (2019)

URBAN



VARANASI UA (MN+)

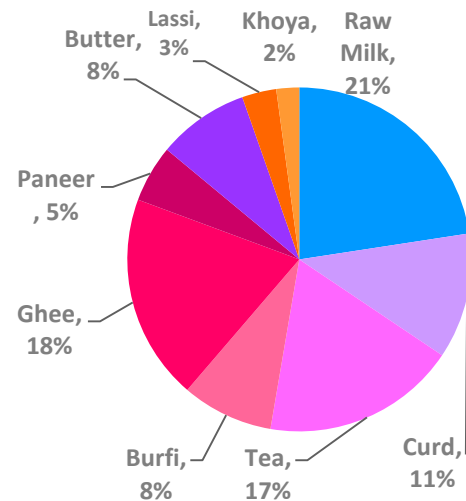
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.61	6.67	5.48	1.19	413	
% URBAN		100	82%	18%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.86	13.24	10.82	2.42	710	
% URBAN		100	82%	18%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	2.54	4.13	38%	62%

PRODUCT SHARE (2019)

URBAN



ASANSOL UA (MN+)

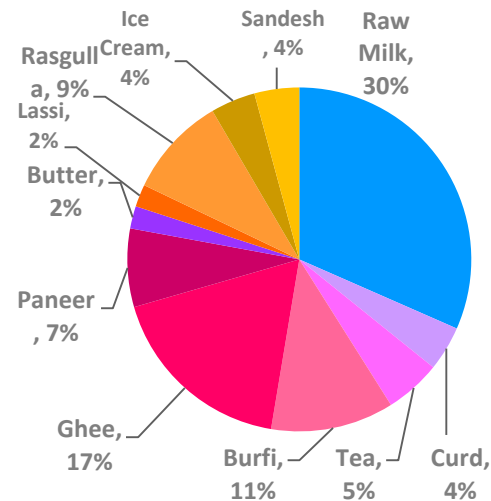
ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.44	3.41	2.61	0.80	236	
% URBAN		100	77%	23%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	1.72	5.76	4.18	1.58	334	
% URBAN		100	73%	27%		

	CONSUMPTION OF MILK AND MILK PRODUCTS(2019)			
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	1.21	2.20	35%	65%

PRODUCT SHARE (2019)

URBAN



KOLKATA UA (MN+)

ESTIMATED HOUSEHOLD CONSUMPTION (LLPD) (2019)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	15.32	38.34	29.15	9.19	250	
% URBAN		100	76%	24%		

PROJECTED HOUSEHOLD DEMAND (LLPD) (2030)						
Sector	Population	HH Consumption	At Home	Out of Home	Per Capita (ml)	
LLPD URBAN	16.98	66.98	48.56	18.42	394	
% URBAN		100	73%	27%		

CONSUMPTION OF MILK AND MILK PRODUCTS(2019)				
	LLPD		%	
	Liquid milk/ Tea/ Coffee	Milk Products	Liquid milk/ Tea/ Coffee	Milk Products
URBAN	16.89	21.44	44%	56%

PRODUCT SHARE (2019)

URBAN

