Analysis of Household Consumption & Expenditure Patterns in Rural and Urban India (2022-23)

Data Sources.

Data Source

Survey Name: Household Consumption Expenditure Survey (HCES) 2022-23

The following datasets were extracted from the official report and processed into structured CSV files for analysis. The data was **extracted using a Python script** utilizing **pdfplumber** and **pandas**. After extraction, the **data was manually organized and cleaned** for visualization **using pandas**.

Datasets:

- 1. Average MPCE across fractile classes of MPCE, All-India
 - Table Number: 3.1Page Number: 22
 - File: cleaned table 3 1.csv

cleaned_table_3_1.csv

```
Fractile Class, Rural MPCE, Urban MPCE

0-5%, 1373.0, 2001.0

5-10%, 1782.0, 2607.0

10-20%, 2112.0, 3157.0

20-30%, 2454.0, 3762.0
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30-40%,2768.0,4348.0

40-50%,3094.0,4963.0

50-60%,3455.0,5662.0

60-70%,3887.0,6524.0

70-80%,4458.0,7673.0

80-90%,5356.0,9582.0

90-95%,6638.0,12399.0

95-100%,10501.0,20824.0

All classes,3773.0,6459.0
```

Fractile classes of MPCE	R	ural	Urban			
	Upper limit (Rs.)	Average MPCE (Rs.)	Upper limit (Rs.)	Average MPCE (Rs.)		
(1)	(2)	(3)	(4)			
0-5%	1,638	1,373	2,382	2,001		
5-10%	1,912	1,782	2,813	2,607		
10-20%	2,289	2,112	3,467	3,157		
20-30%	2,612	2,454	4,053	3,762		
30-40%	2,927	2,768	4,647	4,348		
40-50%	3,268	3,094	5,286	4,963		
50-60%	3,657	3,455	6,061	5,662		
60-70%	4,138	3,887	7,036	6,524		
70-80%	4,819	4,458	8,425	7,673		
80-90%	6,043	5,356	11,089	9,582		
90-95%	7,411	6,638	14,189	12,399		
95-100%	-)	10,501	-/	20,824		
All classes		3,773	1 - 2	6,459		

2. Average MPCE and Urban-Rural Differences in MPCE in 2022-23, Major States

Table Number: 3.2Page Number: 23

• Files: cleaned_table_3_2.0.csv, cleaned_table_3_2.1.csv

cleaned_table_3_2.0.csv

```
Major State, Rural MPCE, Urban MPCE
Andhra Pradesh, 4870.0, 6782.0
Assam, 3432.0, 6136.0
Bihar,3384.0,4768.0
Chhattisgarh, 2466.0, 4483.0
Gujarat,3798.0,6621.0
Haryana,4859.0,7911.0
Jharkhand, 2763.0, 4931.0
Karnataka,4397.0,7666.0
Kerala,5924.0,7078.0
Madhya Pradesh, 3113.0, 4987.0
Maharashtra,4010.0,6657.0
Odisha,2950.0,5187.0
Punjab,5315.0,6544.0
Rajasthan,4263.0,5913.0
Tamil Nadu, 5310.0, 7630.0
Telangana,4802.0,8158.0
Uttar Pradesh,3191.0,5040.0
West Bengal, 3239.0, 5267.0
All-India,3773.0,6459.0
```

cleaned table 3 2.1.csv

```
Major State,Rural-Urban Difference (%)
```

```
Andhra Pradesh,39.0
Assam, 79.0
Bihar,41.0
Chhattisgarh,82.0
Gujarat,74.0
Haryana,63.0
Jharkhand, 78.0
Karnataka,74.0
Kerala,19.0
Madhya Pradesh,60.0
Maharashtra,66.0
Odisha,76.0
Punjab,23.0
Rajasthan,39.0
Tamil Nadu,44.0
Telangana,70.0
Uttar Pradesh,58.0
West Bengal,63.0
All-India,71.0
```

Major Chata	Average l	MPCE (Rs.)	Urban-Rural differences (%) in MPCE			
Major State	Rural	Urban				
(1)	(2)	(3)	(4)			
Andhra Pradesh	4,870	6,782	39			
Assam	3,432	6,136	79			
Bihar	3,384	4,768	41			
Chhattisgarh	2,466	4,483	82			
Gujarat	3,798	6,621	74			
Haryana	4,859	7,911	63			
Jharkhand	2,763	4,931	78			
Karnataka	4,397	7,666	74			
Kerala	5,924	7,078	19			
Madhya Pradesh	3,113	4,987	60			
Maharashtra	4,010	6,657	66			
Odisha	2,950	5,187	76			
Punjab	5,315	6,544	23			
Rajasthan	4,263	5,913	39			
Tamil Nadu	5,310	7,630	44			
Telangana	4,802	8,158	70			
Uttar Pradesh	3,191	5,040	58			
West Bengal	3,239	5,267	63			
All-India	3,773	6,459	71			

3. Absolute and Percentage Break-up of MPCE by Item Groups in 2022-23: All-India

Table Number: 3.5Page Number: 29, 30

• Files: table_3.5.0.csv, table_3.5.1.csv

table_3.5.0.csv

```
Category, Item, Percentage

Major, Food Total, 46.38

Major, Non-Food Total, 53.62

Food, Cereals & Cereal Substitutes, 4.91

Food, Pulses & Products, 2.01

Food, Sugar & Salt, 0.93

Food, Milk & Milk Products, 8.33

Food, Vegetables, 5.38

Food, Fruits, 3.71
```

```
Food, "Egg, Fish & Meat", 4.91
Food, Edible Oil, 3.59
Food, Spices, 2.98
Food, Beverages & Processed Food, 9.62
Non-Food, "Pan, Tobacco & Intoxicants", 3.79
Non-Food, Fuel and Light, 6.66
Non-Food, Education, 3.30
Non-Food, Medical, 7.13
Non-Food, Conveyance, 7.55
Non-Food, Consumer Services, 5.08
Non-Food, Misc. Goods & Entertainment, 6.21
Non-Food, Rent, 0.78
Non-Food, Taxes and Cesses, 0.13
Non-Food, "Clothing, Bedding & Footwear", 6.10
Non-Food, Durable Goods, 6.89
```

table_3.5.1.csv

```
Category, Item, Percentage

Major, Food Total, 39.17

Major, Non-Food Total, 60.83

Food, Cereals & Cereal Substitutes, 3.64

Food, Pulses & Products, 1.39

Food, Sugar & Salt, 0.60
```

```
Food, Milk & Milk Products, 7.22
Food, Vegetables, 3.80
Food, Fruits, 3.80
Food, "Egg, Fish & Meat", 3.57
Food, Edible Oil, 2.37
Food, Spices, 2.13
Food, Beverages & Processed Food, 10.64
Non-Food, "Pan, Tobacco & Intoxicants", 2.43
Non-Food, Fuel and Light, 6.26
Non-Food, Education, 5.78
Non-Food, Medical, 5.91
Non-Food, Conveyance, 8.59
Non-Food, Consumer Services, 5.92
Non-Food, Misc. Goods & Entertainment, 6.56
Non-Food, Rent, 6.56
Non-Food, Taxes and Cesses, 0.24
Non-Food, "Clothing, Bedding & Footwear", 5.41
Non-Food, Durable Goods, 7.17
```

Item group		e MPCE ls.)	Percentage share i total MPCE (%)		
	Rural	Urban	Rural	Urban	
(1)	(2)	(3)	(4)	(5)	
cereals & cereal substitutes	185	235	4.91	3.64	
pulses & their products*	76	90	2.01	1.39	
sugar & salt	35	39	0.93	0.60	
milk & milk products	314	466	8.33	7.22	
vegetables	203	245	5.38	3.80	
fruits	140	246	3.71	3.80	
egg, fish & meat	185	231	4.91	3.57	
edible oil	136	153	3.59	2.37	
spices	113	138	2.98	2.13	
beverages, refreshments, pro- cessed food#	363	687	9.62	10.64	
food total	1,750	2,530	46.38	39.17	
pan, tobacco & intoxicants	143	157	3.79	2.43	
fuel and light	251	404	6.66	6.26	
education	125	374	3.30	5.78	
medical	269	382	7.13	5.91	
conveyance	285	555	7.55	8.59	

Item group		e MPCE ls.)	Percentage share in total MPCE (%)		
	Rural	Urban	Rural	Urban	
(1)	(2)	(3)	(4)	(5)	
consumer services excluding conveyance&	192	382	5.08	5.92	
misc. goods, entertainment	234	424	6.21	6.56	
rent	30	423	0.78	6.56	
taxes and cesses	5	16	0.13	0.24	
clothing, bedding & footwear\$	230	350	6.10	5.41	
durable goods	260	463	6.89	7.17	
non-food total	2,023	3,929	53.62	60.83	
all items	3,773	6,459	100.00	100.00	

4. Average MPCE (Rs.) by Social Group in 2022-23, Major States

Table Number: 3.12Page Number: 43

• Files: cleaned_table_3.12.0.csv, cleaned_table_3.12.1.csv

cleaned_table_3.12.0.csv

```
State, Rural ST, Rural SC, Rural OBC, Rural Others, Rural All (#)

Andhra Pradesh, 3772.0, 4565.0, 4824.0, 5550.0, 4870.0

Assam, 3289.0, 3387.0, 3404.0, 3523.0, 3432.0

Bihar, 2927.0, 3058.0, 3479.0, 3691.0, 3384.0

Chhattisgarh, 2258.0, 2347.0, 2665.0, 3187.0, 2466.0

Gujarat, 3412.0, 3592.0, 3649.0, 4605.0, 3798.0

Haryana, 4970.0, 4299.0, 4771.0, 5500.0, 4859.0

Jharkhand, 2218.0, 2850.0, 2997.0, 3473.0, 2763.0

Karnataka, 4086.0, 4258.0, 4377.0, 4952.0, 4397.0

Kerala, 4526.0, 5058.0, 5390.0, 7451.0, 5924.0
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Madhya Pradesh, 2651.0, 2977.0, 3302.0, 3713.0, 3113.0

Maharashtra, 2726.0, 3742.0, 4017.0, 4705.0, 4010.0

Orissa, 2384.0, 2899.0, 3258.0, 3484.0, 2950.0

Punjab, 5311.0, 4583.0, 5335.0, 6279.0, 5315.0

Rajasthan, 3206.0, 3794.0, 4527.0, 5428.0, 4263.0

Tamil Nadu, 4713.0, 4898.0, 5462.0, 5773.0, 5310.0

Telangana, 4420.0, 4526.0, 4937.0, 5269.0, 4802.0

Uttar Pradesh, 2295.0, 2900.0, 3191.0, 3747.0, 3191.0

West Bengal, 2658.0, 3152.0, 3234.0, 3427.0, 3239.0

All-India, 3016.0, 3474.0, 3848.0, 4392.0, 3773.0
```

cleaned table 3.12.1.csv

```
State, Urban ST, Urban SC, Urban OBC, Urban Others, Urban All (#)

Andhra Pradesh, 6335.0, 6427.0, 6332.0, 7637.0, 6782.0

Assam, 5410.0, 5173.0, 6374.0, 6398.0, 6136.0

Bihar, 3633.0, 3665.0, 4501.0, 6291.0, 4768.0

Chhattisgarh, 4068.0, 3659.0, 3963.0, 5847.0, 4483.0

Gujarat, 5322.0, 5322.0, 5870.0, 7688.0, 6621.0

Haryana, 6241.0, 5868.0, 7077.0, 9429.0, 7911.0

Jharkhand, 3767.0, 3888.0, 4738.0, 5998.0, 4931.0

Karnataka, 5984.0, 6370.0, 7516.0, 9099.0, 7666.0

Kerala, 9373.0, 5800.0, 6443.0, 8822.0, 7078.0

Madhya Pradesh, 4436.0, 4415.0, 4662.0, 5929.0, 4987.0
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Maharashtra,5337.0,5492.0,5913.0,7475.0,6657.0

Orissa,3563.0,4509.0,5045.0,6252.0,5187.0

Punjab,5820.0,5348.0,6294.0,7729.0,6544.0

Rajasthan,5811.0,4722.0,5525.0,7174.0,5913.0

Tamil Nadu,6115.0,6423.0,7791.0,7830.0,7630.0

Telangana,6311.0,6823.0,7824.0,9534.0,8158.0

Uttar Pradesh,4644.0,4502.0,4652.0,6073.0,5040.0

West Bengal,5228.0,4606.0,4306.0,5636.0,5267.0

All-India,5414.0,5307.0,6177.0,7333.0,6459.0
```

Major states	Rural				Urban					
	ST	SC	OBC	Others	all#	ST	SC	OBC	Others	all#
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra Pradesh	3,772	4,565	4,824	5,550	4,870	6,335	6,427	6,332	7,637	6,782
Assam	3,289	3,387	3,404	3,523	3,432	5,410	5,173	6,374	6,398	6,136
Bihar	2,927	3,058	3,479	3,691	3,384	3,633	3,665	4,501	6,291	4,768
Chhattisgarh	2,258	2,347	2,665	3,187	2,466	4,068	3,659	3,963	5,847	4,483
Gujarat	3,412	3,592	3,649	4,605	3,798	5,322	5,322	5,870	7,688	6,62
Haryana	4,970	4,299	4,771	5,500	4,859	6,241	5,868	7,077	9,429	7,913
Jharkhand	2,218	2,850	2,997	3,473	2,763	3,767	3,888	4,738	5,998	4,93
Karnataka	4,086	4,258	4,377	4,952	4,397	5,984	6,370	7,516	9,099	7,666
Kerala	4,526	5,058	5,390	7,451	5,924	9,373	5,800	6,443	8,822	7,078
Madhya Pradesh	2,651	2,977	3,302	3,713	3,113	4,436	4,415	4,662	5,929	4,987
Maharashtra	2,726	3,742	4,017	4,705	4,010	5,337	5,492	5,913	7,475	6,65
Orissa	2,384	2,899	3,258	3,484	2,950	3,563	4,509	5,045	6,252	5,182
Punjab	5,311	4,583	5,335	6,279	5,315	5,820	5,348	6,294	7,729	6,54
Rajasthan	3,206	3,794	4,527	5,428	4,263	5,811	4,722	5,525	7,174	5,913
Tamil Nadu	4,713	4,898	5,462	5,773	5,310	6,115	6,423	7,791	7,830	7,630
Telangana	4,420	4,526	4,937	5,269	4,802	6,311	6,823	7,824	9,534	8,15
Uttar Pradesh	2,295	2,900	3,191	3,747	3,191	4,644	4,502	4,652	6,073	5,040
West Bengal	2,658	3,152	3,234	3,427	3,239	5,228	4,606	4,306	5,636	5,267
All-India	3,016	3,474	3,848	4,392	3,773	5,414	5,307	6,177	7,333	6,45