

## Evaluation of the Impact of Inflation on the Consumption Expenditure of Households

By

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### Abstract

#### *Background*

The effects of inflation are equally pervasive. The impact of inflation will fluctuate among various social groups, though, as not everyone purchases the same assortment of goods or in the same quantities. This emphasizes the necessity to investigate how inflation has affected the sample households' consumption patterns, which is undertaken in this study.

#### *Methods*

The present study consists of total sample size of 700 respondents as the study population. The collected data were analyzed with proper statistical methods.

#### *Results*

Along with buying food, households must spend a large portion of their monthly money on other things that fall under the category of non-food products. Depending on the necessity of the impact of inflation on the consumption pattern as measured by actual consumption expenditure incurred on various groups of commodities in the prior year and current year, the expenditure they incur on these items increases as a result of inflation to varying degrees.

#### *Conclusion*

The rate of inflation is less in food items than in the case of non-food items, even though within food items, inflation is higher in case of pulses, vegetables, fruits, and meat items compared to cereals.

**Key Words:** Inflation, consumption, households.

### Introduction

The effects of inflation are equally pervasive. People are obliged to spend more on consumption as a result of rising costs for goods and services because not all of them can afford to cut back or delay their consumption. The impact of inflation will fluctuate among various social groups, though, as not everyone purchases the same assortment of goods or in the same quantities. Although taste and product preferences are quite sensitive to price at the lower end of the income spectrum, they are very indifferent to price at the higher end. This emphasizes the necessity to investigate how inflation has affected the sample households' consumption patterns, which is undertaken in this study.

#### *Objective*

To analyse the impact of inflation on the consumption pattern of expenditure.

## Methodology

The present study consists of total sample size of 700 respondents in which area is distributed in five blocks. The data were analyzed using the statistical package for the social sciences (SPSS) software.

## Results

Over the past one year, then monthly household income levels of the sample respondents would have gone up at varying degree, while it should also be noted that it might not have changed or even worse, might have gone down, which is especially true among the poor households. Declining income level over a year is possible not only due to reduced wage rate, but also due to lesser job availability. Since, earned income is the major determinant of consumption expenditure, the changed that have taken place in the household's income level of the sample respondents are examined in this section and Table No. 1 presents the data pertaining to the present and previous monthly household income. Previous income refers to the household's income they earned one year before.

**Table No. 1:** *Current and the Previous Monthly Household Income of the Respondents.*

Previous Monthly Households Income	Current Monthly Household Income				Total
	Upto Rs. 25000	Rs. 25001-40000	Rs. 40001-60000	Above Rs. 60000	
Upto Rs. 25000	168 (85.28%)	29 (14.72%)	0	0	197 (28.14%)
Rs. 25001-40000	0	164 (78.85%)	44 (21.15%)	0	208 (29.71%)
Rs. 40001-60000	0	0	171 (86.80%)	26 (13.20%)	197 (28.14%)
Above Rs. 60000	0	0	0	98 (100%)	98 (14.00%)
Total	168 (24.00%)	193 (27.57%)	215 (30.71%)	124 (17.71%)	700 (100%)

It is noted that from the above table that out of the 700 study subjects, currently 361 (51.6 %) belong to the monthly household income range of less than Rs. 40000, while there were 431 respondents (61.6%) in the previous year; on the other hand, 339 (48.4%) come under the monthly household slab of more than Rs. 40000 currently, while there were 295 respondents (42.1%) in the same income category previously. This indicates that in the last one year, the number of respondents who were in the lower income slabs has come down, and thus, the number of respondents in the higher monthly household income has gone up. This clearly suggests that there has been an upward shift in the monthly household income of the respondents overall.

Specifically, the share of those who were in the lowest income group of upto Rs. 25000 has come down from 28.1 percent to 24 percent; the proportion of those who were in the income segment of Rs. 25001-40000 has declined from 29.7 percent to 27.6 percent; on the other hand, the percentage of those who were in the income ranges of Rs. 40001-60000 and Above Rs. 60000 has moved up by 2.6 percent and 3.7 percent respectively.

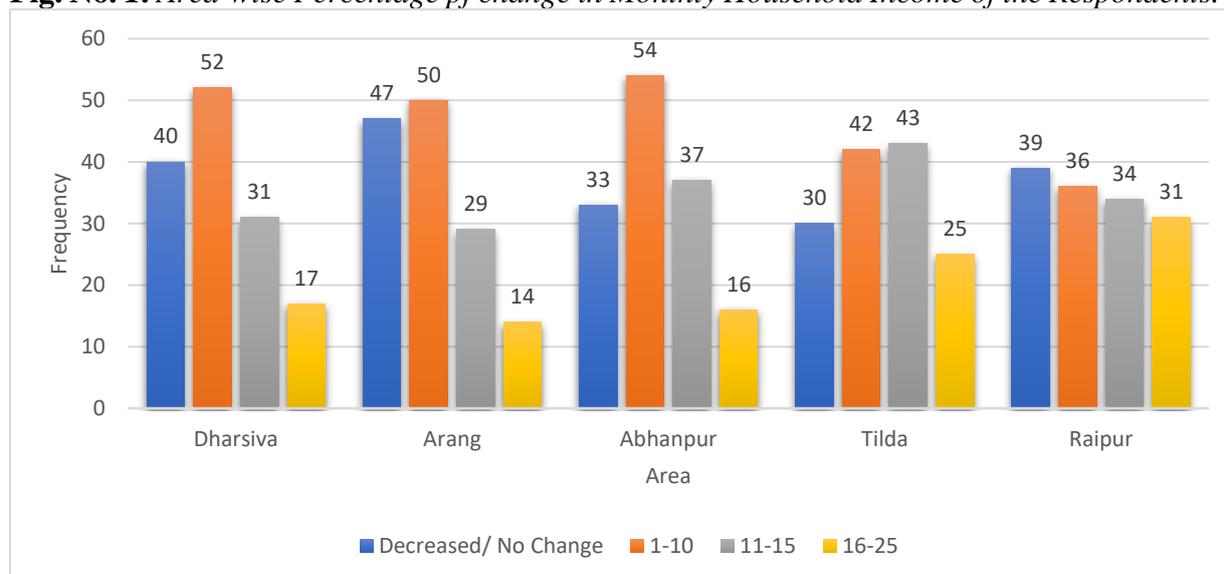
Apart from the tracing the movements of sample respondents in the different income categories, it is also important to understand the percentage of change in their monthly household income levels. This is quite warranted, since grouping the respondents in different income segments will not show the actual rise in their income level and it is also possible that income of some respondents would have declined in fact, which will not again be captured by such segmentation. Thus, the information regarding whether the respondents monthly household income has increased over the one year period or not and if at all by what percentage has been calculated and presented in Table No. 2. On the basis of their area.

**Table No.2:** *Area-wise Percentage pf change in Monthly Household Income of the Respondents.*

Area	Decreased/ No Change	Percentage of Change			Total
		1-10	11-15	16-25	
Dharsiva	40 (28.57%)	52 (37.14%)	31 (22.14%)	17 (12.14%)	140 (20.00%)
Arang	47 (33.57%)	50 (35.71%)	29 (20.71%)	14 (10.00%)	140 (20.00%)
Abhanpur	33 (23.57%)	54 (38.57%)	37 (26.43%)	16 (11.43%)	140 (20.00%)
Tilda	30 (21.43%)	42 (30.00%)	43 (30.71%)	25 (17.86%)	140 (20.00%)
Raipur	39 (27.86%)	36 (25.71%)	34 (24.29%)	31 (22.14%)	140 (20.00%)
Total	189 (27.00%)	234 (33.43%)	174 (24.86%)	103 (14.71%)	700 (100%)

On the basis of their area, in the case of the 140 respondents who belong to the Dharsiva, 40 (28.57%) report 'decreased/no change' in their monthly household income, 52 (37.14%) belong to the segment of less than ten percent rise in income, 31 (22.14%) come under the category of 11-15 percent increase in monthly household income and 17 (12.14%) fall in the 16-25 percent income rise class; among the 140 respondents who are located in Arang, 47 (33.57%) indicate that their monthly household income has either declined or there is no change, 50 (35.71%) report an increase of less than ten percent, 29 (22.14%) state that their monthly household income has moved up in the range of 11-15 percent and in the case of 14 respondents (10%), their monthly household income has gone up by 16-25 percent; out of the 140 respondents who reside in Abhanpur, 33 (23.57%) report 'decreased/no change' in their monthly household income. 54 (38.57%) belong to the segment of less than ten percent rise in income, 37(26.43%) come under the category of 11-15 percent increase in monthly household income and 16 respondents (11.43%) fall in the 16-25 present income rise class; among the 140 respondents who are located in Tilda, 30 (21.43%) indicate that their monthly household income has either declined or there is no change, 42 (30%) report an increase of less than ten percent, 43 (30.71%) state that their monthly household income has moved up in the range of 11-15 percent and in the case of 25 respondents (17.86%), their monthly household income has gone up by 16-25 percent and among the 140 respondents who are located in Raipur, 39 (27.86%) indicate that their monthly household income has either declined or there is no change, 36 (25.71%) report an increase of less than ten percent, 34 (24.29%) state that their monthly household income has moved up in the range of 11-15 percent and in the case of 31 respondents (22.14%), their monthly household income has gone up by 16-25 percent. Hence, more than 27 percent of the total respondents report that their monthly household income has either decreased or has not changed, which is 28 percent or more in Dharsiva, Arang and Raipur, while less than 24 percent in Abhanpur and Tilda; on the hand, the proportion of the respondents who report that their income has gone up by 16-25 percent in the previous one year is higher in Tilda and Raipur. Thus, even though more than 73 percent of the respondents report a rise in income, it is not uniform among the five areas and also within the same area, since in each area, more than one third of the respondents suggest that the rise is only less than ten percent.

**Fig. No. 1: Area-wise Percentage pf change in Monthly Household Income of the Respondents.**



At the micro level, the rate of inflation faced by the sample households differs depending on the basket of commodities, their quantities and the place of purchase. For instance, while the lesser income households can make use of the basic commodities being supplied through the Public Distribution System (PDS), it is not so for the higher income households. Moreover, even for the lesser income households, they have to rely on the market for commodities which are not supplied through the PDS like grams, milk, vegetables, fruits, meat, etc. thus, the commodity-wise and monthly income-wise rate of inflation has been calculated on the basis of information gathered from the respondents regarding per unit price they paid one year before and they pay now. This is done to all the basic goods they would purchase on a day-to-day basis and Table No 3 presents the required data.

**Table No. 3: Commodity-wise and Income-wise Inflation in Major Food Items.**

Item	Monthly Household Income				All
	Less than Rs. 25000	Rs. 25001-40000	Rs. 40001-60000	More than Rs. 60000	
Cereals	4.2	6.07	7.21	9.72	6.80
Pulses	15.41	16.48	17.86	19.27	17.26
Gram	6.42	7.66	8.49	9.55	8.03
Milk	10.58	11.81	13.19	14.38	12.49
Edible Oil	4.36	6.49	7.34	8.47	6.67
Vegetable	10.76	11.74	13.08	14.35	12.48
Fruits	4.21	5.35	7.65	9.16	6.59
Meat	7.16	7.72	9.21	10.11	8.55
Chicken	8.23	8.82	9.37	10.26	9.17
Fish	6.75	7.15	8.63	9.88	8.10
Mean	7.81	8.93	10.20	11.52	9.61

The table indicates that the rate of inflation faced by different income segments varies among them, since the place of purchase and the quality of the commodity will also influence the price level. The lesser income households might depend on the local shops for their daily requirements, while the higher income households might go to the supermarkets or departmental stores for their purchases. Thus, the rate of inflation in case cereals is 4.20 percent

among the respondents who come under the monthly household income of less than Rs. 25000, which goes up to 6.07 percent, 7.21 percent and 9.72 percent among the successive higher income groups. The ability of the higher income households to the better-quality products in each category is resulted in higher rate of inflation among them compared to the lesser income households, since the lower income households would depend on PDS, as noted above. For instance, the average rate of inflation in the case of pulses is 17.26 percent over the previous year, while the same is 19.27 percent for those who come under the highest monthly household income slab of above Rs. 60000, but it declines to 17.86 percent, 16.48 percent and 15.41 percent in the lower income segments. This trend is also reflected in other commodities. Apart from pulses, which have seen the highest rate of inflation over the one-year period, vegetables have seen a price rise of 12.48 percent overall, in which even the households with less than Rs. 25000 monthly income have faced 10.76 percent price rise. On the other hand, the least amount of price rise is found in fruits with 6.59 percent overall. Thus, the major items which have pushed up the rate of inflation overall are pulses, followed by milk, vegetables, chicken, meat, fish, gram and edible oil. The table also indicates the mean percentage rate of inflation faced by the different income segments: it is 7.81 percent among the respondents who come under the monthly household's income of less than Rs. 25000, which is 8.93 percent, 10.20 percent and 11.52 percent among the respondents who belong to the monthly income ranges of Rs. 25001-40000, Rs. 40001-60000 and above Rs. 60000 respectively. Hence, the households in the lowest income range face the lowest rate inflation, even though it is around eight percent. It is also clear that while the poor households can depend on the PDS for the basic commodities like rice, wheat, edible oil, sugar and pulses, in case of other commodities they have to rely on the market and the contribution of such commodities to overall inflation is quite high. Dependence on the PDS enables them to pull down the rate of inflation that they have to bear. However, in order to trace the contribution made by each commodity to the basic inflation among different income segments, the percentage share has been found out and presented in Table No. 4.

**Table No. 4:** *Commodity-wise and Income-wise Percentage Contribution to Inflation.*

Item	Monthly Household Income				All
	Less than Rs. 25000	Rs. 25001-40000	Rs. 40001-60000	More than Rs. 60000	
Cereals	5.4	6.8	7.1	8.4	6.9
Pulses	19.7	18.5	17.5	16.7	18.1
Gram	8.2	8.6	8.3	8.3	8.4
Milk	13.6	13.2	12.9	12.5	13.1
Edible Oil	5.6	7.3	7.2	7.4	6.9
Vegetable	13.8	13.1	12.8	12.5	13.1
Fruits	5.4	6	7.5	8	6.7
Meat	9.2	8.6	9	8.8	8.9
Chicken	10.5	9.9	9.2	8.9	9.6
Fish	8.6	8	8.5	8.6	8.4
Total	100.00	100.00	100.00	100.10	100.03

It is observed from the table that in the case of the households with monthly income of less than Rs. 25000, pulses have contributed 19.7 percent of basic inflation, which is followed by vegetables (13.8%), milk (13.6%), Chicken (10.5%), meat (9.2%), fish (8.6%), gram (8.2%), edible oil (5.6%), while the contribution of cereals is only 5.4 percent. On the other hand, in the case of the households who come under the income range of Rs. 25001-40000 per month, pulses have made the highest contribution by 18.5 percent, while milk has contributed

by 13.2 percent, vegetables by 13.1 percent and chicken (9.9%). But, cereals have contributed 6.8 percent, whereas the contribution of all other items is less than nine percent. In the case of the households who belong to the monthly income segment of Rs.40001-60000, pulses have contributed of 17.5 percent to the basic inflation rate, whereas milk takes a share of 12.9 percent, meat 9 percent, while cereals have contributed the least by 7.1 percent. Among the respondents who come under the monthly income group of more than Rs. 60000, the share of pulses is 16.7 percent, while the contribution of cereals comes down to 8.4 percent. However, the share of vegetables, chicken, meat and fish are all higher than that of cereals. This indicates the fact that not only the rate of inflation differs among different income segments, but the contribution made by the commodities also differs among them.

Apart from the food items, the households have to spend major part of their monthly income on other items, which are grouped into non-food items. They include energy, clothing, housing, education, health, entertainment, transport, durable goods and also unproductive goods like pan, tobacco, liquor and other intoxicants. The rate of inflation faced by the households in such items also plays an important role in determining not only their total consumption expenditure, but also, in some cases, their food expenditure. Thus, the rate of inflation faced by the respondents on all major items of consumption has been calculated on the basis of their average price or the charge paid by them in the previous and current year and presented in Table No. 5 on the basis of their monthly household income.

**Table No. 5: Major Item-wise and Income-wise Rate of Inflation in the Study Area.**

Item	Monthly Household Income				All
	Less than Rs. 25000	Rs. 25001-40000	Rs. 40001-60000	More than Rs. 60000	
Food	7.8	8.9	10.2	11.5	9.6
Energy	9.7	11.3	12.5	13.6	11.8
Clothing	6.9	8.9	9.8	11.2	9.2
Housing	9.6	10.5	11.2	11.5	10.7
Education	5.7	7.9	9.5	12.6	8.9
Health	11.6	18.4	21.2	23.7	18.7
Entertainment	10.9	12.6	13.8	15.2	13.1
Transportation	8.8	11.7	12.6	14.9	12.0
Durables	4.9	6.9	7.7	9.6	7.3
Unproductive	17.2	18.8	19.3	20.4	18.9
No Food	9.5	11.9	13.1	14.7	12.3
Overall Inflation	8.6	10.4	11.6	13.1	10.9

It is inferred from the table that the rate of food inflation increases from 7.8 percent among those who earn less than Rs. 25000 per month to 8.9 percent, 10.2 percent and 11.5 percent among the successive higher income slabs. Similarly, the rate commodities, which is the outcome of the quality and place of purchase of them, as noted above. Among the non-food items, the rate of inflation is the highest in the case of unproductive items with 18.9 percent overall, which is followed by health (18.7%), entertainment (13.1%), transport (12%), energy (11.8%) and housing (10.7%), while in the case of clothing, education and durable goods, the inflation rate is less than ten percent. Thus, the overall non-food inflation is 12.3 percent, which is clearly higher than that of the food items. This is also case with all income segments, which signifies the fact that the households have to face a higher inflation in the case of non-food items, and it is chiefly contributed by unproductive items, health, transport, energy and housing, even though there are marginal differences among different income categories. Thus,

the overall inflation rate, which includes both food and non-food items is 8.6 percent in the case of the respondents who come under the monthly household income of less than Rs. 25000, which goes up to 10.4 percent, 11.6 percent and 13.1 percent in the higher income groups respectively. Also, the inflation faced by all respondents in the study area stands at 10.9 percent, which is quite higher the rate increases in their income level in the last one year period.

All households need to spend on all consumer items in a period of a year, including their food requirements. The expenditure they incur on these items goes up due to inflation in varying degrees, depending on the level of necessity of the impact of inflation on the consumption pattern in terms of actual consumption expenditure incurred on different groups of commodities in the previous year and current year. At the same time, apart from the nominal expenditure in the two periods, the real expenditure too has been calculated. This is done on the basis of the commodity specific inflation rate in each income segment, which underlines the extent to which consumption expenditure has been eroded over the year among the households.

## **Discussion**

Testing of hypotheses indicates the fact that the sample respondents, who have been drawn from different strata of the society, portray different levels of income as well. This also underscores the fact that the pressure of inflation faced by them would also be different. Also, there is significant variation in the consumption expenditure among the sample respondents who come under the different levels of household's income.

There is significant impact of inflation on the level of consumption expenditure among the sample households. Moreover, the respondents have been forced to spend more towards their food requirements due to the price rise in the last year and thus, the level of food expenditure has gone up over the period and this taken place across the income groups, though at varying degrees.

Moreover, these measures are particularly applicable to food items, which in the case of non-food items, postponing or total cut down of the consumption can be adopted. Specifically, in the case of clothing, durable goods and entertainment postponement is an easy option, while in the case of energy, economic use is the best way to reduce the impact of inflation. However, in the case of housing, education and health, respondents cannot be in a position to either postpone or consume in less quantity. Hence, ways to economize the available resources are neither uniform across all commodity groups nor are they similar across income groups.

## **Conclusion**

This Chapter Analyzed The Trends In Inflation In The Study Area Among Different Commodities And Among Different Income Segments, Apart From Its Impact On The Different Groups Of Respondents. This Suggests That The Rate Of Inflation Is Less In Food Items Than In The Case Of Non-Food Items, Even Though Within Food Items, Inflation Is Higher In Case Of Pulses, Vegetables, Fruits And Meat Items Compared To Cereals. Also, The Rate Of Inflation Faced By The Less Income Earners Is Also Less Than That Of Those Who Have Higher Income.

## References

- Shoo AP “Impact of inflation on spending habits of middle-income groups: A study in India”. Grand Academic Portal Research Journals.2021.5(1): 2581-5830.
- Paul M and Sharma P “Inflation rate and poverty: Does poor become poorer with inflation?”. Sulekha A, Mary FP and Tharmalingam “Impact of inflation of the household spending power”. International Journal of Recent Technology and Engineering.2019.7(5S):2277-3878.
- Sivarajan A, Mathew BP, Gowda A and Thomas A “Rising fuel prices in Bangalore – causes and impact”. International Journal of Research an Analytical Reviews.2018.5(4).
- Anand R, Kumar N and Tulin V “Understanding India’s food inflation: The roel of demand and supply factors”. International Monetary Fund. 2016.WR/16/2.
- Gang C, Sha H, Farooq MU et al. “The helix of CO2, household income, and oil pricing under the assumption of Keynesian Consumption function: A policy-mix scenario of oil-importing South Asia for SDGs-2030”. Plos One.2022.17(4): e0265515.
- Movahed MS, Rezapour A, Vahedi S et al. “The impact of inflation and its uncertainty on pharmaceutical prices: Evidence from Iran”. Iranian Journal of Pharmaceutical Research.2021.20(3):94-101.