

# A Tax Perspective on the Dynamics of Household Consumption Expenditure



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Understanding household expenditure patterns helps us understand socioeconomic dynamics and consumption behaviour in India. It is an important public policy that sheds light on how households allocate their funds across a variety of categories, including food, clothing, fuel, and services. The implementation of the Goods and Services Tax (GST) has transformed the indirect tax regime, shifting the tax burden from production to consumption while providing a seamless input tax credit mechanism. This paper provides a tax perspective on how people consume various goods and services under different GST rates, as well as the total tax burden on their consumption.

## Research Methodology

Our research is based on the data from the *Household Consumption Expenditure Survey (HCES) 2022–23* by the *National Sample Survey Organisation (NSSO)* and tax rates notified by the *GST Council* and provided by

*Central Board of Indirect Taxes & Customs (CBIC)* to understand how indirect taxes affect consumption patterns of rural and urban households.

We analysed 368 taxable consumption items and the average monthly per capita consumption expenditure (MPCE) (in terms of ₹/month/person) of HCES) 2022–23. We excluded Free/PDS/Subsidized items though they are in the overall consumption but are not part of taxable MPCE. Each item was matched to the appropriate GST rate, with the lower tax rate taking precedence where multiple rates could apply. We kept alcoholic and tobacco in one category being they are intoxicant and very highly taxed. In addition, items such as electricity, rent, and petroleum, which are not covered by GST, were classified as “outside GST.”

Exempted goods and services and Items taxed @ 18% GST together account of nearly 58% of the line items. Following the mapping of GST rates on each line item, we made an analysis the MPCE consumption distribution of GST rates both rural and urban households.

Distribution of Household Items In Relation to GST Rates		
Tax Category	Number of Items #	Number of Items (%)
Exempted	110	29.89%
3.0%	3	0.82%
5.0%	58	15.76%
12.0%	67	18.21%
18.0%	103	27.99%
Very High ( >= 28%)	7	1.90%
Alcohol/ Tobacco	12	3.26%
Outside GST: (Elec/ Rent/ Petrol)	8	2.17%

Source: TARI Calculations, NSSO 2022-23, MOSPI

## Tax Perspective on Household Consumption Expenditure

The average MPCE by rural population as NSSO 2022-23 survey is ₹3738.44, out of which they spend ₹2285.45 on either exempted and low GST items. The rural population spend primarily towards staple foods, health, education and other basic services and goods to fulfil their essential needs, which is more than 61% of their total MPCE expenditure.

The medium (12% GST) and High (18% GST) taxed items account for nearly 25% of rural MPCE expenditure. This category includes fast moving consumer goods FMCG), durables and services. The consumption of two high value goods durables goods, one jewellery/ ornaments taxed @ 3% GST and automobiles taxed @ >=28% has low consumption share of 3.16% in rural MPCE basket. Tobacco and alcohol are heavily taxed. Rural households spend more (3.2%) of MPCE than urban households (2.2%) on heavily taxed alcohol and tobacco suggesting inelastic consumption despite lower income levels.

Indirect Taxes and Household Consumption Expenditure Pattern				
Tax Category	Rural		Urban	
	MPCE (₹)	MPCE (% Share)	MPCE (₹)	MPCE (% Share)
Exempted or Nil: 0%	1333.4	35.67%	1993.49	31.79%
Ornaments: 3%	54.83	1.47%	96.28	1.54%
Low: 5%	952.05	25.47%	1266.07	20.19%
Medium: 12%	329.88	8.82%	524.72	8.37%
High: 18%	603.34	16.14%	1124.93	17.94%
Very High: >= 28%)	63.12	1.69%	140.25	2.24%
Alcohol/ Tobacco	120.14	3.21%	139.76	2.23%
Outside GST: (Elec/ Rent/ Fuel)	281.68	7.53%	985.74	15.72%
<b>Total Average MPCE (₹)</b>	<b>3738.44</b>	<b>100.00%</b>	<b>6271.24</b>	<b>100.00%</b>

Source: TARI Calculations, NSSO 2022-23, MOSPI

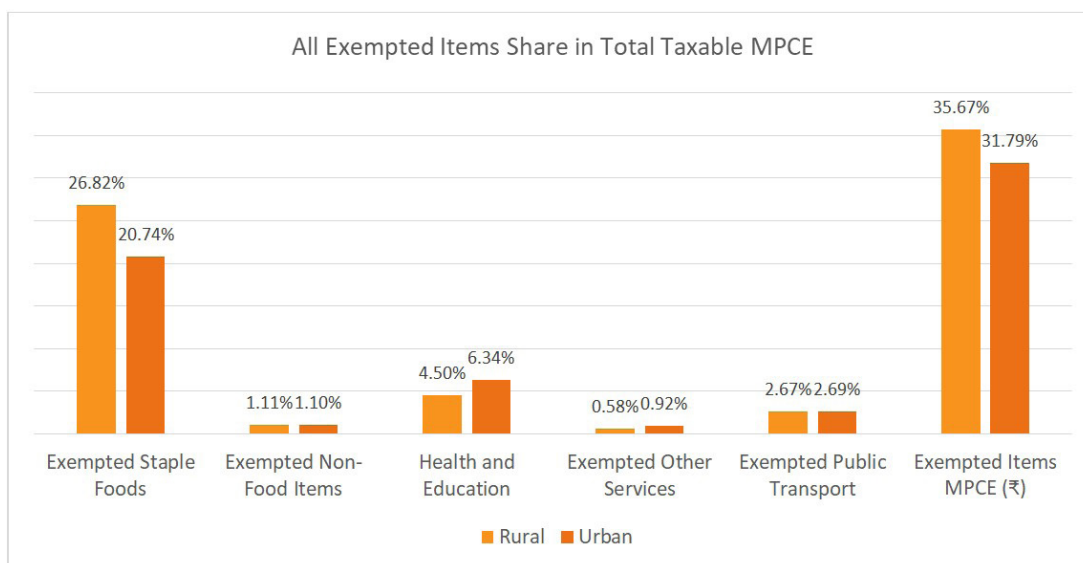
The average MPCE by urban population is ₹6271.24, which is 1.677 times higher than the rural population. The urban population spends ₹3259.56 on exempted and low GST items, which is 1.43 times higher than rural people. However, in terms of MPCE% share, it is only 52% lower than their rural counterparts.

The urban population consumes the same proportion of medium (12% GST) and high (18% GST) taxed items as the rural population, which accounts for 26.31%. With higher disposable income, the urban MPCE share of jewellery (3% GST) and high-value, high-taxed items, primarily automobiles (>= 28%) is 3.77%, slightly higher than the rural population. The urban population's consumption shares outside of GST, which include petroleum products, electricity, and house rent, are 15.72%, more than doubling the rural population's share of 7.53%.

#### Nil/Exempted Items Consumption Expenditure by Households

The graph below shows the average MPCE (₹) and consumption share (%) for goods and services exempt from GST regulations. Households spend an average of rural- ₹1002.61-rural and urban- ₹1300.9 on staple foods to meet their basic needs. Exempted staple foods account for 75% of exempted MPCE in rural areas and 65% in urban areas, representing 26.82% and 20.74% of total MPCE, respectively. Any GST or cess on basic foods will have a direct impact on real consumption levels in India's rural and low-income populations.

The urban population spends 2.4 times more on health and education than the rural population (₹397 vs ₹168). The urban MPCE share is also significantly higher (6.34% vs. 4.50% of the rural population), indicating better access and potentially higher costs for private services in cities. Public transport is another critical component of the exempted category, and the consumption share of the rural and urban populations in the MPCE basket is nearly identical. The combined share of exempted non-food and other services is less than 2% for both the rural and urban populations.

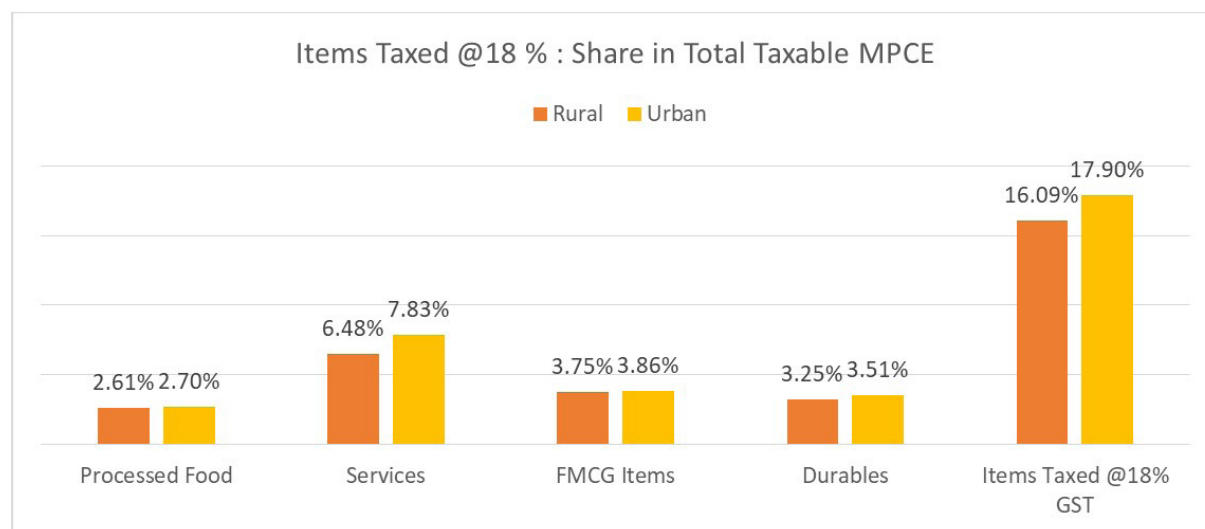


Source: TARI Calculations, NSSO 2022-23, MOSPI

### Household Consumption Expenditure on High Taxed (18% GST) Items

The total consumption share of items taxed @ 18 % under GST framework in MPCE basket is 17.90% and 16.09% for urban and rural population respectively. The MPCE of urban is ₹1122.4, which is 1.87 times higher in comparison to rural MPCE of ₹601.5 in this category.

Services exhibit the highest MPCE expenditure, with urban MPCE exceeding rural MPCE by more than twofold. The demand for consumer services such as telecommunications, banking, repairs, app-based services, internet, and hospitality has resulted in a significant share of services for both rural and urban populations. The urban population's consumption share (7.83%) surpasses that of the rural population (6.48%) due to increased service penetration in urban areas. The MPCE of processed food, FMCG household and personal care products, and consumer durables for the urban population is 1.70 to 1.80 times greater than that of the rural population. Nevertheless, when we analyse their consumption proportions in the MPCE, the urban share is only slightly greater than the rural consumption share.



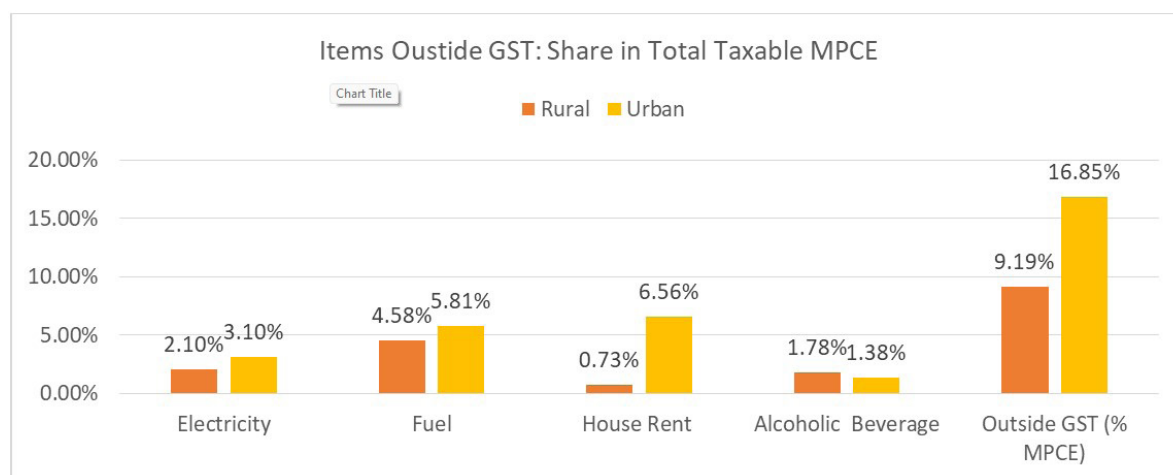
Source: TARI Calculations, NSSO 2022-23, MOSPI

### MPCE by Households on Items Outside GST

Total MPCE share of the items not covered by the GST is 16.85% and 9.19% for the urban and rural populations, respectively. Urban MPCE is ₹1056.5, more than three times higher than rural MPCE (₹343.4).

Even though household rent is only exempt, while commercial rent is subject to GST, we have included it for better analysis because it accounts for a significant portion of expenditure, particularly among urban populations. The urban rent MPCE of ₹411.5 is 15 times higher than the rural MPCE of ₹27.28. The percentage share of rent in the total MPCE basket for the urban population is also significantly higher than for the rural population, indicating that a significant proportion of the urban population continues to live in rented housing, with rent accounting for a significant portion of their household expenditure.

Fuel and electricity are vital utilities excluded from GST, and in absolute MPCE (₹) terms, urban spending on these items surpasses rural spending. They constitute a substantial segment of the overall monthly expenditure for both urban (8.91%) and rural (6.68%) populations. Alcoholic beverages, although taxed outside of GST (state excise), constitute a significant portion of rural consumption, exhibiting inelastic characteristics.



Source: TARI Calculations, NSSO 2022-23, MOSPI

## Indirect Tax Burden of Consumption on the Population

We calculated average tax liability for rural and urban population using following formula:

Tax liability =  $(P_c \times Q \times t) / (1 + t)$ , where  $P_c$  is the Price paid for consuming good and service,  $Q$  is quantity consumed, and  $t$  is the tax rate.

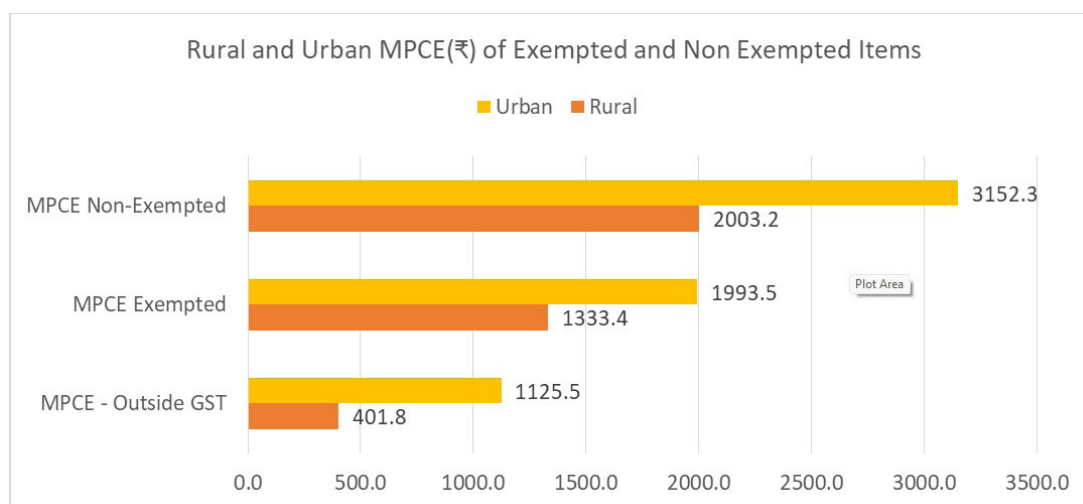
We assume that all goods and services are bought by consumers from taxpayers who are registered. The final tax burden on consumers is hard to predict if consumption is not coming from GST-registered entities.

Based on this, we calculated the total tax burden on rural and urban households based on their total taxable MPCE, which included both exempted and non-exempted items under the GST regime but excluded those outside GST. Because exempted items do not attract GST, the entire tax burden shifts to non-exempted items, so we only provide the tax burden on rural and urban households for taxable non-exempted MPCE.

**1<sup>st</sup> Account: Total Tax liability** = Tax Liability/Average taxable MPCE including exempted and non-exempted items; and

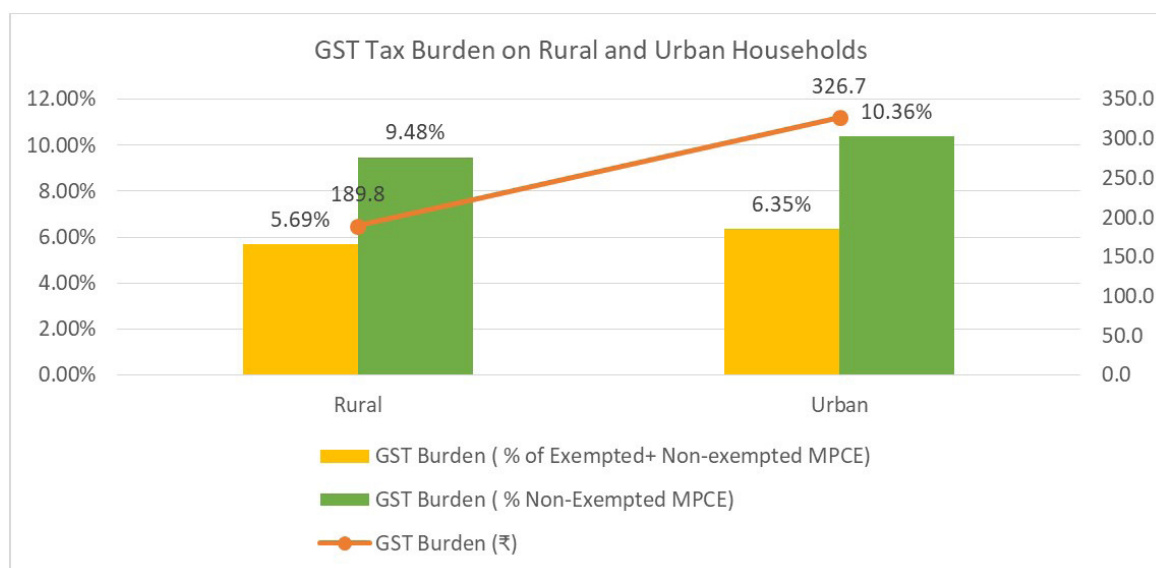
**2<sup>nd</sup> Account: Adjusted Tax liability** = Tax Liability/Average taxable MPCE including only non-exempted items.

Total MPCE (exempted and non-exempted) as forms basis for calculating tax burden on the 1st account. It is for ₹5145.7 for urban population, about 1.54 times higher than in comparison of total rural MPCE of ₹3336.6.



Source: TARI Calculations, NSSO 2022-23, MOSPI

Urban residents face an average per capita tax burden of ₹326.7, which is 1.72 times higher than that of rural residents. The urban population bears a higher GST burden due to their higher absolute expenditure. The tax burden on the first account, expressed as a percentage of total Monthly Per Capita Expenditure (MPCE), is 6.35% in urban areas and 5.69% in rural areas, indicating a roughly equal impact on both demographics. When compared solely to non-exempt (taxable) MPCE-2nd account, the GST burden is significantly higher: 10.36% in urban areas versus 9.48% in rural regions.



Source: TARI Calculations, NSSO 2022-23, MOSPI

## Conclusions

The urban population's monthly per capita expenditure (MPCE) is significantly higher in comparison to the rural population. Rural households spend 35.67% of their total MPCE on exempted items, against urban households spending of 31.79%, suggesting a higher tax burden for urban households. Any change in the GST-exempted category would affect the rural population more than the urban population.

Both rural and urban populations have similar consumption shares of items taxed at 18%, but urban people pay higher taxes in this category, as their absolute MPCE is almost double in comparison to rural people. Overall, non-GST items (excluding rent) constitute a significant portion of total MPCE: 8.28% in rural areas and 10.28% in urban areas. Fuel constitutes the primary non-GST expense for the rural populace, whereas housing rent represents a significant expenditure for the urban populace.

Overall, the urban population bears a higher tax burden than the rural population. This is clearly evident from two points. On the first account, the urban population has a higher share of non-exempted items, and on the second account, greater consumption of high and very high GST items: Urban: 20.17% versus Rural: 17.83%.

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