



ISSN (E): 2277- 7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2021; SP-10(8): 1093-1099  
© 2021 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 01-06-2021  
Accepted: 03-07-2021

**Phool Chand Meenal**  
Assistant Professor, COA,  
Sumerpur, Agricultural  
University, Jodhpur, Rajasthan,  
India

**Prem Chand Meena**  
National Academic of  
Agricultural Research  
Management, Hyderabad,  
Telangana, India

## Food consumption of farmer households in the new millennium: An analysis of data from the situation assessment survey of Indian farmers

**Phool Chand Meena and Prem Chand Meena**

### Abstract

The National Sample Survey Organization (NSSO) has conducted a series of studies in the new millennium to ascertain the socio- economic condition of the Indian farmers covering education level, living standard, farming practices, income and productive assets, awareness and access to modern technology and rural indebtedness. To meet these requirements the NSSO conducted a Situation Assessment Survey of the farmers in 2003 and brought out estimates of food consumption, incidence of consumption and consumption expenditures across the farmers. The consumer basket included all food items and non- food items. It may be mentioned that this is one off survey on the state of living conditions of the Indian farmers. Nonetheless, the cross- sectional evidence contained in the report provides a good account of the consumer expenditure of the farmers and the regional characteristics in terms of priorities in food consumption. It is under this perspective the IDR Group thought to analyze the data relating to specific items of consumer basket (cereal, milk, edible oil and meat, fish and eggs) and bring out various facets of household consumption expenditure of farmers for dissemination and further discussions.

**Keywords:** national sample survey organization (NSSO), socio- economic, food consumption, consumer expenditure, assets, consumer basket, household

### Introduction

A farmer has been identified for the purpose of this survey “as a person who operated some land and performed agricultural activities including cultivation, animal husbandry, poultry, fishery, bee-keeping, vermiculture, sericulture etc during the last 365 days”. A farmer household has been termed as a household in which there was at least one farmer. Thus, a person qualifies as a farmer if

- he possessed some land (i.e land, either owned or leased in or otherwise possessed), and
- he was engaged in some agricultural activities on that land during the last 365 days

It may be mentioned that persons engaged in agriculture and/or allied activities but not operating a piece of land are not considered as farmers. Similarly, agricultural labourers, rural artisans and persons engaged in agricultural services are not considered as farmers. The survey covered 51,770 households spread over 6638 villages of the major states.

### Organization of findings

By design, the consumer expenditure survey reports are published across 12 expenditure groups. For ease of understanding, we have collapsed these 12 expenditure classes into 4 classes after factoring the relative weights of population in each of these classes and presented some specific findings. The commodity, which are presently covered include cereal, milk, edible oil and meat, fish and eggs. They account for two-thirds of total food expenditure. However, if interests grow in NDDB, the scope of commodity profile could be enlarged covering other items of food and non- food expenditure.

There are some typical observations in this publication relating total consumption expenditure of the farmer as a group against total rural consumption (representing the rural universe). A comparison between these two broad groups enable us to examine if the consumption or by default, income in the rural areas could differ in any way. Moreover, this also reflects the relative condition of the farming communities in relation to other inhabitants in the rural areas.

**Corresponding Author**  
**Phool Chand Meena**  
Assistant Professor, COA,  
Sumerpur, Agricultural  
University, Jodhpur, Rajasthan,  
India

### Distribution of Indian farmers

There is always an interest to understand the living condition of the Indian farmers. But the living condition is a broader issue, which can be argued on the basis of different dimensions. Analysis of data however permits to limit our query up to a point of finding out the relative distribution of the farmers in respect of 12 expenditure classes. As we use expenditure and income distributions inter changeably (for ease of present analysis), we could find out what proportion of farmers fall under certain expenditure groups and how would that distribution be across the major states (Table 1). The distributional characteristics are indicative of a broad pointer of relative prosperity or poverty among the Indian farmers.

The consumption pattern is an indicator of a farmer's income and perhaps well being. If the 12 classes are combined into 4 classes, it is found that 15% of the Indian farmers spend less than Rs 10 a day; and the conditions of the farmers of Orissa, Jharkhand, Chhattisgarh, Madhya Pradesh and Bihar are dismal—more than 20% do not have income or expenditure of more than Rs 10 a day. Specifically, the farmers of Orissa

are the most disadvantage, nearly half of them do not earn Rs 300 per month. At the other spectrum, the farmers of northern states (Punjab, J&K, Haryana, Uttaranchal & Rajasthan), Kerala and Gujarat are relatively better –off and their average expenditure exceeds Rs 20 a day.

If for the sake of academic interest, we draw a benchmark of poverty line at Rs 12 per day, we find that more than one-fourth of our farmers are below the poverty line, and in Orissa such ratio is 57%, Jharkhand (50%), Chhattisgarh (44%), Madhya Pradesh (37%), Bihar (34%) and UP (27%). Poverty ratio is low in the agriculturally prosperous states of Punjab, Haryana (3-5%), while the farmers of the southern states have a poverty ratio of around 17-18%. From our knowledge of milk production across the states, we could find an inverse relationship. High poverty ratio among the farmers is associated with low intensity of milk production and vice-versa. We however do not wish to correlate the reason of poverty and deprivation among the farmers with that of livestock production, but it is generally found that the higher poverty among the farmer is associated with low growth in agriculture and rural infrastructure.

**Table 1:** Per 1000 distribution of farmers over Monthly Per capita Expenditure (MPCE) classes

State	0-225	225-255	255-300	300-340	340-380	380-420	420-470	470-525	525-615	615-775	775-950	950 & above	All
Assam	12	14	50	68	99	118	119	139	176	138	47	20	1000
Bihar	55	51	112	125	118	114	106	93	105	73	25	23	1000
Jharkhand	105	83	155	152	124	110	92	52	57	43	15	12	1000
Orissa	223	98	135	117	92	89	73	59	49	35	15	15	1000
WB	16	17	60	74	92	98	121	116	154	137	63	52	1000
Chhattisgarh	77	69	134	159	132	110	98	88	62	37	13	21	1000
Gujarat	16	29	56	59	66	91	112	70	114	150	116	121	1000
MP	83	59	112	116	117	92	114	89	86	73	30	29	1000
Maharashtra	22	19	60	67	82	87	105	114	148	150	75	71	1000
Haryana	0	2	15	23	37	51	65	63	155	205	152	232	1000
HP	1	2	14	22	40	42	73	100	140	214	133	219	1000
J&K	1	1	5	8	18	41	43	87	164	289	190	153	1000
Punjab	1	3	10	16	19	35	50	58	128	213	186	281	1000
Rajasthan	12	17	38	73	82	87	111	113	138	154	87	88	1000
UP	36	37	94	107	108	98	108	99	106	98	53	56	1000
Uttaranchal	4	15	23	59	65	95	117	101	156	179	87	99	1000
AP	18	26	61	80	98	101	115	111	124	132	59	75	1000
Karnataka	9	24	59	85	119	113	134	115	115	130	45	52	1000
Kerala	2	4	9	20	20	34	56	60	124	175	146	350	1000
Tamil Nadu	24	23	56	71	73	76	98	106	132	132	79	130	1000
All- India	41	34	76	88	93	93	104	97	117	118	64	75	1000

### Consumption expenditure in rural areas

The NSSO has provided item wise total consumption expenditure for the farmers as well as for the entire rural areas consisting of farmers as well as non- farmers. A distinction between these two groups indicates how different is the farmers in the rural milieu, especially in respect of conditions prevailing in the rural society. A typical farmer spends Rs 502 per month, which is lower than the average total expenditure in the rural areas (Rs 554 per month). In other words, it is found that the farmers in general tend to spend less than the expenditure in the rural society by 10% percentage point.

Among the items of food consumption, the farmers spend relatively more in cereals and milk compared to others in the rural society, while for other items of food expenditure the non- farmers outweigh the farmers. On the whole, this also suggests that the farmers are perhaps not the most important segment in income generation or in spending compared to others in the rural society (Table 2). Higher expenditure on cereal and milk of the farmers are however associated with internal production within the family in comparison to other food items like fruit, beverages, egg, fish & meat.

**Table 2:** Average monthly per capita expenditure of farmer and all households in rural areas

Sr. no	Item group	Monthly per capita exp (Rs)				Consumption ratio (Farmer to All rural)
		Farmer HH	%	All Rural HH	%	
1	Cereals	101.27	20.1	99.17	17.9	1.02
2	Pulses	16.57	3.3	18.06	3.3	0.92
3	Milk	48.71	9.7	44.76	8.1	1.09
4	Edible Oil	23	4.6	24.62	4.4	0.93
5	Egg, fish & meat	15.7	3.1	17.93	3.2	0.88
6	Vegetables	30.6	6.1	35.92	6.5	0.85
7	Fruits	6.6	1.3	9.98	1.8	0.66
8	Sugar,salt & spices	21.42	4.3	24.3	4.4	0.88
9	Beverages, refreshments & processed food	14.87	3.0	24.45	4.4	0.61
A	Food Total	278.74	55.4	298.57	53.9	0.93
B	Non food Total	224.09	44.6	255.59	46.1	0.88
(A+B)	All Items	502.83	100.0	554.16	100.0	0.91

### Milk Consumption

A typical farmer consumes 146 grams of milk per day in the precincts of his family and nearly three- fourths of the Indian farmers consume milk. As reflected in per capita availability of milk, the farmers of northern states of Punjab, Haryana, HP, and Rajasthan & J &K consume relatively higher volume compared to farmers of other regions. Large majority of them also consume milk (95%). As expected, the farmer of the

eastern region consumes the least, and more specifically, in the states of Orissa (18 grams a day), Chhattisgarh (22 grams), and Jharkhand (39 grams) the status is dismal. The incidence of consumption is equally low. Both these observations in conjunction with adverse expenditure and income distribution clearly suggest that it is the low affordability and low production that contribute to low per capita consumption among the farmers.

**Table 3:** Per capita consumption of milk and incidence of consumption among the farmers

State	Per capita consumption (Grams/day)	% Farmer household reporting consumption	State	Per capita consumption (Grams/day)	% Farmer household reporting consumption
Assam	51	59	J&K	324	98.9
Bihar	100	73	Punjab	505	99.3
Jharkhand	39	30.8	Rajasthan	329	95.4
Orissa	18	21.9	UP	166	74.6
WB	55	54.1	Uttaranchal	219	93.1
Chhattisgarh	22	30.2	AP	102	81.5
Gujarat	181	96.8	Karnataka	111	96
MP	116	79.9	Kerala	119	83.9
Maharashtra	96	85.7	Tamil Nadu	99	74.9
Haryana	532	98.5	All- India	146	73.4
HP	318	94.1			

### Consumption disparity - commodity profile

Consumer expenditure on specific items of consumer basket has been analyzed in respect of monthly per capita consumption classes. As mentioned earlier, for ease of understanding 12 classes are combined into 4 classes after taking into to their respective population weights. The results are presented through commodity specific tables beginning with milk (Annex 1), cereals (Annex 2), edible oil (Annex 3), meat, fish & eggs (Annex 4), total food (Annex 5), total non-food (Annex 6) and all expenditure (Annex 7). However, a summary of observations at the national level in given in Box 1.

It is significant that the disparity in expenditure in milk consumption between the highest to lowest groups of MPCE class is the largest in case on milk. A disparity ratio of 11 indicates that the richest group consumes 11 times higher than the poorest group (under neutral price effect). Therefore, milk has perhaps most inequities consumption distribution among the framers; surprisingly, higher than meat, fish and eggs (4.60). On the contrary, in regard to cereal consumption, the equity is the most significant, only 1.53, suggesting near homogeneity in scale of consumption across the expenditure or income classes. The consumption expenditure profile of milk in particular becomes an important element of further knowledge and analysis. It is our belief that milk is perhaps

dear to the people of lower expenditure strata, and therefore the farmers in this group tend to economize on this item and resort to unavoidable food expenditure that is embodied in cereal consumption. A counter factual view is that if the incomes of the farmers increase, it would be spawn greater demand in the rural society.

#### Box 1

Disparity ratio in consumption expenditure among Indian farmers

Cereal	1.53
Milk	11.0
Meat, fish & egg	4.60
Edible Oil	2.50
Total Food	2.88
Total Non-Food	5.56
All expenditure	3.87

NB: Disparity is a simple ratio of consumption expenditure in top most group over the lowest group

Disparity in milk consumption across different strata of the farming community is further related to profile of average milk consumption across the states. This means the disparity ratio is accentuated in those states which have low average consumption expenditure on milk & milk products. The

disparity in milk consumption expenditure between lowest and highest class is the highest in Orissa (29 times); the state has also the lowest per capita average expenditure and also high incidence of poverty among farmers. The states of Jharkhand, Assam and Chhattisgarh also resemble a typical disparity ratio associated with low consumption expenditure on milk & milk products. Summarily, two points emerge

- Divergence in milk consumption across the socio economic groups is universal over all states, and
- The milk deficit states show high degree of divergence in milk consumption across the socio economic groups. (Annex 1).

#### Elasticity in milk consumption expenditure

The NSSO data permits estimation of expenditure elasticity of different items of consumption basket among the farmers. Such estimation was not possible earlier due to paucity of data. Nonetheless, we have limited the estimation for the milk only. As is commonly known, the coefficient of expenditure or income elasticity of milk would signify the response of the farmers in respect of increase or decrease in total consumption expenditure or total income. In other words, what would be the percent changes in milk consumption corresponding to one percent increase in total expenditure or income? Estimated elasticity coefficients are presented in Table 4. The results reconfirm our understanding of potential effect of milk demand on increased consumption expenditure

or income.

The relatively milk deficit states have higher values of expenditure elasticity of demand for milk - Orissa has a significantly high value at 2.08 and Jharkhand has a value of 1.94, signifying more than double impact on milk consumption with unit change in total expenditure or income. These low producing as well as low consuming states will improve milk consumption profile much more prominently with improvement in economic well being of the farmers. So, there would be considerable demand for milk among the farming communities when they improve their socio economic status. Counter intuitively, as the farmers of these states do not have sufficient incomes they cannot presently allocate their earning toward milk expenditure.

Most egalitarian distribution in consumption expenditure of milk has been observed in the states of Karnataka and Jammu & Kashmir (Annex 1). As a result, expenditure elasticity of demand for milk is “inelastic”, suggesting less than proportionate response in milk demand of the farmers given increase in economic status of the farmers. In Gujarat and Punjab, the potential impact would be perfectly elastic, which means the increase in consumption of milk will go hand in hand with increase in relative economic status. For the remaining states, the expenditure elasticity is highly elastic whereby the rise in total consumption expenditure will influence more than proportionate increase in demand for milk among the farming communities.

**Table 4:** Expenditure Elasticity of demand for milk for farmers

State	Elasticity	t-value	State	Elasticity	t-value
AP	1.31	14.2	Punjab	1.09	12.83
Bihar	1.5	14.63	Rajasthan	1.35	22.88
Gujarat	1.09	8.52	Tamil Nadu	1.15	18.73
Haryana	1.32	9.69	Uttar Pradesh	1.54	14.84
HP	1.37	10.46	West Bengal	1.53	17.43
J&K	0.91	19.66	Assam	1.61	8.64
Karnataka	0.84	9.32	Chhattisgarh	1.52	10.53
Kerala	1.13	11.8	Jharkhand	1.94	12.64
Maharashtra	1.26	10.31	Uttaranchal	1.2	15.89
Madhya Pradesh	1.27	9.92	All India	1.58	16.5
Orissa	2.08	9.56			

Note: “t” values are highly significant

#### Summary of observations

- More than one fourth of Indian farmers appear to be below the poverty line—with states like Orissa, Jharkhand, Chhattisgarh have relatively higher poverty ratio among the farmers.
- There is an inverse relationship between poverty ratio and intensity of milk production—relatively high milk producing states exhibit lower poverty while the low producing states show higher poverty
- Surprisingly, the non farmers spend more than the farmers in the rural society. This could be interpreted as relatively higher incomes from non-farm occupations than the typical agricultural activities in the rural areas. A typical farmer however spends higher amount in milk and cereal consumptions compared to non-farmers.
- The average consumption of milk of a farmer at the household level is estimated at 146 grams a day and three- fourths of our farmers consume milk. The farmers of the northern states consume significantly higher volume of milk compared to the farmers of the eastern state.
- Another interesting revelation is that consumption of milk is most inequitable among different income/expenditure strata –higher than fish, meat and eggs, edible oil, total food and even non food items. This disparity is far stronger in the milk deficit states. Not only the deficit states have lower availability of milk, lower per capita consumption, but also higher disparity in consumption.
- The deficit states also exhibit very high expenditure/income elasticity of demand for milk for the farmers. Therefore, rural demand for milk will rise more than proportionately with improvements in economic well being of the farmers. Only the states of Karnataka and j & K exhibit an inelastic demand for milk among the farmers, which suggest that rise in total income or expenditure will have less than proportionate impact on milk demand. For the remaining states, the increase in income or expenditure will induce demand for milk in the rural areas.

**Annex 1:** Per capita monthly expenditure of milk & milk products (Rs) by 4 MPCE classes

State	Milk & milk products					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	4.52	12.21	25.01	53.43	22.99	11.8
Bihar	11.40	25.91	53.34	100.76	35.47	8.8
Jharkhand	4.00	13.03	33.80	66.46	15.06	16.6
Orissa	1.11	5.03	13.04	32.68	5.93	29.3
WB	4.77	9.90	18.63	41.71	18.83	8.7
Chhattisgarh	2.89	5.72	12.33	29.22	7.38	10.1
Gujarat	21.83	36.55	63.22	133.06	71.66	6.1
MP	14.54	32.36	58.25	110.24	41.12	7.6
Maharashtra	8.59	19.23	33.12	56.70	31.76	6.6
Haryana	36.61	67.65	127.79	272.86	192.56	7.5
HP	19.76	44.52	73.82	172.72	113.33	8.7
J&K	34.14	51.77	77.06	124.03	99.79	3.6
Punjab	37.90	61.25	90.37	208.18	160.35	5.5
Rajasthan	29.09	57.31	100.41	208.65	111.2	7.2
UP	13.60	31.97	61.70	126.12	51.9	9.3
Uttaranchal	23.43	40.58	64.67	125.50	72.6	5.4
AP	9.04	16.51	32.25	58.22	29.42	6.4
Karnataka	16.08	24.08	34.49	58.26	32.37	3.6
Kerala	10.53	15.96	26.89	60.80	44.65	5.8
Tamil Nadu	9.65	16.25	26.89	54.48	29.24	5.6
All- India	10.58	25.72	49.95	116.53	48.71	11.0

**Annex 2:** Per capita monthly expenditure of cereals (Rs) by 4 MPCE classes

State	Cereals					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	103.13	119.07	142.44	162.46	133.66	1.58
Bihar	88.11	109.13	128.64	148.49	111.81	1.69
Jharkhand	92.27	117.31	133.05	147.29	110.99	1.60
Orissa	90.29	114.45	124.11	130.70	104.84	1.45
WB	93.84	118.26	140.54	165.30	132.67	1.76
Chhattisgarh	98.38	124.43	140.47	158.59	121.04	1.61
Gujarat	58.10	67.44	82.70	98.76	80.16	1.70
MP	68.01	82.17	90.64	103.41	81.91	1.52
Maharashtra	62.71	77.42	92.04	111.62	88.92	1.78
Haryana	64.43	64.73	67.97	81.21	74.01	1.26
HP	72.27	82.69	93.92	111.10	99.87	1.54
J&K	76.05	89.09	109.33	144.68	126.65	1.90
Punjab	54.58	63.70	67.57	78.04	73.46	1.43
Rajasthan	61.75	76.25	86.25	105.81	86.61	1.71
UP	74.12	87.00	96.31	108.47	90.52	1.46
Uttaranchal	69.65	80.33	90.51	107.05	91.12	1.54
AP	81.70	108.64	131.57	162.60	123.82	1.99
Karnataka	67.03	84.26	105.01	134.01	97.59	2.00
Kerala	62.19	89.30	108.69	140.67	124.12	2.26
Tamil Nadu	65.45	82.90	103.78	150.26	103.29	2.30
All- India	79.19	95.11	107.66	121.19	101.27	1.53

**Annex 3:** Per capita monthly expenditure of edible oil (Rs) by 4 MPCE classes

State	Edible oil					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	12.98	17.85	24.18	33.05	22.29	2.55
Bihar	14.86	19.37	23.92	33.58	20.51	2.26
Jharkhand	15.51	20.09	26.22	33.32	19.78	2.15
Orissa	8.28	13.64	19.08	23.33	29.42	2.82
WB	15.41	21.39	27.88	36.84	26.08	2.39
Chhattisgarh	10.60	16.39	21.67	30.02	16.3	2.83
Gujarat	21.88	30.08	39.66	58.52	40.32	2.67
MP	12.61	17.58	23.46	29.22	18.67	2.32
Maharashtra	18.78	23.76	31.91	43.95	30.85	2.34
Haryana	8.31	12.55	12.74	14.05	13.29	1.69
HP	16.43	20.31	25.92	36.26	29.62	2.21
J&K	20.70	24.02	27.80	36.46	32.06	1.76
Punjab	14.67	18.16	22.34	30.00	26.61	2.05



Rajasthan	11.54	16.64	20.84	26.89	20.47	2.33
UP	14.17	18.76	23.43	37.56	22.12	2.65
Uttaranchal	15.44	20.64	25.58	33.43	25.72	2.16
AP	15.34	20.02	26.55	38.15	25.33	2.49
Karnataka	15.66	18.88	22.79	29.80	21.68	1.90
Kerala	11.39	16.57	21.99	32.15	27.04	2.82
Tamil Nadu	14.60	19.20	23.48	32.85	23.71	2.25
All- India	13.77	19.22	24.83	34.44	23	2.50

**Annex 4:** Per capita monthly expenditure of meat, fish & eggs (Rs) by 4 MPCE classes

State	Meat, fish and eggs					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	19.84	37.02	57.22	80.18	50.08	4.04
Bihar	5.73	8.61	13.69	22.58	10.33	3.94
Jharkhand	6.84	13.19	21.31	33.90	12.84	4.96
Orissa	9.00	17.83	28.01	45.53	16.62	5.06
WB	19.88	31.54	48.72	83.99	46.86	4.22
Chhattisgarh	4.44	7.97	11.87	14.54	7.97	3.27
Gujarat	4.66	4.94	5.48	4.86	5.00	1.04
MP	2.29	2.86	5.12	5.59	3.52	2.44
Maharashtra	5.73	9.13	12.69	21.73	12.96	3.79
Haryana	1.73	0.84	2.41	2.64	2.31	1.52
HP	4.45	3.77	5.01	11.15	7.60	2.51
J&K	4.62	11.23	15.50	25.59	20.61	5.54
Punjab	1.64	1.44	1.97	4.63	3.53	2.83
Rajasthan	1.17	1.64	3.13	5.92	3.30	5.08
UP	2.76	5.33	7.65	10.49	6.31	3.79
Uttaranchal	1.28	4.14	9.36	15.53	9.09	12.11
AP	9.44	15.29	23.21	40.66	22.39	4.31
Karnataka	6.91	10.34	15.58	26.70	14.47	3.87
Kerala	19.12	33.64	47.02	91.58	70.28	4.79
Tamil Nadu	11.46	18.10	27.65	41.05	26.61	3.58
All- India	6.14	10.94	17.96	28.27	15.70	4.60

**Annex 5:** Per capita monthly expenditure of food (Rs) by 4 MPCE classes

State	Food total					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	180.51	248.56	339.67	463.73	311.72	2.57
Bihar	164.97	229.20	309.29	438.98	250.28	2.66
Jharkhand	164.38	232.14	309.82	415.45	225.06	2.53
Orissa	145.49	220.96	286.06	379.55	202.81	2.61
WB	178.61	245.88	328.13	465.35	311.32	2.61
Chhattisgarh	159.44	219.15	275.76	368.20	219.11	2.31
Gujarat	165.38	226.97	303.02	466.99	313.29	2.82
MP	139.79	200.52	271.20	380.02	217.17	2.72
Maharashtra	151.65	209.94	277.23	385.00	268.25	2.54
Haryana	167.37	213.29	302.37	508.21	393.97	3.04
HP	166.75	222.51	297.04	489.88	371.46	2.94
J&K	183.26	250.90	326.16	470.90	396.86	2.57
Punjab	167.72	225.29	290.53	485.24	403.84	2.89
Rajasthan	146.39	214.17	297.52	475.00	308.63	3.24
UP	154.86	215.17	285.59	428.23	257.3	2.77
Uttaranchal	159.72	217.77	289.81	433.15	301.81	2.71
AP	165.01	229.22	304.29	438.85	289	2.66
Karnataka	158.15	213.95	284.19	401.78	262.71	2.54
Kerala	154.35	230.13	310.61	520.92	418.88	3.38
Tamil Nadu	157.10	221.87	304.32	448.59	302.07	2.86
All- India	155.96	221.34	297.47	449.84	278.74	2.88

**Annex 6:** Per capita monthly expenditure in non- food items (Rs) by 4 MPCE classes

State	Non-food total					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	79.91	118.37	169.87	331.28	167.7	4.15
Bihar	82.98	129.51	190.58	383.33	153.32	4.62
Jharkhand	80.12	122.31	181.35	418.04	127.79	5.22
Orissa	77.74	136.07	207.60	493.23	138.94	6.34
WB	80.09	117.92	180.45	425.57	196.42	5.31
Chhattisgarh	85.55	135.19	216.90	581.81	159.78	6.80
Gujarat	91.91	139.81	198.74	480.97	249.58	5.23
MP	102.86	154.81	225.18	498.47	189.13	4.85
Maharashtra	100.44	153.72	233.61	491.77	255.87	4.90
Haryana	104.03	158.62	222.82	484.93	347.13	4.66
HP	102.45	148.07	220.28	513.44	337.01	5.01
J&K	80.79	132.20	204.53	427.45	314.96	5.29
Punjab	94.87	144.18	236.90	560.54	424.17	5.91
Rajasthan	109.62	149.16	211.05	451.28	248.82	4.12
UP	96.32	143.68	216.08	543.71	217.59	5.65
Uttaranchal	102.42	148.13	219.98	489.76	264.78	4.78
AP	89.91	133.69	199.84	495.90	223.55	5.52
Karnataka	104.38	149.90	214.79	523.80	228.48	5.02
Kerala	104.82	139.57	210.72	712.82	481.71	6.80
Tamil Nadu	92.61	139.57	205.66	570.71	270.74	6.16
All- India	90.57	139.39	207.70	503.93	224.09	5.56

**Annex 7:** Per capita total monthly expenditure (Rs) by 4 MPCE classes

State	Total consumer expenditure					Ratio (highest to lowest)
	0-300	300-420	420-615	>615	All	
Assam	260.43	366.93	509.54	795.00	479.42	3.05
Bihar	247.95	358.71	499.87	822.30	403.60	3.32
Jharkhand	244.50	354.45	491.18	833.49	352.85	3.41
Orissa	223.23	357.03	493.66	872.78	341.75	3.91
WB	258.70	363.80	508.57	890.92	507.74	3.44
Chhattisgarh	244.99	354.34	492.66	950.01	378.89	3.88
Gujarat	257.29	366.78	501.76	947.96	562.87	3.68
MP	242.66	355.33	496.38	878.48	406.30	3.62
Maharashtra	252.09	363.65	510.85	876.77	524.12	3.48
Haryana	271.41	371.90	525.20	993.14	741.10	3.66
HP	269.20	370.58	517.32	1003.33	708.47	3.73
J&K	264.05	383.10	530.69	898.35	711.82	3.40
Punjab	262.59	369.47	527.44	1045.78	828.01	3.98
Rajasthan	256.01	363.33	508.58	926.28	557.45	3.62
UP	251.18	358.84	501.67	971.95	474.89	3.87
Uttaranchal	262.14	365.90	509.79	922.91	566.59	3.52
AP	254.93	362.90	504.13	934.75	512.55	3.67
Karnataka	262.52	363.85	498.98	925.58	491.19	3.53
Kerala	259.17	369.70	521.33	1233.74	900.59	4.76
Tamil Nadu	249.70	361.44	509.97	1019.30	572.81	4.08
All- India	246.53	360.73	505.17	953.77	502.83	3.87

**References**

- Basu D, Basole, Amit. The calorie consumption puzzle in India: An empirical investigation 2013.
- Begum S, Khan M, Farooq M, Begum N, Shah IU. Socio-economic factors affecting food consumption pattern in rural area of district Nowshera, Pakistan. *Sarhad J Agric* 2010;26(4):649-653.
- Deaton A, Muellbauer J. An almost ideal demand system. *American Econ. Rev* 1980;70(3):312-326.
- Deaton A, Dreze, Jean. Food and nutrition in India, *Economic & Political Weekly* 2009;44(7):42-65.
- Green R, Alston JM. Elasticities in AIDS models, *American J Agric. Econ* 1990;72(2):442-445.
- Kumar P, Kumar, Anjani, Parappurathu, Shinoj, Raju SS. Estimation of demand elasticity for food commodities in India, *Agric. Econ. Res. Rev* 2011;24:1-14.
- Nzuma JM, Sarker R. An error corrected almost ideal demand system for major cereals in India 2010.
- Agric Econ.* Consumption behaviour of rural households: A micro level study of Rajasthan, India 2010;41:43-50.
- Radhakrishna R. Food consumption and nutritional status in India: Emerging Trends and Perspectives, WP-2006-008, Indira Gandhi Institute of Development Research, Mumbai 2006.
- Sethi AS, Pandhi, Ritu. Differential inequalities in calorie intake among Indian States: Evidence from different rounds of NSS. *J Income & Wealth* 2012;34(1):30-46