

MEASUREMENT OF CONSUMPTION INEQUALITY OF CEREALS IN MAJOR STATES OF INDIA

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ABSTRACT

Studying inequalities of income and consumption is a prerequisite for developing framework for narrowing them and achieving equitable and sustainable growth. In this paper, an attempt has been made to study the inequality of cereal consumption which persists in the major States between different consumption segments. Per capita consumption of cereals as a whole, as well as rice, wheat and coarse grain has been studied, separately making use of unit level data of the latest consumer expenditure survey conducted by the National Sample Survey Office, Government of India during the year 2011-2012. The ratios of per capita consumption of the richest households (top 10 per cent) with households belonging to the 'poorest' (10 per cent), the 'poor' (30 per cent) and the 'less advantaged half' (50 per cent) have been taken as a measure of consumption inequality. The study reveals that inequality, in terms of consumption of rice and wheat, exists in almost all major States in rural areas. The extent of inequality decreases as the base of the bottom population increases. The urban areas have either low levels of inequality or even reverse inequality of cereal consumption. Most of rural India has not been able to achieve equality of cereal consumption, despite focused nutrition intervention of targeted PDS.

Keywords: Per Capita, Cereal, Consumption, Inequality, Decile Class.

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Introduction

By virtue of globalisation and economic reforms/boom/growth, countries across the world are facing rise in income levels. As a result, domestic markets have become more integrated, competitive and consumer-friendly. With the availability of urban goods in rural areas, the consumption pattern of the people of India has undergone a radical change in both rural and urban India. Even, the per capita consumption of cereals has been declining despite rising monthly per capita consumption expenditure¹ (MPCE).

Human life is ultimately nourished and sustained by consumption (Vaidyanathan (1985), Reddy (2004), Pavithra (2009)). Studying inequalities in the consumption patterns (across MPCE classes) has always been of great interest to economists as it gives a good measure of existing standards of living. The same can also be studied using disposable income levels. However, according to Atkinson (1998), the consumption and inter-alia expenditure reflect 'long term' or 'permanent' income and is thus considered to be a better measure of economic well-being and respective inequalities. Similarly, Hasset and Mathur (2012) in their paper 'A new measure of consumption inequality' have also argued that income data are not the best measure of overall welfare. What matters for household is consumption. Consumption inequality when studied for food items, gives a composite measure of economic well-being, diet diversity and institutional interventions like food security. Therefore, the food consumption pattern of household is considered an important

measure of individual; welfare and well-being in any region.

Many researchers have studied consumption inequality across classes, castes and regions in terms of overall consumption as well as consumption of food and non-food items, separately. Study of consumption of non-food items is generally more relevant in the context of developed countries where the population spends substantially on education, health insurance as well as consumer durables. In the case of India, which is still in the nascent stage of development and where education and healthcare facilities are either free or heavily subsidised for the poor, studying consumption inequality in terms of food items may be more useful. In our present study, we have endeavoured to analyse cereal consumption across major States and studied consumption inequalities across MPCE classes using 68th round survey data of National Sample Survey Office.

National Sample Survey Office has been conducting quinquennial surveys on consumer expenditure since long and as per the latest round conducted during July, 2011 to June, 2012, the households still spend 52.9 per cent and 42.6 per cent of their monthly consumption expenditure on food items in rural and urban areas, respectively. The report also highlights that cereals continue to remain dominant in the food basket in both rural as well as urban India with a share of 10.7 and 6.6 per cent, respectively, in the total food share. The above, along with the fact that 'diet diversification' and 'eating out' are

phenomena which are still elusive to majority of the population, signify the need of studying inequalities prevailing in consumption of cereals across the economic classes. The share of expenditure on food and beverages in the total expenditure has often been used to define the boundary points of economic classes; however, as this approach does not take into account the relative provisions of various goods and services and also the extent of their usage, it has not found many takers. Studying the pattern of consumption across the individual decile classes of consumption has also not been preferred much as the inequality reflected in such a study may defuse differences in way of incremental changes (Roy, 2011).

Thus, for this study, we have compared the per capita cereal consumption of bottom most populations (below 10 per cent, 30 per cent and 50 per cent) with the topmost class of consumption expenditure. As the poverty line is closer to the upper limit of the 3rd decile class of consumption (i.e. 30 per cent), comparison with the population below it may be of use. The three inequalities could thus reveal how the 'poorest' (below 10 per cent), the 'poor' (below 30 per cent) and the 'less advantaged half' (below 50 per cent) fare in comparison with the top 10 per cent of the population, i.e., the 'richest' in terms of consumption inequality of cereals.

Data and Methods

Data Source and Design: The household² consumer expenditure survey is one of the important socio-economic surveys of National Sample Survey (NSS) Office, used to collect

information on actual quantity and value of household's consumption separately for rural and urban areas in different States/UTs. The latest consumer expenditure survey is 68th round, conducted during July, 2011 to June, 2012 and covered the whole of the Indian Union. Detailed information about the total quantity consumption of 142 food items including cereals, 15 items of energy (fuel, light and household appliances), 28 items of clothing, bedding and footwear, 19 items of educational and medical expenses, 51 items of durable goods, and 89 other items has been taken at household level. The households' quantity consumption of cereal during last 30 days and within the cereals, the total quantity consumption of rice (including rice through PDS), wheat (including wheat through PDS) and coarse grains (including jawar, bajra, maize, ragi, small millets, barley and their products) has been recorded in the schedule of enquiry. The period of survey was one whole agricultural year, but to ensure better representation of survey throughout the year, the survey period was divided into four sub-rounds of three months. In each sub-round, equal numbers of sample villages and urban blocks was allotted. For the selection of samples, a stratified multi-stage design has been adopted in the survey. The first stage units were the 2001 census³ villages (Panchayat wards in case of Kerala) in the rural sector and Urban Frame Survey blocks in the urban sector. The ultimate stage units were households in both the sectors. In the case of large first stage units, one intermediate stage of sampling frame was done. (Please see detailed sampling design at Note 4).

Methodology

The entire methodology can be divided into two parts as follows:

- I. Methodology for calculation of monthly per capita quantity consumption.
- II. Methodology for calculation of consumption inequality.

Methodology for Calculation of Monthly Per Capita Quantity Consumption:

The Monthly Per Capita Quantity Consumption (MPCQC) of cereals has been calculated by the formula given below

$$MPCQC_i = \frac{C_i}{N_i}$$

Where

$MPCQC_i$ = Monthly Per Capita Quantity Consumption of i^{th} household

C_i = Total Quantity Consumption of i^{th} household

N_i = Total members of i^{th} household

With the above formula Monthly per Capita Quantity Consumption of cereals, rice, wheat and coarse grains has been calculated separately for individual rural and urban households and further the same has been calculated for the major States⁵ of India.

Methodology for Calculation of Consumption Inequality:

To get the quantity consumption of households for different economic segments, 10 decile classes of monthly per capita expenditure have been estimated separately for rural and

urban areas of all major States of India and the same is given in Tables 6 and 7 of Annexures. Also with the above approach decile class-wise, Monthly per capita quantity consumption of cereals, rice, wheat and coarse grains has been calculated separately for the major States of rural and urban India.

The ratio of monthly per capita quantity consumption (MPCQC) of the households in the top decile class with those belonging to the bottom 10, 30 and 50 per cent of monthly per capita expenditure classes have been taken as a measure of consumption inequality. The formula to measure the consumption inequality is given below:

A ratio greater than 1 would indicate that inequality is present as the bottom classes would be consuming less. A ratio less than 1 would indicate presence of reverse inequality, a situation where the bottom classes are consuming more, the reasons for which could be many. The above formula has been used separately for cereals (including coarse grains), rice and wheat to calculate the measurement of consumption inequality for all major States as well as India and separately rural and urban areas.

Per Capita Consumption of Cereals in India

Per capita consumption of cereals in the major States is given in Table 1, separately for rural and urban areas. The same information for different decile classes in the major States is given in Tables 8 to 15 of Annexures. As may be seen, the per capita cereal consumption in

urban areas is lesser as compared to the rural areas which is obvious given the less laborious and relatively sedentary lifestyle of urban areas as well as the fact that the phenomenon of 'diet diversification' and 'eating out' are more prominent in urban areas. The consumption of

coarse grains is also negligible in urban areas; Gujarat, Karnataka, Maharashtra and Rajasthan are the only States where consumption of coarse grains is significantly visible. It may be noted that all the four States lie in the western half of India.

Table 1: Monthly Per Capita Cereal Consumption (kg) in all Major States in India: 2011-12

Major States	Rural				Urban			
	Rice	Wheat	Coarse Grain	Total Cereal	Rice	Wheat	Coarse Grain	Total Cereal
Jammu & Kashmir	8.13	3.39	0.82	12.34	7.60	3.29	0.06	10.95
Himachal Pradesh	4.39	6.43	0.92	11.75	3.82	5.81	0.12	9.75
Punjab	0.84	8.21	0.13	9.19	1.17	7.05	0.08	8.29
Uttarakhand	4.94	6.90	0.19	12.03	4.05	6.44	0.01	10.51
Haryana	0.72	8.55	0.11	9.38	1.06	7.20	0.03	8.29
Delhi	1.45	6.10	0.00	7.56	2.07	5.45	0.02	7.54
Rajasthan	0.24	9.27	2.25	11.76	0.58	8.96	0.29	9.83
Uttar Pradesh	4.06	7.16	0.06	11.29	2.84	6.54	0.01	9.39
Bihar	6.04	5.58	0.14	11.77	5.37	5.51	0.02	10.90
Assam	11.87	0.48	0.00	12.35	9.57	0.82	0.00	10.40
West Bengal	9.92	1.35	0.01	11.27	6.24	2.29	0.02	8.55
Jharkhand	8.84	2.67	0.09	11.60	5.72	4.46	0.02	10.19
Odisha	12.14	0.67	0.06	12.87	8.80	1.75	0.02	10.57
Chhattisgarh	11.25	0.87	0.08	12.21	8.70	2.13	0.00	10.84
Madhya Pradesh	2.19	8.48	0.67	11.35	1.88	7.85	0.09	9.82
Gujarat	2.04	3.71	2.83	8.58	1.83	4.98	0.70	7.52
Maharashtra	3.24	4.31	1.94	9.49	2.95	4.14	0.68	7.77
Andhra Pradesh	10.83	0.27	0.40	11.50	8.95	0.69	0.15	9.79
Karnataka	5.62	0.90	2.64	9.16	5.21	1.18	1.53	7.93
Kerala	7.24	0.74	0.01	7.98	6.74	0.87	0.01	7.62
Tamil Nadu	8.60	0.53	0.14	9.28	7.34	0.73	0.05	8.11
All India	5.98	4.29	0.65	10.91	4.49	4.01	0.29	8.79

A key finding which emerges here is that in the four out of five most developed States, as per HDI (UNDP, 2011), the per capita cereal consumption is the lowest. These States are Kerala, Punjab, Maharashtra and Haryana. The same is true for Karnataka, Tami Nadu and UT of Delhi also. On the other hand, the States of

Chhattisgarh, Odisha, Bihar UP, Jharkhand and Rajasthan which were the least developed as per HDI (UNDP, 2011) are found to have the highest per capita cereal consumption. This may be due to the fact that with development a variety of goods/processed foods, etc., become available and dietary pattern shifts towards higher

consumption of milk, fruits and vegetables. Also as the disposable income of people increases, they tend to eat out more. The hilly States of Jammu & Kashmir, Uttarakhand and Himachal are found to have cereal consumption above all-India average. The Table also reflects the well-known fact that eastern and southern India prefer rice to wheat.

Findings and Discussions

Cereal Consumption Inequality (CCI):

Consumption inequality of cereals in the major States of India is given in Table 2, separately for rural and urban areas. In rural areas, in almost all

cases, inequality in terms of cereal consumption is existent. The extent of inequality varies across States; however, it decreases as we broaden the bottom class of population. The extent of CCI in rural areas is highest in the three southern States of Tamil Nadu, Karnataka and Kerala. These States are followed by Gujarat, Jharkhand, Assam, Madhya Pradesh and Bihar. The States exhibiting the lowest levels of rural CCI are Delhi, Punjab, Himachal, Odisha, Uttarakhand and Haryana. Rajasthan, Jammu & Kashmir, West Bengal and Uttar Pradesh are the middle level States as far as CCI is concerned.

Table 2: Consumption Inequality of Cereals in the Major States of India: 2011-12

Major States	Rural			Urban		
	10:10	10:30	10:50	10:10	10:30	10:50
Jammu & Kashmir	1.26	1.15	1.11	1.16	1.08	1.04
Himachal Pradesh	1.15	1.13	1.09	0.80	0.83	0.80
Punjab	1.13	1.14	1.13	1.08	1.00	0.99
Uttarakhand	1.16	1.10	1.07	1.02	1.00	1.00
Haryana	1.18	1.08	1.07	0.83	0.82	0.84
Delhi	1.02	0.85	0.97	1.19	1.16	1.12
Rajasthan	1.29	1.24	1.21	1.05	1.01	0.99
Uttar Pradesh	1.18	1.15	1.13	0.94	0.94	0.93
Bihar	1.32	1.19	1.15	1.23	1.20	1.16
Assam	1.32	1.28	1.28	0.96	0.98	0.95
West Bengal	1.25	1.20	1.18	0.80	0.80	0.80
Jharkhand	1.36	1.25	1.21	1.03	1.01	0.99
Odisha	1.15	1.10	1.07	0.78	0.80	0.78
Chhattisgarh	1.26	1.16	1.10	0.99	0.91	0.91
Madhya Pradesh	1.32	1.25	1.20	0.97	0.95	0.93
Gujarat	1.36	1.24	1.18	0.99	0.97	0.96
Maharashtra	1.30	1.20	1.16	0.79	0.82	0.83
Andhra Pradesh	1.18	1.14	1.08	1.08	1.00	0.98
Karnataka	1.40	1.33	1.27	1.05	0.98	0.95
Kerala	1.40	1.30	1.23	1.20	1.13	1.10
Tamil Nadu	1.44	1.33	1.26	0.90	0.87	0.84
All India	1.09	1.05	1.04	0.86	0.86	0.86

Remarks: Cereals include rice, wheat and coarse grain.

When one tries to correlate the above findings with the levels of consumption through PDS (Table 5 and Tables 16 to 21 of Annexure), one can see that irrespective of the absolute levels of share of consumption through PDS, the States where the bottom classes consume relatively much more through PDS in comparison to the richest class exhibit lesser degree of CCI.

In case of urban areas, 11 out of 21 States exhibit the phenomenon of reverse inequality for all three comparison classes. In case of the remaining States which exhibit inequality (atleast for the poorest class), the levels of inequality are far less than those present in their rural areas. The States which exhibit the highest levels of urban CCI are Bihar, Kerala, Delhi and Jammu & Kashmir. The fact that either low levels of inequality or reverse inequality is present in urban areas somehow indicates that in urban areas, particularly the upper decile's consumption of cereals is less which may be due to the fact that they are more likely to have a diversified diet (including fruits, vegetables, milk, etc.), consume processed food

and eat out than their rural counterparts who are still struggling to overcome inequality of consumption of basic food items, i.e., cereals.

Rice Consumption Inequality (RCI):

Consumption inequality of rice in the major States of India is given in Table 3, separately for rural and urban areas. As far as rural areas are concerned, one can see that the RCI is prevalent at high rates in wheat eating States like Rajasthan, Delhi and Haryana. This shows that in these States the relative consumption of the non-preferred foodgrain is much less amongst the poor classes. Madhya Pradesh exhibits the highest levels of reverse RCI. The other States which have reverse or low levels of RCI are Uttar Pradesh, Odisha, Maharashtra, etc. Now this may be expected also, as they are rice preferring States. In case of Odisha and Jharkhand, RCI is almost negligible in case of rural areas. On the other hand, in case of urban areas, strikingly reverse RCI is present, which may be due to the fact that in urban Odisha, the upper decile classes consume more wheat.

Table 3: Consumption Inequality of Rice in the Major States of India: 2011-12

Major States	Rural			Urban		
	10:10	10:30	10:50	10:10	10:30	10:50
Jammu & Kashmir	1.62	1.25	1.07	1.00	0.90	0.88
Himachal Pradesh	1.10	1.13	1.08	0.67	0.68	0.65
Punjab	1.25	1.16	1.12	0.95	0.97	0.96
Uttarakhand	1.10	1.02	0.98	0.94	0.89	0.86
Haryana	2.36	1.99	1.87	1.05	1.12	1.01
Delhi	3.20	1.87	1.18	1.01	1.12	1.15
Rajasthan	3.66	2.95	2.84	2.21	2.09	1.92
Uttar Pradesh	0.92	0.95	0.97	0.69	0.76	0.79
Bihar	1.29	1.18	1.15	1.12	1.11	1.10
Assam	1.32	1.26	1.26	0.87	0.90	0.89
West Bengal	1.17	1.14	1.11	0.69	0.72	0.74

(Contd.....)

Table 3 (Contd.....)

Jharkhand	1.13	1.04	1.01	0.77	0.83	0.86
Odisha	1.02	0.98	0.96	0.53	0.54	0.54
Chhattisgarh	1.14	1.04	1.00	0.78	0.70	0.72
Madhya Pradesh	0.54	0.58	0.61	0.89	0.99	1.04
Gujarat	1.26	1.22	1.11	0.92	0.96	0.96
Maharashtra	1.05	1.11	1.09	0.96	0.88	0.89
Andhra Pradesh	1.20	1.14	1.09	0.98	0.92	0.90
Karnataka	1.81	1.60	1.49	1.11	1.00	0.94
Kerala	1.32	1.23	1.18	1.09	1.04	1.02
Tamil Nadu	1.41	1.29	1.22	0.82	0.80	0.77
All India	0.96	0.96	0.97	0.79	0.80	0.80

The rice preferring States of Maharashtra, West Bengal and Tamil Nadu also present the case of reverse RCI in urban areas due to two facts: upper decile classes consume less in terms of overall cereal consumption and they consume wheat more as compared to the lower and middle decile classes. Assam, though being a rice eating State, exhibits high levels of RCI in rural areas. When one looks at its share of consumption through PDS (Table 16 of Annexure), it turns out that even the poorest class is consuming less than 30 per cent of its share of rice through PDS, which is disturbing as it is a rice preferring State. In case of urban areas, barring Rajasthan, almost all States exhibit either reverse or very low levels of RCI. This shows that in urban Rajasthan, the consumption of rice by even the bottom decile class is very low. The same is also seen in Table 13 of Annexure. At all-India level also, one can see that for both rural as well as urban India reverse RCI is present, though the degree of reversal in urban areas is more than that in rural areas. This reflects that somehow the poor are more likely to consume rice than wheat. This may be due to the concentration of poor in rice eating States,

the relatively better availability of rice through PDS, the relatively lesser price of rice in open market or its more consumption on account of home production.

Wheat Consumption Inequality (WCI):

Consumption inequality of wheat in the major States of India is given in Table 4, separately for rural and urban areas. WCI is present at strikingly high levels in Odisha. The other States exhibiting high levels of WCI are Chhattisgarh, Andhra Pradesh, Jharkhand and Kerala. For Kerala and Andhra Pradesh, carefully as this occurs because of the fact that quantity of wheat consumed is low in higher decile classes and almost negligible in lower decile classes. Also for urban areas, unlike RCI which was negligible in most cases, WCI is present at substantially higher levels. The extent of decrease from rural to urban is also less or absent. Andhra Pradesh and Assam even exhibit a higher level of WCI in urban areas, which may be due to the fact that in both these States in urban areas, consumption of wheat through PDS is almost negligible for the lowest decile class.

Only three States - Maharashtra, Haryana and Himachal Pradesh - exhibit reverse WCI in urban areas. When one correlates this with per capita consumption of wheat, it comes out as obvious as the urban lower decile classes of

these States consume wheat at par with their higher decile counterparts. They also consume relatively higher share of wheat through PDS than most of the other States.

Table 4: Consumption Inequality of Wheat in the Major States of India: 2011-12

Major States	Rural			Urban		
	10:10	10:30	10:50	10:10	10:30	10:50
Jammu & Kashmir	1.13	1.24	1.42	1.56	1.59	1.48
Himachal Pradesh	1.14	1.11	1.08	0.89	0.94	0.91
Punjab	1.10	1.11	1.11	1.08	0.99	0.97
Uttarakhand	1.23	1.20	1.18	1.05	1.05	1.07
Haryana	1.09	1.01	1.00	0.80	0.79	0.82
Delhi	0.83	0.72	0.92	1.27	1.17	1.10
Rajasthan	1.36	1.29	1.29	1.02	0.96	0.95
Uttar Pradesh	1.38	1.28	1.24	1.09	1.03	0.99
Bihar	1.35	1.20	1.15	1.36	1.30	1.22
Assam	1.33	1.94	1.86	3.50	2.31	2.06
West Bengal	1.95	1.70	1.68	1.16	0.97	0.95
Jharkhand	2.53	2.15	1.98	1.62	1.32	1.20
Odisha	15.25	7.29	5.45	4.25	3.82	3.19
Chhattisgarh	3.63	3.80	2.97	2.32	2.36	2.13
Madhya Pradesh	1.74	1.52	1.43	1.04	0.96	0.92
Gujarat	2.14	1.98	1.83	1.17	1.06	1.03
Maharashtra	1.62	1.30	1.22	0.80	0.86	0.86
Andhra Pradesh	3.16	2.29	2.10	4.47	3.01	2.36
Karnataka	0.98	0.93	0.92	1.81	1.63	1.58
Kerala	2.40	2.10	1.87	2.40	1.97	1.84
Tamil Nadu	1.75	1.84	1.81	2.02	1.77	1.64
All India	1.20	1.13	1.10	0.93	0.92	0.94

In case of Gujarat, it was seen that RCI was almost absent; however, WCI is present at higher levels, particularly in rural areas. In Gujarat the share of consumption through PDS is low, as well as overall cereal consumption is also low. On careful analysis, one finds that across the decile classes, the consumption of coarse grains is substantially high almost

at par with consumption of rice and wheat, individually. In rural areas, it is even higher than consumption of rice and wheat. Since PDS essentially offers only rice and wheat, it results in low share of PDS in the overall consumption even amongst the lower decile classes of rural Gujarat.

Share of PDS in Consumption

Table 5 gives the share of PDS in per capita consumption of rice and wheat for all

India and 21 major States. The information about different decile classes of consumption are given in Tables 16 to 21 of Annexures.

Table 5: Percentage Share of Per Capita Consumption of Rice, Wheat and Both (through PDS) to Total Cereal Consumption: 2011-12

States	Rural			Urban		
	Rice	Wheat	Rice & Wheat	Rice	Wheat	Rice & Wheat
Jammu & Kashmir	35.57	13.34	48.91	40.04	14.16	54.20
Himachal Pradesh	17.67	27.05	44.72	10.32	20.26	30.59
Punjab	0.01	12.56	12.57	0.03	4.62	4.65
Uttarakhand	15.19	14.02	29.20	5.77	8.04	13.81
Haryana	0.12	13.12	13.24	0.02	8.23	8.25
Delhi	0.90	6.60	7.50	1.61	6.16	7.77
Rajasthan	0.05	11.30	11.34	0.08	7.28	7.36
Uttar Pradesh	7.72	5.90	13.62	2.68	4.91	7.59
Bihar	11.22	8.35	19.57	5.34	3.80	9.14
Assam	23.57	0.35	23.92	11.02	0.09	11.11
West Bengal	8.42	5.40	13.82	4.33	4.46	8.79
Jharkhand	17.71	0.19	17.90	3.63	0.24	3.87
Odisha	28.34	1.30	29.64	12.94	3.13	16.07
Chhattisgarh	35.35	2.96	38.31	23.76	5.19	28.96
Madhya Pradesh	4.13	13.27	17.40	2.33	11.39	13.72
Gujarat	3.96	7.79	11.75	0.93	2.24	3.16
Maharashtra	11.89	13.78	25.67	2.55	4.19	6.75
Andhra Pradesh	30.61	0.33	30.94	20.32	0.50	20.83
Karnataka	27.77	4.72	32.49	16.55	2.83	19.37
Kerala	32.20	5.16	37.36	26.53	4.54	31.07
Tamil Nadu	48.87	4.70	53.58	39.06	5.44	44.51
All India	15.30	6.82	22.12	10.04	4.62	14.66

In Table 5, it can be seen that the States with the highest percentage share of consumption of rice and wheat (combined) through PDS are Tamil Nadu, Jammu & Kashmir, Himachal Pradesh, Chhattisgarh, Kerala, Karnataka, Andhra Pradesh, Odisha and Uttarakhand. The share of PDS rice in most wheat eating States of Punjab, Haryana, Delhi and Rajasthan is less. Similarly, the share of PDS wheat in most rice eating States (Odisha and

four southern States) is less which is obvious also. The hilly States of Jammu & Kashmir, Himachal Pradesh and Uttarakhand, the central States of Uttar Pradesh and Madhya Pradesh, Bihar, West Bengal and Maharashtra have significant share of both rice and wheat in PDS. Delhi consumes less through PDS and so do Rajasthan and Gujarat. In case of Rajasthan and Gujarat, this may be due to higher consumption of coarse foodgrains (Reference Table 1).

Except for Jammu & Kashmir all other States depict relatively higher share of PDS for rural areas than urban areas. Though urban Delhi's PDS share is also marginally higher than rural Delhi's, the same may be due to negligible area of rural Delhi. In urban areas, share of Punjab, Gujarat and Jharkhand was below 5 per cent and that of Haryana, Delhi, Rajasthan, Uttar Pradesh, West Bengal and Maharashtra was below 10 per cent indicating strong need for coverage improvement.

Conclusion

Governments in India have always focused on nutrition programmes like targeted PDS, food for work, etc., for ensuring foodgrain security. Study of consumption inequality in terms of foodgrain consumption is useful in India's context and forms the premises of this paper. The ratios of per capita consumption of the richest households (top 10 per cent) with households belonging to the 'poorest' (10 per cent), the 'poor' (30 per cent) and the 'less advantaged half' (50 per cent) have been taken as a measure of consumption inequality.

The findings of the paper reveal that inequality in terms of consumption of rice and wheat exists in almost all major States in rural areas. The extent of inequality decreases as the base of the bottom population increases. The urban areas have either low levels of inequality or even reverse inequality of cereal consumption. Most of rural India has not been able to achieve equality of cereal consumption, despite focused nutrition intervention of targeted PDS.

A transition in the preference (dietary changes/nutrition transition) with increase in income levels is also observed. For example, in rice preferring/eating States, the consumption of wheat is found to be increased marginally in the upper decile classes. Similarly, in wheat preferring/eating States, the consumption of rice is found to be increased marginally in the upper decile classes for wheat. The share of PDS of rice in wheat preferring/eating States and the share of PDS of wheat in rice preferring/eating States is observed to be less significant.

The share of PDS in cereal consumption for Delhi and urban areas of Punjab, Gujarat, Jharkhand, Haryana, Rajasthan, Uttar Pradesh, West Bengal and Maharashtra is less than 10 per cent and has a lot of scope for increase. For urban areas, RCI is almost absent, however, WCI is present at relatively higher levels. This reflects that the consumption of rice amongst the poor is on an average higher than that of wheat although, in most of the rice preferring/eating States in urban areas, the upper decile class has significant consumption of wheat. This somehow reflects that the well-off section of the population tends to increase its consumption of wheat.

Thus, it can be concluded that despite being able to manage inter-year production fluctuations, India has still a lot to do in terms of achieving equality of foodgrain consumption and nutrition transition.

Table 6: Ten Decile Classes of Monthly Per Capita Consumption Expenditure: 2011-12 (Major States)

Major States	Decile Classes (Rural)									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	0-988	988-1159	1159-1275	1275-1422	1422-1539	1539-1713	1713-1918	1918-2160	2160-2637	>2637
Himachal Pradesh	0-1028	1028-1211	1211-1368	1368-1512	1512-1697	1697-1908	1908-2140	2140-2491	2491-3168	>3168
Punjab	0-1178	1178-1379	1379-1565	1565-1749	1749-1975	1975-2244	2244-2527	2527-2946	2946-3703	>3703
Uttarakhand	0-988	988-1106	1106-1238	1238-1326	1326-1450	1450-1639	1639-1853	1853-2168	2168-2717	>2717
Haryana	0-1092	1092-1309	1309-1501	1501-1710	1710-1884	1884-2111	2111-2444	2444-2818	2818-3503	>3503
Delhi	0-1304	1304-1900	1900-1955	1955-2134	2134-2342	2342-2342	2342-2794	2794-4439	4439-4472	>4472
Rajasthan	0-879	879-1022	1022-1159	1159-1289	1289-1406	1406-1532	1532-1722	1722-1914	1914-2367	>2367
Uttar Pradesh	0-638	638-744	744-829	829-906	906-1004	1004-1111	1111-1233	1233-1421	1421-1800	>1800
Bihar	0-687	687-799	799-884	884-970	970-1032	1032-1123	1123-1219	1219-1395	1395-1690	>1690
Assam	0-702	702-812	812-915	915-995	995-1079	1079-1209	1209-1316	1316-1519	1519-1855	>1855
West Bengal	0-745	745-839	839-934	934-1029	1029-1138	1138-1247	1247-1365	1365-1574	1574-1950	>1950
Jharkhand	0-613	613-698	698-784	784-843	843-937	937-1015	1015-1098	1098-1205	1205-1437	>1437
Odisha	0-559	559-653	653-748	748-814	814-891	891-980	980-1095	1095-1254	1254-1540	>1540
Chhattisgarh	0-588	588-677	677-769	769-840	840-918	918-978	978-1087	1087-1277	1277-1517	>1517
Madhya Pradesh	0-576	576-706	706-807	807-888	888-987	987-1106	1106-1230	1230-1468	1468-1824	>1824
Gujarat	0-864	864-994	994-1089	1089-1207	1207-1334	1334-1450	1450-1644	1644-1924	1924-2402	>2402
Maharashtra	0-906	906-1049	1049-1165	1165-1271	1271-1383	1383-1526	1526-1691	1691-1960	1960-2487	>2487
Andhra Pradesh	0-983	983-1135	1135-1259	1259-1395	1395-1521	1521-1669	1669-1870	1870-2150	2150-2628	>2628
Karnataka	0-850	850-978	978-1113	1113-1202	1202-1320	1320-1462	1462-1591	1591-1840	1840-2459	>2459
Kerala	0-1104	1104-1327	1327-1526	1526-1736	1736-1995	1995-2309	2309-2595	2595-3135	3135-4229	>4229
Tamil Nadu	0-824	824-1003	1003-1163	1163-1313	1313-1442	1442-1615	1615-1824	1824-2151	2151-2822	>2822
All India	0-710	710-845	845-963	963-1075	1075-1198	1198-1341	1341-1522	1522-1793	1793-2296	>2296

Table 7: Ten Decile Classes of Monthly Per Capita Consumption Expenditure: 2011-12 (Major States)

Major States	Decile Classes (Urban)									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	0-1115	1115-1356	1356-1605	1605-1835	1835-2034	2034-2363	2363-2759	2759-3269	3269-4213	>4213
Himachal Pradesh	0-1455	1455-1872	1872-2187	2187-2480	2480-2717	2717-3101	3101-3661	3661-4402	4402-5579	>5579
Punjab	0-1257	1257-1519	1519-1785	1785-2005	2005-2263	2263-2573	2573-3105	3105-3653	3653-4599	>4599
Uttarakhand	0-1021	1021-1243	1243-1418	1418-1746	1746-1962	1962-2251	2251-2542	2542-3107	3107-4047	>4047
Haryana	0-1384	1384-1735	1735-1989	1989-2274	2274-2632	2632-3036	3036-3493	3493-4419	4419-7818	>7818
Delhi	0-1319	1319-1656	1656-1904	1904-2148	2148-2454	2454-2867	2867-3525	3525-4337	4337-6431	>6431
Rajasthan	0-1087	1087-1347	1347-1538	1538-1745	1745-1974	1974-2221	2221-2457	2457-3039	3039-4156	>4156
Uttar Pradesh	0-780	780-936	936-1094	1094-1230	1230-1428	1428-1690	1690-2013	2013-2534	2534-3662	>3662
Bihar	0-705	705-868	868-971	971-1111	1111-1217	1217-1375	1375-1643	1643-1996	1996-2626	>2626
Assam	0-867	867-1062	1062-1326	1326-1546	1546-1826	1826-2079	2079-2292	2292-2933	2933-3905	>3905
West Bengal	0-943	943-1165	1165-1403	1403-1693	1693-1953	1953-2291	2291-2703	2703-3440	3440-4762	>4762
Jharkhand	0-833	833-1055	1055-1233	1233-1475	1475-1760	1760-1987	1987-2231	2231-2700	2700-3371	>3371
Odisha	0-755	755-907	907-1146	1146-1271	1271-1412	1412-1727	1727-2114	2114-2649	2649-3751	>3751
Chhattisgarh	0-700	700-863	863-1046	1046-1182	1182-1393	1393-1686	1686-1974	1974-2464	2464-3425	>3425
Madhya Pradesh	0-812	812-962	962-1150	1150-1310	1310-1545	1545-1796	1796-2149	2149-2681	2681-3845	>3845
Gujarat	0-1198	1198-1449	1449-1720	1720-1972	1972-2268	2268-2486	2486-2871	2871-3265	3265-4134	>4134
Maharashtra	0-1335	1335-1652	1652-1865	1865-2131	2131-2432	2432-2769	2769-3254	3254-3907	3907-5384	>5384
Andhra Pradesh	0-1180	1180-1509	1509-1725	1725-1963	1963-2219	2219-2539	2539-2976	2976-3600	3600-4365	>4365
Karnataka	0-1025	1025-1274	1274-1498	1498-1806	1806-2222	2222-2673	2673-3160	3160-3580	3580-3594	>3594
Kerala	0-1238	1238-1467	1467-1735	1735-1989	1989-2366	2366-2712	2712-3226	3226-4089	4089-5865	>5865
Tamil Nadu	0-1121	1121-1372	1372-1609	1609-1857	1857-2064	2064-2402	2402-2803	2803-3411	3411-4588	>4588
All India	0-983	983-1239	1239-1490	1490-1757	1757-2019	2019-2349	2349-2771	2771-3390	3390-4610	>4610

Table 8: Decile Class-wise Monthly Per capita Cereals Consumption (kg) in all Major States of India: 2011-12 (Rural)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	10.27	11.60	11.71	12.01	12.70	12.86	12.85	13.37	13.07	12.91
Himachal Pradesh	10.92	10.90	11.62	11.81	12.17	11.75	12.39	12.00	11.34	12.57
Punjab	8.73	8.60	8.82	9.13	8.68	8.93	9.05	9.85	10.17	9.91
Uttarakhand	10.96	11.73	11.97	12.04	12.67	12.35	12.56	12.22	11.00	12.76
Haryana	8.19	9.07	9.47	9.28	9.26	9.46	9.40	9.90	10.10	9.67
Delhi	7.79	10.27	10.00	6.89	6.98	0.00	7.84	7.67	5.44	7.92
Rajasthan	10.42	11.04	11.14	11.40	11.76	11.79	12.28	12.03	12.29	13.46
Uttar Pradesh	10.41	10.89	10.92	10.89	11.42	11.34	11.24	11.73	11.71	12.32
Bihar	9.79	11.03	11.76	11.66	11.70	12.05	11.83	12.44	12.56	12.88
Assam	11.24	11.08	12.31	11.39	11.83	12.10	13.24	12.51	12.96	14.83
West Bengal	10.12	10.87	10.52	10.82	11.45	11.34	11.48	11.52	11.97	12.65
Jharkhand	9.63	11.40	10.60	11.29	11.50	12.39	12.34	11.88	11.88	13.12
Odisha	11.55	12.18	12.45	12.85	12.81	13.65	12.85	13.46	13.67	13.29
Chhattisgarh	10.22	11.04	12.03	12.28	12.65	12.55	12.17	12.81	13.53	12.83
Madhya Pradesh	9.67	10.69	10.44	10.89	11.76	11.25	11.86	12.05	12.07	12.80
Gujarat	7.20	8.18	8.41	8.97	8.72	7.95	8.16	9.42	8.96	9.83
Maharashtra	8.04	9.09	9.08	9.43	9.52	9.68	9.40	10.06	10.11	10.47
Andhra Pradesh	10.06	10.21	11.13	11.52	11.87	11.58	12.26	12.21	12.29	11.88
Karnataka	7.66	7.71	8.87	8.95	9.13	9.30	9.80	9.31	10.13	10.72
Kerala	6.55	7.13	7.55	7.83	8.06	8.28	7.84	8.60	8.83	9.17
Tamil Nadu	7.48	8.23	8.61	8.99	9.50	9.15	9.95	9.76	10.38	10.75
All India	10.21	10.81	10.90	10.87	10.92	11.03	10.99	11.11	11.15	11.14

Table 9: Decile Class-wise Monthly Per capita Rice Consumption (kg) in All Major States of India: 2011-12 (Rural)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	4.85	6.41	7.57	8.38	9.48	9.54	9.07	9.31	8.82	7.86
Himachal Pradesh	4.29	3.83	4.35	4.51	4.75	4.30	4.71	4.39	4.06	4.71
Punjab	0.65	0.71	0.74	0.75	0.77	0.98	0.99	1.12	0.92	0.82
Uttarakhand	4.54	4.84	5.31	4.98	5.83	4.69	5.31	4.54	4.40	4.99
Haryana	0.48	0.65	0.58	0.61	0.71	0.47	0.74	0.99	0.80	1.13
Delhi	0.61	1.18	2.00	2.51	2.13	0.00	1.09	0.85	1.06	1.95
Rajasthan	0.14	0.19	0.20	0.17	0.22	0.17	0.21	0.24	0.27	0.53
Uttar Pradesh	4.39	4.19	4.18	4.06	4.10	4.17	3.84	3.91	3.75	4.04
Bihar	5.17	5.80	6.03	5.90	6.06	5.98	5.96	6.37	6.50	6.66
Assam	10.65	10.77	11.99	10.93	11.39	11.73	12.65	12.06	12.42	14.04
West Bengal	9.10	9.60	9.30	9.63	10.22	10.15	10.10	10.09	10.38	10.66
Jharkhand	7.79	9.49	8.11	8.74	9.21	9.38	9.18	9.04	8.69	8.78
Odisha	11.21	11.88	12.02	12.50	12.19	13.00	12.17	12.50	12.46	11.48
Chhattisgarh	9.61	10.45	11.47	11.31	11.77	11.49	11.22	11.82	12.41	10.95
Madhya Pradesh	2.97	3.05	2.29	2.25	2.65	2.00	1.86	1.80	1.50	1.60
Gujarat	1.89	1.93	2.04	2.32	2.54	1.56	1.85	1.80	2.09	2.38
Maharashtra	3.43	3.10	3.18	3.32	3.50	3.30	2.94	3.02	2.99	3.60
Andhra Pradesh	9.29	9.39	10.71	10.89	11.07	10.93	11.75	11.60	11.52	11.16
Karnataka	4.06	4.15	5.55	5.15	5.71	5.90	6.07	5.66	6.62	7.35
Kerala	6.07	6.58	6.94	7.18	7.28	7.53	7.10	7.72	7.96	8.02
Tamil Nadu	6.92	7.65	8.07	8.43	8.90	8.55	9.25	8.96	9.61	9.74
All India	6.09	6.21	6.13	5.99	5.88	6.03	5.90	5.85	5.83	5.86

Table 10: Decile Class-wise Monthly Per Capita Wheat Consumption (kg) in All Major States of India: 2011-12 (Rural)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	4.06	4.04	2.96	2.55	2.60	2.75	3.00	3.57	3.74	4.59
Himachal Pradesh	5.96	5.98	6.40	6.37	6.52	6.42	6.68	6.79	6.44	6.78
Punjab	8.05	7.83	7.98	8.32	7.81	7.77	7.95	8.48	9.02	8.86
Uttarakhand	6.27	6.74	6.26	6.75	6.58	7.45	7.12	7.53	6.54	7.70
Haryana	7.64	8.33	8.85	8.60	8.45	8.81	8.51	8.81	9.18	8.34
Delhi	7.18	9.09	8.00	4.38	4.85	0.00	6.74	6.81	4.38	5.94
Rajasthan	8.11	8.86	8.59	8.44	8.74	9.55	9.36	10.16	9.91	11.03
Uttar Pradesh	5.97	6.67	6.63	6.74	7.25	7.11	7.36	7.74	7.88	8.24
Bihar	4.51	5.16	5.64	5.64	5.52	5.87	5.59	5.91	5.89	6.11
Assam	0.59	0.31	0.32	0.46	0.43	0.37	0.59	0.45	0.51	0.79
West Bengal	1.02	1.26	1.22	1.19	1.21	1.19	1.38	1.43	1.58	1.98
Jharkhand	1.66	1.83	2.38	2.52	2.22	2.87	3.10	2.77	3.15	4.20
Odisha	0.12	0.22	0.40	0.32	0.57	0.62	0.62	0.89	1.18	1.78
Chhattisgarh	0.50	0.49	0.44	0.90	0.73	0.95	0.91	0.96	1.07	1.81
Madhya Pradesh	6.01	7.09	7.63	7.95	7.87	8.67	9.59	9.30	10.23	10.48
Gujarat	2.54	3.04	2.65	3.39	3.17	4.23	3.56	4.46	4.58	5.43
Maharashtra	2.97	4.07	4.01	4.25	4.34	4.38	4.55	4.84	4.92	4.80
Andhra Pradesh	0.14	0.22	0.22	0.23	0.24	0.22	0.31	0.31	0.36	0.45
Karnataka	0.85	0.93	0.89	1.02	0.84	0.90	0.87	0.88	0.96	0.83
Kerala	0.47	0.55	0.61	0.65	0.77	0.74	0.74	0.86	0.85	1.14
Tamil Nadu	0.46	0.44	0.40	0.41	0.50	0.47	0.56	0.61	0.64	0.80
All India	3.86	4.22	4.19	4.25	4.38	4.19	4.23	4.41	4.53	4.62

Table.11: Decile Class-wise Monthly Per Capita Coarse Grain Consumption (kg) in All Major States of India: 2011-12 (Rural)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	1.36	1.15	1.18	1.09	0.62	0.56	0.78	0.49	0.51	0.46
Himachal Pradesh	0.67	1.08	0.87	0.92	0.89	1.03	1.00	0.82	0.85	1.08
Punjab	0.04	0.06	0.09	0.05	0.10	0.17	0.11	0.25	0.23	0.24
Uttarakhand	0.15	0.15	0.40	0.32	0.27	0.21	0.13	0.16	0.07	0.06
Haryana	0.07	0.09	0.05	0.07	0.10	0.18	0.15	0.09	0.13	0.20
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03
Rajasthan	2.16	1.98	2.35	2.79	2.80	2.07	2.72	1.63	2.10	1.90
Uttar Pradesh	0.05	0.03	0.11	0.09	0.06	0.06	0.04	0.08	0.08	0.04
Bihar	0.10	0.07	0.08	0.12	0.13	0.20	0.28	0.16	0.17	0.11
Assam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
West Bengal	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.01
Jharkhand	0.18	0.09	0.10	0.03	0.08	0.14	0.05	0.06	0.04	0.14
Odisha	0.22	0.08	0.04	0.03	0.05	0.03	0.05	0.06	0.03	0.03
Chhattisgarh	0.11	0.10	0.12	0.07	0.14	0.11	0.04	0.03	0.05	0.07
Madhya Pradesh	0.69	0.55	0.52	0.69	1.24	0.58	0.41	0.95	0.33	0.71
Gujarat	2.77	3.21	3.72	3.26	3.01	2.16	2.74	3.15	2.28	2.01
Maharashtra	1.64	1.91	1.89	1.85	1.68	2.01	1.91	2.21	2.21	2.07
Andhra Pradesh	0.62	0.60	0.20	0.40	0.55	0.42	0.20	0.29	0.41	0.27
Karnataka	2.76	2.63	2.44	2.78	2.58	2.51	2.86	2.76	2.55	2.54
Kerala	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.01
Tamil Nadu	0.11	0.14	0.13	0.16	0.10	0.13	0.14	0.19	0.12	0.21
All India	0.27	0.38	0.58	0.62	0.66	0.82	0.86	0.84	0.79	0.67

Table 12: Decile Class-wise Monthly Per Capita Cereals Consumption (kg) in All Major States of India: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	9.63	10.52	10.90	11.47	11.15	11.38	11.68	10.81	10.81	11.21
Himachal Pradesh	9.74	9.85	8.58	9.52	11.32	11.28	10.43	8.76	10.07	7.83
Punjab	7.51	8.56	8.20	8.37	8.46	8.30	8.28	8.55	8.58	8.11
Uttarakhand	9.97	10.41	10.23	10.43	9.82	11.25	11.43	11.28	10.00	10.16
Haryana	8.51	8.49	8.57	8.01	8.32	8.48	8.50	8.60	8.37	7.03
Delhi	6.95	7.06	7.34	7.49	8.07	7.14	7.78	7.63	7.68	8.26
Rajasthan	9.32	9.58	10.25	9.71	10.53	9.62	9.73	10.12	9.71	9.76
Uttar Pradesh	9.41	9.44	9.57	9.63	9.81	9.38	9.21	9.64	8.97	8.88
Bihar	9.68	9.58	10.50	10.59	10.84	11.24	12.04	11.57	11.07	11.88
Assam	10.41	10.45	9.94	10.62	11.05	10.50	10.63	10.40	10.09	10.00
West Bengal	8.96	8.87	9.27	9.05	8.50	8.69	8.40	8.19	8.34	7.19
Jharkhand	9.77	10.16	9.97	9.96	10.88	10.40	9.99	10.27	10.50	10.05
Odisha	11.19	11.50	10.34	11.29	11.65	11.23	9.80	10.69	9.18	8.78
Chhattisgarh	10.06	10.93	11.82	11.19	10.47	10.44	11.62	10.27	11.62	9.95
Madhya Pradesh	9.28	9.17	10.01	10.05	10.04	10.08	10.17	10.18	10.17	9.03
Gujarat	7.33	7.15	8.01	7.49	7.98	7.27	7.13	7.54	8.02	7.27
Maharashtra	8.31	8.13	7.67	7.91	7.82	7.89	8.08	7.82	7.45	6.60
Andhra Pradesh	8.87	9.67	10.19	10.09	10.34	10.10	10.25	9.49	9.30	9.61
Karnataka	7.05	7.79	7.87	8.12	8.24	8.56	8.62	8.22	7.37	7.40
Kerala	6.74	7.18	7.53	7.78	7.55	7.99	7.87	7.58	7.91	8.07
Tamil Nadu	7.73	8.16	8.07	8.49	8.72	8.83	7.98	8.34	7.84	6.93
All India	9.09	9.14	9.11	9.03	8.84	9.02	8.64	8.68	8.49	7.82

Table 13: Decile Class-wise Monthly Per Capita Rice Consumption (kg) in All Major States of India: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	6.86	7.26	8.72	8.24	7.98	7.95	8.52	7.24	6.38	6.87
Himachal Pradesh	3.88	4.35	3.40	3.72	5.01	4.46	4.10	3.30	3.43	2.62
Punjab	1.22	1.25	1.09	1.48	0.99	1.01	1.08	1.33	1.06	1.16
Uttarakhand	3.60	4.27	3.68	3.91	4.29	4.78	4.41	4.67	3.54	3.40
Haryana	0.96	0.69	1.07	1.09	1.20	1.11	1.07	1.11	1.30	1.02
Delhi	2.32	1.91	2.04	1.94	1.96	1.95	2.07	2.06	2.15	2.34
Rajasthan	0.39	0.32	0.53	0.44	0.59	0.59	0.83	0.63	0.63	0.87
Uttar Pradesh	3.45	3.15	2.82	2.73	2.86	2.96	2.62	2.68	2.70	2.37
Bihar	5.08	4.85	5.37	5.26	5.08	5.74	5.93	5.49	5.18	5.67
Assam	10.04	9.96	9.19	10.05	10.20	9.36	9.78	9.48	9.11	8.73
West Bengal	7.08	6.49	6.84	6.59	6.21	6.41	5.87	5.96	6.06	4.91
Jharkhand	6.83	6.55	5.72	5.80	5.92	5.63	5.37	4.92	5.14	5.28
Odisha	10.39	10.57	9.38	10.23	10.13	8.98	7.87	8.51	6.42	5.51
Chhattisgarh	8.69	10.04	10.03	10.06	8.20	8.51	9.46	7.49	7.69	6.76
Madhya Pradesh	2.23	1.97	1.86	1.77	1.77	1.43	1.80	2.03	1.91	1.99
Gujarat	2.01	1.91	1.82	1.85	2.00	1.59	1.63	1.87	1.82	1.85
Maharashtra	2.66	2.88	3.16	2.98	2.74	3.10	3.37	3.03	2.99	2.56
Andhra Pradesh	8.47	9.06	9.61	9.44	9.46	9.10	9.22	8.60	8.25	8.31
Karnataka	4.34	5.05	5.07	5.27	5.68	5.85	5.58	5.68	5.48	4.80
Kerala	6.20	6.48	6.79	6.99	6.80	7.15	6.92	6.56	6.73	6.77
Tamil Nadu	7.18	7.49	7.48	7.87	7.95	8.08	7.19	7.40	6.84	5.88
All India	4.68	4.63	4.63	4.67	4.57	4.64	4.39	4.39	4.55	3.72

Table 14: Decile Class-wise Monthly Per Capita Wheat Consumption (kg) in All Major states of India: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	2.74	3.18	2.15	3.18	3.17	3.34	3.02	3.51	4.37	4.26
Himachal Pradesh	5.68	5.34	5.09	5.70	6.17	6.74	6.22	5.42	6.47	5.07
Punjab	6.26	7.25	7.06	6.86	7.41	7.19	7.11	7.15	7.39	6.79
Uttarakhand	6.36	6.14	6.55	6.52	5.52	6.47	7.00	6.59	6.45	6.70
Haryana	7.54	7.74	7.48	6.89	7.09	7.30	7.43	7.45	7.05	6.00
Delhi	4.64	5.13	5.30	5.53	6.10	5.11	5.72	5.57	5.51	5.89
Rajasthan	8.53	8.98	9.52	9.08	9.55	8.81	8.58	9.23	8.66	8.68
Uttar Pradesh	5.94	6.25	6.75	6.90	6.93	6.41	6.58	6.94	6.26	6.49
Bihar	4.57	4.68	5.12	5.30	5.74	5.47	6.09	6.06	5.89	6.21
Assam	0.36	0.50	0.74	0.58	0.86	1.14	0.85	0.92	0.98	1.27
West Bengal	1.88	2.37	2.43	2.46	2.29	2.28	2.52	2.19	2.26	2.18
Jharkhand	2.93	3.61	4.24	4.14	4.92	4.75	4.58	5.35	5.35	4.74
Odisha	0.77	0.85	0.95	1.04	1.53	2.24	1.92	2.18	2.76	3.28
Chhattisgarh	1.37	0.89	1.79	1.12	2.27	1.92	2.15	2.78	3.92	3.18
Madhya Pradesh	6.74	7.09	8.01	8.24	8.22	8.57	8.30	8.13	8.21	7.01
Gujarat	4.28	4.48	5.38	4.78	5.30	4.93	4.88	5.21	5.60	5.00
Maharashtra	4.52	4.34	3.82	4.26	4.31	4.19	4.20	4.23	3.95	3.63
Andhra Pradesh	0.25	0.41	0.47	0.52	0.75	0.81	0.86	0.79	0.95	1.14
Karnataka	0.86	0.92	1.07	1.06	1.00	1.14	1.37	1.35	0.79	1.55
Kerala	0.54	0.69	0.74	0.78	0.74	0.84	0.94	1.02	1.17	1.29
Tamil Nadu	0.49	0.62	0.55	0.60	0.74	0.72	0.73	0.89	0.94	0.98
All India	4.19	4.24	4.15	4.03	3.97	4.09	3.94	3.96	3.66	3.88

Table 15: Decile Class-wise Monthly Per Capita Coarse Grain Consumption (kg) in All Major States of India: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	0.03	0.08	0.03	0.04	0.01	0.08	0.13	0.06	0.06	0.07
Himachal Pradesh	0.18	0.15	0.09	0.11	0.13	0.07	0.10	0.03	0.18	0.13
Punjab	0.03	0.07	0.05	0.03	0.06	0.10	0.09	0.07	0.13	0.17
Uttarakhand	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.05
Haryana	0.01	0.07	0.02	0.03	0.03	0.08	0.01	0.04	0.02	0.02
Delhi	0.00	0.02	0.00	0.02	0.01	0.08	0.00	0.00	0.02	0.03
Rajasthan	0.40	0.28	0.20	0.20	0.39	0.21	0.32	0.27	0.43	0.21
Uttar Pradesh	0.01	0.03	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.02
Bihar	0.02	0.04	0.01	0.02	0.02	0.03	0.02	0.02	0.00	0.01
Assam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Bengal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.10
Jharkhand	0.01	0.00	0.01	0.02	0.04	0.02	0.04	0.00	0.00	0.03
Odisha	0.03	0.08	0.01	0.02	0.00	0.00	0.01	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Madhya Pradesh	0.31	0.12	0.14	0.05	0.04	0.08	0.07	0.01	0.05	0.03
Gujarat	1.03	0.76	0.81	0.86	0.68	0.75	0.61	0.47	0.60	0.42
Maharashtra	1.12	0.91	0.70	0.68	0.77	0.60	0.50	0.57	0.51	0.41
Andhra Pradesh	0.15	0.20	0.12	0.13	0.13	0.19	0.17	0.10	0.11	0.17
Karnataka	1.86	1.82	1.73	1.80	1.55	1.56	1.68	1.19	1.10	1.05
Kerala	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.01
Tamil Nadu	0.06	0.04	0.04	0.03	0.04	0.04	0.05	0.06	0.06	0.08
All India	0.23	0.27	0.33	0.33	0.30	0.29	0.31	0.33	0.28	0.22

Table 16: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Rice (through PDS) to Total Cereal Consumption: 2011-12 (Rural)

Major States	Decile Classes									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	33.75	37.39	42.07	40.90	39.01	37.51	35.95	37.68	31.78	20.41
Himachal Pradesh	21.02	17.21	18.41	19.26	17.91	16.83	18.78	17.32	15.79	14.62
Punjab	0.07	0.00	0.00	0.00	0.00	0.08	0.00	0.01	0.00	0.00
Uttarakhand	22.77	21.84	20.30	20.17	14.31	14.01	13.42	9.98	7.51	8.27
Haryana	0.07	0.58	0.06	0.02	0.00	0.09	0.41	0.00	0.00	0.00
Delhi	5.50	1.13	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Rajasthan	0.01	0.05	0.06	0.00	0.00	0.01	0.04	0.27	0.00	0.00
Uttar Pradesh	15.84	11.21	8.89	6.35	8.65	6.81	5.67	4.70	6.24	4.15
Bihar	16.35	15.54	11.68	13.49	12.08	11.87	9.45	10.30	7.51	5.88
Assam	28.63	21.35	24.15	27.71	25.09	30.98	20.70	25.81	22.29	12.39
West Bengal	14.32	14.87	9.10	11.41	9.04	6.66	7.30	5.05	5.88	2.68
Jharkhand	37.16	26.60	20.21	22.12	12.26	11.47	15.58	15.60	14.56	7.16
Odisha	44.90	34.63	35.13	34.43	27.01	31.33	24.22	21.53	23.10	10.65
Chhattisgarh	43.11	42.87	41.46	49.71	41.32	34.86	29.98	34.32	25.37	14.31
Madhya Pradesh	11.84	7.76	5.85	5.73	3.86	1.98	3.39	1.20	0.82	1.20
Gujarat	7.18	5.65	3.61	5.47	6.33	1.96	3.84	3.24	1.75	1.39
Maharashtra	22.10	16.58	12.90	16.35	11.66	13.16	9.83	8.83	6.94	3.56
Andhra Pradesh	37.32	34.40	33.70	32.29	31.60	30.60	29.62	28.91	26.17	23.45
Karnataka	33.59	32.00	35.03	30.59	29.22	25.61	27.43	23.11	24.52	20.19
Kerala	46.11	37.51	40.04	40.97	32.40	29.37	28.02	28.61	26.44	19.08
Tamil Nadu	61.41	57.28	51.75	53.46	52.27	48.86	50.99	45.50	39.76	34.38
All India	21.83	17.19	15.86	14.51	14.87	14.71	15.11	14.53	13.25	11.72

Table 17: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Wheat (through PDS) to Total Cereal Consumption: 2011-12 (Rural)

Major States	Decile Classes									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	24.89	22.01	14.88	13.72	10.28	10.17	11.72	10.09	9.45	9.66
Himachal Pradesh	29.19	25.92	28.52	28.95	26.79	26.62	29.25	27.84	25.33	22.44
Punjab	32.46	23.62	17.83	15.65	14.73	7.35	6.49	5.94	2.89	2.47
Uttarakhand	19.34	18.91	16.72	14.48	12.71	11.65	11.33	13.49	11.33	10.81
Haryana	37.16	23.53	25.67	9.22	13.64	7.57	9.01	4.12	0.66	5.19
Delhi	23.38	4.08	0.00	28.95	0.00	0.00	0.08	0.00	0.00	0.00
Rajasthan	30.38	15.66	16.48	9.09	7.85	9.94	6.69	6.66	7.04	6.98
Uttar Pradesh	9.39	7.95	7.19	5.33	6.51	5.31	4.29	4.06	5.56	4.06
Bihar	11.96	10.87	8.70	9.51	8.59	9.10	7.17	7.86	6.17	4.84
Assam	0.35	0.49	0.39	0.35	0.42	0.42	0.23	0.45	0.20	0.24
West Bengal	7.31	6.42	4.67	5.27	5.51	5.65	5.85	4.68	5.06	3.99
Jharkhand	0.00	0.00	0.01	0.00	0.01	0.20	0.00	0.00	1.03	0.46
Odisha	0.28	0.23	0.82	0.23	1.44	0.91	0.96	1.85	2.09	3.84
Chhattisgarh	4.21	2.50	1.60	5.91	3.21	2.68	3.08	2.34	1.53	2.90
Madhya Pradesh	26.50	19.92	18.27	18.11	14.57	12.63	10.34	7.54	6.20	3.69
Gujarat	9.50	11.24	9.25	9.99	14.38	3.88	8.75	5.25	2.83	4.02
Maharashtra	19.63	17.69	16.76	17.54	15.36	14.71	13.36	11.71	8.14	5.41
Andhra Pradesh	0.39	0.28	0.49	0.34	0.30	0.23	0.36	0.29	0.20	0.41
Karnataka	5.79	4.96	6.05	5.19	5.06	4.55	4.62	3.66	4.57	3.31
Kerala	5.15	4.51	5.45	5.31	4.83	5.74	4.99	5.28	4.93	5.30
Tamil Nadu	5.35	5.08	4.26	4.08	4.53	4.46	4.92	5.40	4.53	4.53
All India	9.44	7.97	7.41	7.29	7.03	7.12	6.37	6.01	5.44	4.39

Table 18: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Both Rice and Wheat (through PDS) to Total Cereal Consumption: 2011-12 (Rural)

Major States	Decile Classes									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	58.65	59.40	56.95	54.63	49.29	47.68	47.67	47.78	41.23	30.07
Himachal Pradesh	50.21	43.13	46.93	48.21	44.70	43.45	48.03	45.15	41.12	37.05
Punjab	32.53	23.62	17.83	15.65	14.73	7.43	6.49	5.95	2.89	2.47
Uttarakhand	42.11	40.75	37.02	34.65	27.02	25.66	24.74	23.47	18.83	19.08
Haryana	37.22	24.11	25.74	9.24	13.64	7.66	9.42	4.12	0.66	5.19
Delhi	28.88	5.21	0.00	28.95	0.00	0.00	0.01	0.00	0.00	0.00
Rajasthan	30.40	15.72	16.55	9.09	7.85	9.95	6.72	6.93	7.05	6.99
Uttar Pradesh	25.23	19.16	16.08	11.67	15.16	12.12	9.96	8.76	11.80	8.21
Bihar	28.31	26.41	20.38	23.01	20.67	20.97	16.62	18.16	13.68	10.72
Assam	28.98	21.83	24.53	28.05	25.52	31.40	20.93	26.26	22.48	12.63
West Bengal	21.63	21.29	13.77	16.68	14.56	12.31	13.15	9.74	10.94	6.67
Jharkhand	37.16	26.60	20.23	22.12	12.27	11.67	15.58	15.60	15.59	7.62
Odisha	45.18	34.86	35.94	34.66	28.44	32.24	25.18	23.37	25.19	14.50
Chhattisgarh	47.33	45.37	43.06	55.63	44.53	37.54	33.06	36.66	26.90	17.21
Madhya Pradesh	38.34	27.68	24.12	23.84	18.43	14.61	13.73	8.74	7.01	4.89
Gujarat	16.68	16.89	12.86	15.46	20.71	5.84	12.60	8.49	4.58	5.40
Maharashtra	41.73	34.27	29.65	33.89	27.02	27.87	23.19	20.55	15.08	8.97
Andhra Pradesh	37.71	34.68	34.19	32.63	31.90	30.83	29.98	29.19	26.37	23.86
Karnataka	39.38	36.96	41.08	35.79	34.28	30.17	32.05	26.77	29.09	23.50
Kerala	51.27	42.01	45.49	46.28	37.23	35.11	33.01	33.89	31.38	24.37
Tamil Nadu	66.75	62.35	56.01	57.54	56.80	53.32	55.92	50.90	44.29	38.91
All India	31.27	25.16	23.27	21.80	21.90	21.83	21.48	20.54	18.69	16.11

Table 19: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Rice (through PDS) to Total Cereal Consumption: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	51.80	43.56	57.22	42.65	48.50	39.66	40.63	32.76	24.70	20.07
Himachal Pradesh	14.90	17.02	15.37	9.25	6.34	10.75	12.35	7.66	3.68	5.70
Punjab	0.00	0.00	0.02	0.00	0.00	0.27	0.00	0.00	0.00	0.00
Uttarakhand	11.98	12.34	9.62	7.84	5.07	4.09	2.35	2.89	1.54	1.02
Haryana	0.11	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Delhi	1.82	3.15	2.82	2.02	4.77	0.68	0.96	0.00	0.02	0.00
Rajasthan	0.49	0.01	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
Uttar Pradesh	9.01	5.87	3.87	2.21	1.75	2.33	0.68	0.60	0.09	0.10
Bihar	12.38	8.53	6.63	8.04	5.07	5.58	4.49	1.34	0.84	2.49
Assam	24.92	21.85	11.12	6.73	12.96	12.89	0.91	7.15	4.85	8.91
West Bengal	13.36	8.31	6.35	4.21	1.54	4.92	1.16	1.53	0.06	0.18
Jharkhand	16.99	10.61	3.06	1.77	1.05	0.07	2.18	0.19	0.97	0.00
Odisha	31.70	24.87	25.02	14.73	7.94	4.71	9.12	3.63	1.77	1.24
Chhattisgarh	42.45	40.68	36.17	32.40	22.67	22.78	24.16	9.45	3.28	1.48
Madhya Pradesh	4.42	7.64	3.65	2.02	1.37	1.29	1.76	0.85	0.52	0.28
Gujarat	2.82	2.69	1.08	1.04	0.17	0.42	1.05	0.13	0.03	0.00
Maharashtra	10.91	4.33	3.43	2.28	1.17	1.15	0.59	0.35	0.31	0.04
Andhra Pradesh	34.42	33.88	28.95	27.54	25.49	19.05	13.84	11.08	4.99	3.77
Karnataka	32.98	31.28	26.72	21.68	16.58	17.08	7.70	7.05	0.00	3.08
Kerala	39.62	39.50	35.97	26.39	29.71	27.49	21.71	18.32	19.10	11.10
Tamil Nadu	58.97	53.22	46.77	43.32	43.66	39.61	34.28	27.95	22.66	17.03
All India	16.10	13.71	13.20	11.84	11.93	9.96	8.16	6.12	4.98	2.85

Table 20: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Wheat (through PDS) to Total Cereal Consumption: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	18.92	15.94	10.36	11.93	13.38	12.84	11.39	15.75	20.43	11.81
Himachal Pradesh	21.80	30.72	28.42	24.63	14.58	19.49	25.21	12.22	10.94	14.95
Punjab	13.54	12.17	8.14	4.07	4.41	1.89	0.22	0.76	0.43	1.35
Uttarakhand	8.85	15.86	11.25	8.88	5.20	6.16	5.43	7.96	6.74	4.67
Haryana	28.25	12.56	15.67	9.84	7.80	2.79	2.79	0.07	1.02	0.31
Delhi	11.12	11.38	9.35	10.56	16.46	1.43	0.74	1.27	0.29	0.01
Rajasthan	18.64	12.24	9.29	7.82	6.34	5.11	7.61	2.88	2.12	1.16
Uttar Pradesh	10.97	8.70	5.82	6.09	6.47	4.92	2.81	1.70	0.82	0.14
Bihar	8.12	5.54	4.79	5.34	3.34	3.89	3.23	1.33	1.25	2.36
Assam	0.00	0.02	0.22	0.01	0.17	0.09	0.12	0.07	0.16	0.02
West Bengal	8.16	7.41	4.41	4.66	6.80	5.33	2.38	2.05	1.81	0.53
Jharkhand	0.07	0.14	0.00	0.00	0.00	0.24	0.02	0.00	1.98	0.00
Odisha	3.77	1.03	3.36	3.75	3.03	5.13	3.35	1.52	4.60	1.71
Chhattisgarh	11.72	4.11	8.20	4.09	6.19	5.64	6.17	2.95	2.28	0.60
Madhya Pradesh	19.74	21.28	17.55	15.12	10.17	11.00	10.37	3.94	3.10	2.54
Gujarat	4.52	5.73	3.67	2.58	1.97	1.40	0.89	0.86	0.63	0.15
Maharashtra	16.31	6.53	5.01	3.84	3.28	2.35	1.18	0.82	0.92	0.25
Andhra Pradesh	0.39	0.54	0.32	1.19	0.18	0.30	0.56	1.23	0.18	0.18
Karnataka	5.52	5.23	4.21	3.86	2.99	2.65	2.04	0.99	0.00	0.49
Kerala	4.80	5.29	5.96	5.04	4.69	4.61	4.31	4.17	4.24	2.47
Tamil Nadu	5.46	6.59	5.72	5.84	7.00	6.06	5.25	4.60	3.93	3.50
All India	9.48	7.57	6.42	5.06	5.07	4.00	2.95	1.98	1.68	1.06

Table 21: Decile Class-wise Percentage Share of Monthly Per Capita Consumption of Both Rice and Wheat (through PDS) to Total Cereal Consumption: 2011-12 (Urban)

Major States	Decile Class									
	1	2	3	4	5	6	7	8	9	10
Jammu & Kashmir	70.72	59.50	67.58	54.58	61.88	52.50	52.01	48.51	45.13	31.88
Himachal Pradesh	36.71	47.74	43.78	33.88	20.91	30.25	37.57	19.89	14.62	20.65
Punjab	13.54	12.17	8.16	4.07	4.41	2.16	0.22	0.76	0.43	1.35
Uttarakhand	20.83	28.20	20.87	16.72	10.27	10.24	7.78	10.85	8.29	5.69
Haryana	28.36	12.56	15.67	9.84	7.80	2.83	2.79	0.07	1.02	0.31
Delhi	12.94	14.52	12.16	12.58	21.23	2.11	1.71	1.27	0.32	0.01
Rajasthan	19.14	12.26	9.29	7.82	6.34	5.43	7.61	2.88	2.12	1.16
Uttar Pradesh	19.98	14.57	9.70	8.30	8.22	7.24	3.49	2.30	0.90	0.24
Bihar	20.50	14.07	11.42	13.38	8.41	9.48	7.73	2.66	2.08	4.84
Assam	24.92	21.87	11.34	6.74	13.13	12.98	1.03	7.22	5.00	8.93
West Bengal	21.52	15.72	10.76	8.87	8.34	10.25	3.54	3.58	1.87	0.71
Jharkhand	17.06	10.75	3.06	1.77	1.05	0.31	2.20	0.19	2.96	0.00
Odisha	35.47	25.90	28.38	18.48	10.97	9.84	12.47	5.15	6.37	2.95
Chhattisgarh	54.17	44.79	44.37	36.49	28.85	28.42	30.32	12.41	5.56	2.08
Madhya Pradesh	24.17	28.92	21.20	17.14	11.54	12.29	12.12	4.79	3.62	2.82
Gujarat	7.34	8.43	4.75	3.63	2.14	1.82	1.94	0.99	0.66	0.15
Maharashtra	27.22	10.86	8.44	6.13	4.44	3.50	1.77	1.17	1.23	0.29
Andhra Pradesh	34.80	34.42	29.27	28.73	25.67	19.34	14.40	12.31	5.17	3.94
Karnataka	38.50	36.51	30.94	25.54	19.56	19.74	9.74	8.04	0.00	3.57
Kerala	44.42	44.79	41.94	31.44	34.40	32.10	26.01	22.48	23.33	13.57
Tamil Nadu	64.43	59.80	52.49	49.16	50.66	45.67	39.53	32.55	26.58	20.53
All India	25.58	21.28	19.62	16.89	17.00	13.96	11.11	8.10	6.66	3.92

Notes

1. As per the NSSO, the Monthly Per Capita Expenditure is defined as 'household monthly consumer expenditure ÷ household size.' In this paper, household monthly consumer expenditure has been obtained by using the Modified Mixed Recall Period, in which expenditure on non-food items is recorded for the reference period of 'last 365 days' and expenditure on some of food items is recorded for the reference period of 'last 30 days' and expenditure on the rest of food items is recorded for the reference period of "last 7 days".
2. As per the NSSO, household means a group of persons normally living together and taking food from a common kitchen.
3. Though the survey was conducted during the year 2011-12, the selection of first stage units (villages) took place earlier, when results of the 2011 Population Census were not available. Hence, 2001 Population Census data have been used for sample selection.
4. Sampling Design: The sampling frame for the rural sector was 2001 census villages and urban frame survey blocks (2007-12) for urban sector.

Stratification: Within each district of a State/UT, generally speaking, two basic strata were formed: i) rural stratum comprising all rural areas of the district and (ii) urban stratum comprising all the urban areas of the district. However, within the urban areas of a district, if there were one or more towns with population of 10 lakh or more as per population census 2001, each of them form a separate basic stratum and the remaining urban areas of the district were considered as another basic stratum.

Sub-stratification (Rural sector): If 'r' be the sample size allocated for a rural stratum, the number of sub-strata formed was 'r/4'. The villages within a district as per frame were first arranged in ascending order of population. Then sub-strata 1 to 'r/4' was demarcated in such a way that each sub-stratum will comprise a group of villages of the arranged frame and have more or less equal population.

Sub-stratification (Urban sector): If 'u' be the sample size for an urban stratum, 'u/4' number of sub-strata was formed. In case u/4 is more than 1, implying formation of 2 or more sub-strata, this was done by first arranging the towns in ascending order of total number of households in the town as per UFS phase 2007-12 and then arranging the IV units of each town and blocks within each IV unit in ascending order of their numbers. From this arranged frame of UFS blocks of all the towns/million plus city of a stratum, 'u/4' number of sub-strata was formed in such a way that each sub-stratum will have more or less equal number of households as per UFS 2007-12.

Selection of FSUs: For the rural sector, from each stratum/sub-stratum, required number of sample villages was selected by probability proportional to size with replacement (PPSWR), size being the population of the village as per Census 2001. For the urban sector, UFS 2007-12 phases were used for all towns and cities and from each stratum/sub-stratum FSUs were selected by using Simple Random

Sampling without Replacement (SRSWOR). Both rural and urban samples were to be drawn in the form of two independent sub-samples and equal numbers of samples were allocated among the four sub-rounds.

The sample households were selected by SRSWOR on both the rural and urban areas.

5. Major States: This refers to the 21 States of India which had a population of 50 lakh or more according to the Census of 2011. The States are: Andhra Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttarakhand, Uttar Pradesh and West Bengal.

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