



# FOOD INFLATION AND BOTTOM OF THE PYRAMID

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## 1. Abstract

In this paper, the impact of food inflation on the living condition of the bottom of the pyramid would be discussed. Inflation is a leading economic hitch in present times. The persistent inflation and the troubles linked with inflation have asserted more consideration of the economists, policymakers and elected representatives next to any other macroeconomic problem. The dilemma of inflation is as aged as market structure. But, a persistent, continuous and high rate of inflation – generally, 5 per cent or more – has appeared during the post–War II period as the most stubborn economic dilemma for both theoreticians and policymakers all over the world. The hitch of inflation has received foremost serious attention since the early 1970s. An uninterrupted rise in general price level over an extended period of time has been the most frequent characteristic of both developed and developing economies.

**Key Words** – Food inflation, Bottom of the Pyramid, Macroeconomic, Inflation-adjusted Income Pyramid, Wage boost

## 2. Data Collection & Methodology

Random samples have been taken to gather primary data from the cities. Out of 20 most slum inhabitant cities, five cities – New Delhi, Mumbai, Hyderabad, Kolkata and Patna – have been selected at random and since these cities are spread all over the country, they may be considered as representative samples of the country's slum population in terms of its various attributes. In every city, ten slum habitations were chosen randomly. Thus, a total of 50 slums (10 slums from each study area) have chosen at random and slums are spread all over the five study areas. From each of these slums, we have collected socio-economic statistics of randomly selected 25 individuals. Thus, a total of 1250 individuals are selected under this research from 50 slums of five cities.

The schedule for the survey has planned to keep in vision the items that are already included in the Household Census Survey. Those parameters were included that could help determine the standard of living of the Bottom of the Pyramid. The schedule contains information regarding the individual age, gender, religion, social group, number of children, location of permanent residence as well as state of domicile. The form also contained information on the status of education, availability of food, items of foods during normal and inflationary food price, house, sanitation facility, and drinking water availability as well as the electricity consumption. Further, the details of various items of consumption, a skill they have, availability of work, working sector, working condition, income on daily & monthly basis, banking facilities, behaviour of government officers during providing government services as well as the utilisation of government services.

## 2.1. Process of Data Collection

Collection of data always play a pivotal role in outcome-based analysis. Following procedures have been followed for collection of data: -

A survey team of researchers were created and grouped together for each of the five different study areas. For this survey, a schedule along with coding details was held in reserve during investigation. All the information was voluntary and subject to the code of the survey. This fact was made lucid right in the commencement of the exercise.

An empirical, phenomenological approach has been applied to conduct interviews. The information from the respondents gathered in a supportive manner, if they do not want to respond on any question, they were not pressurized to furnish such information. Whatever information collected simply noted down in the questionnaire. In each schedule sheet, the information for one member from a family is gathered. In approximately six months, information from the 1250 individuals was collected. Data were collected from five cities and each city had separate code. From above mentioned five cities 10 slums were selected randomly from each city i.e., altogether 50 slums were selected and noted by separate Slum Code. 10 surveyors including the researchers were involved in the survey and each of them had been separately coded. Many of the individual's information was not complete, and hence could not be used in the analysis of the standard of living. The data with incomplete information were segregated and not used. All the information was used in this thesis only.

## 2.2. Validation of Data or Missing Information

To validate the information the first step was taken by discarding the information which is not available in the database along with available hard copy of the questionnaire. After that, if collected information affects analysis, that data was removed. All non-available / blank information sheet were also segregated & due to this very small number of respondents information had to be separated. After applying these processes, the validation of the remaining data was done.

Data analysed with the help of Statistical Package for the Social Sciences (SPSS). In addition to graphical/diagrammatic representation of data, the techniques like per centage analysis, appropriate test statistics etc. have been used in this study.

Secondary data collected from various reliable sources have also used to complete the paper. The publications/ reports of different departments of the state government, the publications/ reports of different ministries of the central government, publications of the National Institution for Transforming India (NITI Aayog), National Sample Survey Organisation (NSSO), data from Economic Survey of different financial years published by the Ministry of Finance and data provided by different Non-Government Organisations etc.

## 2.3. Objective and Hypothesis

The objective of this project is to elucidate effect of inflation, especially food inflation, on the living condition of Bottom of the Pyramid.

**Hypotheses: -**

Mainly food inflation in recent years has made living condition of Bottom of the Pyramid more vulnerable.

## 3. Introduction

An interesting study by the National Council of Applied Economic Research (NCAER) in India suggests that there might be some weak but clear signal that social transformation is emerging (Bery, Bosworth, & Panagariya, 2011). During the last decade, India has liberalised its economy, promoted private sector development, and allowed each state to experiment. As a result, instead of one monolithic approach to economic development, there is multiple models of development being implemented. The various states are also growing at highly differentiated rates. NCAER modelled the changing patterns of income distribution by states and had projected the inflation-adjusted income pyramid for 2006-2007. It is easy to see that in some

states such as Bihar and Orissa, the shape of the income distribution does not change. However, in other states, such as Assam, Maharashtra, Gujarat, Haryana and Punjab, the pattern is shifting noticeably. This shows the standard of living of this group is improving in recent years but in a scattered manner.

In a wide sense of the term, inflation means a significant and persistent rise in the general price level over a period of time. Inflation is commonly understood to be circumstances in which the prices of goods, services and all other commodities go on rising to a large extent and at a fast pace. Economists are, however, divided about the origin, causes and effects of inflation. There has also been no unanimity among them regarding its meaning. Some consider it as an occurrence of rising prices, while some others consider it as a monetary phenomenon. In the first category, fall economists like Johnson, Crowther, etc. Crowther describes inflation as a “state in which the significance of money is falling, i.e., the prices are rising”. Harry G. Johnson speaks that, “I describe inflation as a substantial increase in prices”. According to Gardner Ackley, “inflation is a persistent and appreciable rise in the general level or average of prices”.

In the second category are included economists like Pigou, Kemmerer, Coulborn, Hawtrey, etc. Prof. A.C. Pigou held that if money incomes expand more than in proportion to income-earning activity, there is inflation. Similarly, Hawtrey defined inflation as that state of economic life in which “there is the issue of too much currency”. Kemmerer likewise defines inflation as “too much money and deposit currency in relation to the physical volume of business being done”. According to Coulborn, inflation is a condition of “too much money chasing too few goods”.

The one frequent component in all these definitions is the indication of disequilibrium which grounds a rise in the price level. In fact, inflation is not a single definitive occurrence capable of being described accurately. Whatever definitions have been given are just an enumeration of the factors that cause its enlargement and continuation. To the quantity theorists, inflation meant an increase in the quantity of money; while the rise in the price level was considered to be its effect.

Keynes apprehended that inflation was an occurrence of full employment. It is synonymous with an excess of aggregate demand in excess of aggregate supply in conditions of full employment, while the growing prices are just a signal of the existence of the above fact. According to him, true inflation initiates only after full employment. Keynes also recognises that prices may mount even before full employment due to the continuation of certain blockages in the increase of production. But the increase in prices which is actually threatening to the economy is in the condition of true inflation. However, excess demand needs not necessarily origin an upward movement in the price level, since in an open economy the situation could be met by expanding imports. Moreover, it is not always due to a surplus demand that an upward movement in the price level takes place. There are various added causes and amount in prices under their impact should surely be inflation. So, conceivably it may be enviable to define inflation as circumstances in which the price level generally tends to grow upward (Comley, 2015).

The modern economists believe inflation as a widespread and cohesive occurrence. They also relate the rising price level with the altering stage of unemployment. According to the investigation of the inflationary phenomenon as presented by the modern economists, there are simply two categories of inflation: (i) demand-pull inflation; and (ii) cost-push inflation. In the earlier, inflation and falling unemployment exist mutually while in the latter; inflation and rising unemployment exist mutually.

During the late 1950s, A.W. Phillips put frontward a thesis that an everlasting long-run trade-off continued living between inflation and unemployment. It means that less inflation means more unemployment and high inflation means less unemployment.

In the decade next the Phillips thesis, Milton Friedman and his followers sophisticated the argument that a trade-off between inflation and unemployment was only a short-run phenomenon. In the long-run both inflation and unemployment exist mutually and increase mutually. These economists also extravagances inflation as one integrated occurrence which pooled both demand-pull and cost-push inflation. According to these economists’ “inflation” is an amalgamated occurrence of which demand and cost elements are essential parts and in which outlooks of future price level changes play an overriding task.

India, a speedy developing homeland – increasing at the rate of 9 per cent per annum was countenancing a high rate of inflation – over 12 per cent in the second half of 2008 which had shaped economic, social and also political troubles of the country. Persistent inflation possibly the second main serious macroeconomic problem dealing with the world economy today – second only to hunger and poverty in the third world.

## 4. Food Inflation

When food prices rise in the advanced economies it is a hassle, something to gripe about. But when food prices rise in the developing economies it can formulate a distinction between going hungry and getting enough to eat. Food inflation is unpredictable. Agricultural prices tend to oscillate because inelastic demand and supply and supply can vary due to the weather too. However, despite the usual unpredictability, food prices seem to be screening a strong uphill progress, reaching record highs in recent years. In India, a flourishing economy has GDP escalating at 9 per cent a year. Headline food inflation is more than double at 17.8 per cent of administrative inflation 7 per cent (Tejyan, 2021) [Indian food inflation at Economist, Jan 6th 2011].

**Persistent and high** food inflation materialised as a major worry in India, from 2006 to 2016. While food inflation averaged 9 per cent over this phase, at its peak in late 2009, it had crossed 20 per cent. **Sustained high food inflation has noteworthy welfare connotations in India, given that food consists half of the consumption expenditure basket.** With 21.9 per cent of the population living below the poverty line, already consuming food below the subsistence level, sustained high food inflation has negative consequences. Effectual stabilisation of food inflation, therefore, is of utmost priority.

Bhattacharya and Sen-Gupta (2015) analyse the behaviour and determinants of food inflation in the recent past and evaluate the extent of transmission of food inflation to non-food and aggregate inflation. The article discovers that both demand and supply factors have contributed to the recent surge in food inflation (Bhattacharya & Sen Gupta, 2021).

Rising income and diversification of diets raising the demand for high-value food products, and thereby adding to inflationary pressures has often been argued as driving food inflation in India. Bhattacharya and Sen-Gupta (2015) calculate the demand-supply gap for major food commodities including, pulses, vegetables, cereals, fruits, milk, meat and fish, and find empirical support for this hypothesis (Bhattacharya & Sen Gupta, 2021). Expenditure elasticities for all these commodities are estimated by using National Sample Survey Organisations household consumption expenditure survey data for 2009–10. All the probable expenditure bounciness is set up to be positive, with those for milk, vegetables and fruits exceeding one, implying that 1 per cent rise in family expenditure is associated with a more than 1 per cent rise in their demand. Bounciness for meat and fish, although below one, is high enough to cause a significant rise in their demand with rising food expenditure (India - Household Consumer Expenditure, Type 1 : July 2011 - June 2012, NSS 68th Round, 2020). In developing economy, with growing per capita income, high expenditure elasticities of vitamin and protein-rich commodities indicate growing demand pressure for these commodities. The total cumulative demand comprising the indirect demand for seed feed and wastage is calculated for the period 2004–05 to 2013–14, and compared with total supply based on annual production adjusted for post-harvest wastage. Demand is starting to persistently outstrip supply in the case of pulses, meat and fish, and in recent years in case of milk and vegetables. Overall, an additional gap of 1 million tons in demand relative to supply would result in food prices increasing by 0.3per cent to 1.1per cent annually.

### 4.1. Supply Side Factors Affecting Food Inflation

**Fuel and agricultural wage inflation and international food price surge.** On the supply side, the rise in prices of key inputs, agricultural wages and including fuel has impacted the prices of various commodities and cumulative food inflation. The commonly hypothesised link between surge in rural wage growth since 2007, and the country-wide execution of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2008 finds support in the study with a structural split being noticed in 2008 for wage inflation. New deregulation of key fuel prices in India, fuel inflation can potentially influence food inflation as fuel is used for powering machines and transportation. Growing agricultural trade amalgamation, the surge in international food prices in 2008, and again in 2010, is another factor influencing domestic food inflation.

To take into account the dynamic inter-linkages among food inflation, key input price inflation, demand from non-agricultural sector, and global food price inflation, a Structural Vector Auto Regression (SVAR) framework, using monthly data, is anticipated by Bhattacharya and Sen-Gupta (2015). **The study locates agricultural wage inflation to be a complete driver of mechanism and collective food inflation.** Ten months after a shock, 10 per cent of the variation in inflation in wholesale price index (WPI) for food is



explained by wage inflation. The contribution of wage inflation in total food inflation doubled (21 per cent) in the post-MGNREGA period. The study discovers the partial role of international prices, apart from for tradable such as edible oil (34 per cent) and sugar (10 per cent), and reasonable function of fuel inflation. A board regression analysis reveals scramble in minimum support prices (MSP) has prejudiced inflation in rice, wheat, pulses and sugar.

A wide-ranging mixture of factors is found to force different mechanism of food inflation. Increase in cost of production and MSP are the main forces of cereal inflation, while inflation in milk, vegetables, and meat and fish are forced by input cost inflation and positive demand-supply gap. These two factors by the side of with MSP inflation mainly force pulses inflation. Global food inflation boosts prices of edible oil and sugar, while the rise in MSP is an additional factor forcing sugar price inflation.

**Food inflation has a spilling consequence of non-food inflation and cumulative CPI inflation.** The share of food expenditure in total household expenditure is quite high so high food inflation has also decoded in high CPI (consumer price index) inflation. High food inflation has nourished into higher wages and higher inflation anticipation. In entirety, therefore, high food inflation has been an important economic trouble for the country. The composition of the food inflation also shows remarkable outline. The NSSO surveys on consumer expenditure illustrate that the majority of categories including cereals, pulses, milk, fruits and vegetables, eggs-meat-fish and sugar endured from upper levels of average rates of inflation than by and large wholesale inflation since the second half of the 2010s till the last part of FY 2015-16. Along with these, milk and milk products pulses and eggs–meat–fish had to a great extent higher inflation and had accounted for over 40 per cent of the on the whole food inflation throughout this period. What this fundamentally means is that protein-based plant and animal foods have turn out to be key drivers of food inflation.

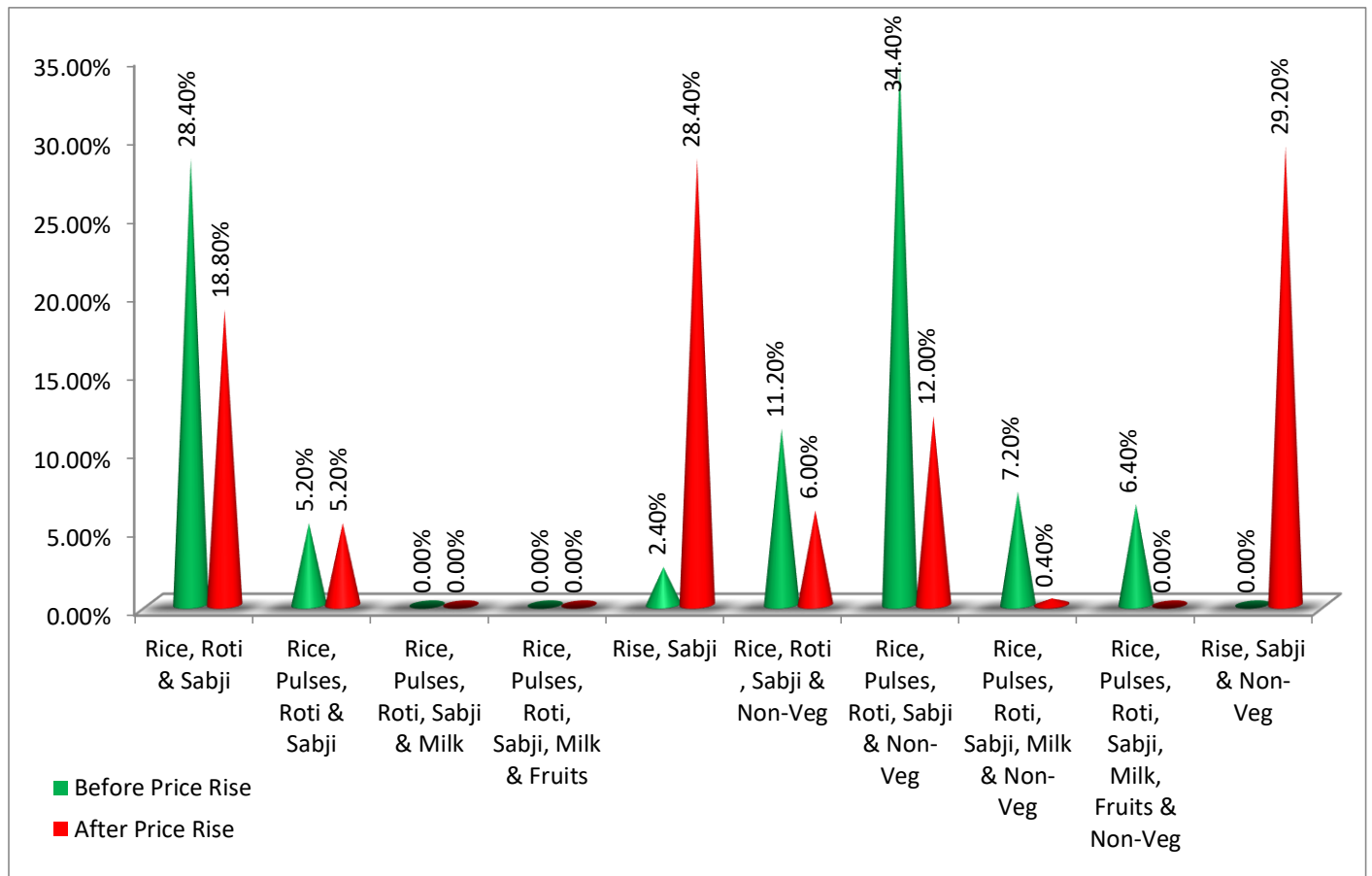
#### **4.2. Agricultural Remuneration Hike: The True Wrongdoer**

Wages are the most significant input cost of agricultural production. As such, an elevated rural wage is bound to drive food inflation higher. According to estimates of the Commission for Agriculture Costs and Prices (CACP) of the Govt. of India, a one per cent rise in wage inflation pushes food inflation by 0.3 per cent. This was also underscored by a study of renowned economist Ashok Gulati which showed that higher rural wages were second most crucial reason for the food inflation in India (Gulati & Saini, 2021) during 1995–96 to December 2012, second only to fiscal deficits. Elevated global food inflation was found to be an additional reason for higher food inflation during this period. Furthermore, RBI research completed in 2014 that elevated food inflation could be endorsed to higher rural real wages which prejudiced prices in short as well as in the long term. But what guided to such hikes in agricultural wages? There are several bases. The most visible of these is the ailing thought out MGNREGA scheme which has imprecise wage innovation process by creating synthetic, high floor price for rural workers. Once set in motion, this high wage reproduces in high food prices, which in turn pushes rural wages even elevated. Rapidly growing employment prospect in non-agricultural sectors which contended directly with farm sector for rural labour provided further uphill jolt in rural wages since the latter half of the last decade. Manufacturing and construction sectors are typical sectors which weaned away a large number of rural workers from farms. However, as the economy sluggish and the RBI restricted money supply over the last 3–4 years, the agricultural wage inflation came downstairs in the last three years. The high base consequence could also have played some part here.

We have collected food bundle wise data from 250 sampled respondents from each of the five-study area. The total 1250 respondents have responded to their preferences in both normal pricing and inflationary pricing situation. There are ten food bundles in which sampled respondents have to choose.

## 5. Data Analysis

**Graph A** reveals consumable food bundles of sampled slum respondents of the study area New Delhi. Total sampled respondents are divided into ten groups.



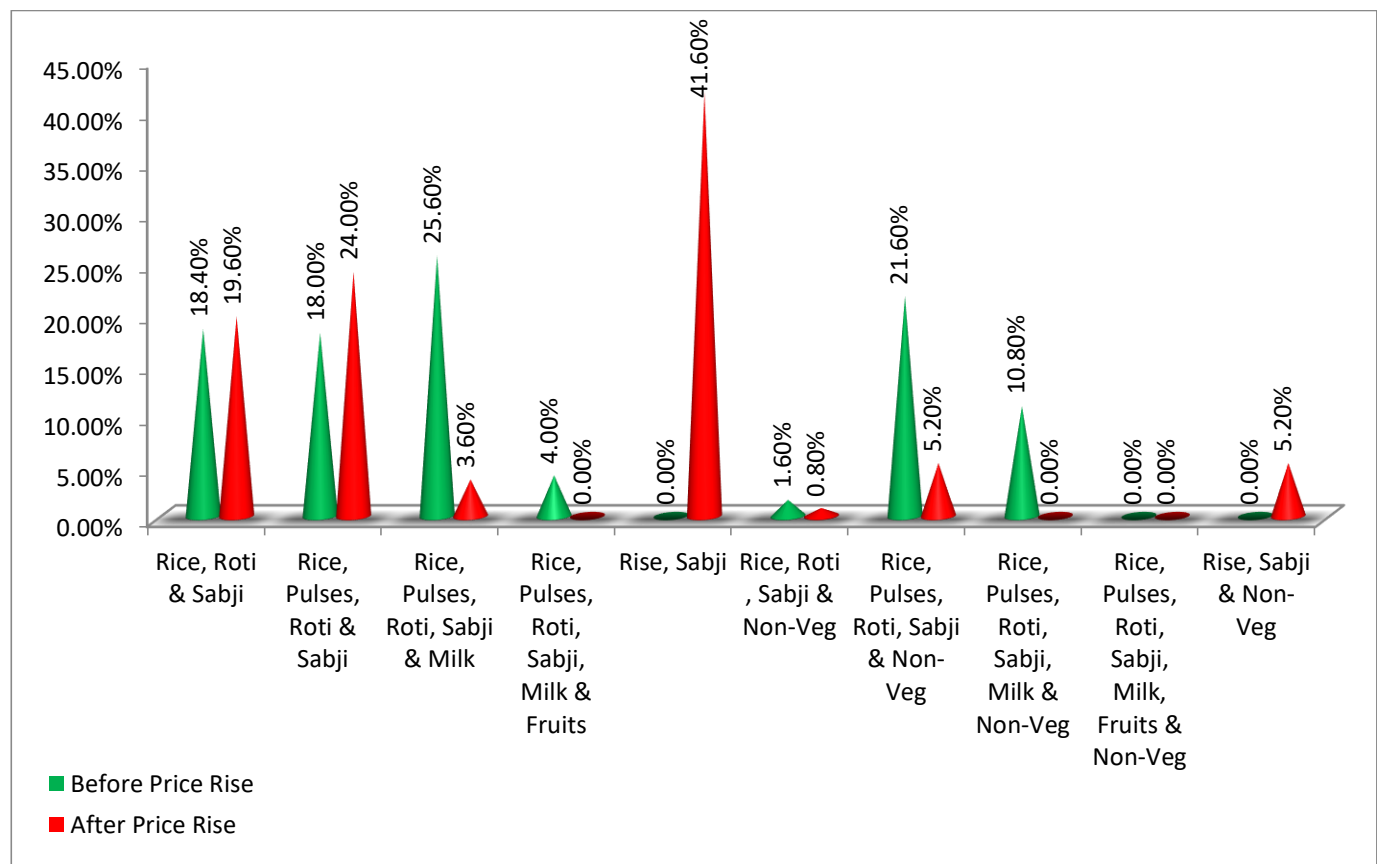
**Graph – A**

If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 28.40 per cent of sampled respondents are consuming Rice-Roti-Sabji, 5.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 2.40 per cent of sampled respondents are consuming Rice-Sabji, 11.20 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 34.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 7.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 6.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg, none of the sampled respondents are consuming Rice- Sabji-Non-Veg.

After price rise of food items only 18.80 per cent of sampled respondents are consuming Rice-Roti-Sabji, 5.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 28.40 per cent of sampled respondents are consuming Rice-Sabji, 6.20 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 12.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 0.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg, 29.20 per cent of sampled respondents are consuming Rice- Sabji-Non-Veg.

Here collected data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In New Delhi, almost all respondents change their food bundle due to food inflation. Major 76 per cent respondents are consuming very much lighter food bundles (18.80 per cent choose Rice-Roti-Sabji; 28.40 per cent choose Rice-Sabji & 29.20 per cent choose Rice- Sabji-Non-Veg) due to inflationary price rice. Because of inflation, in this study area only 0.80 per cent respondents are able to consume milk, 17.60 per cent respondents are able to consume pulses, none respondents are able to consume fruits. So, we may conclude that in New Delhi study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor.

**Graph B** reveals consumable food bundles of sampled slum respondents of study area Mumbai. Total sampled respondents are divided into ten groups.

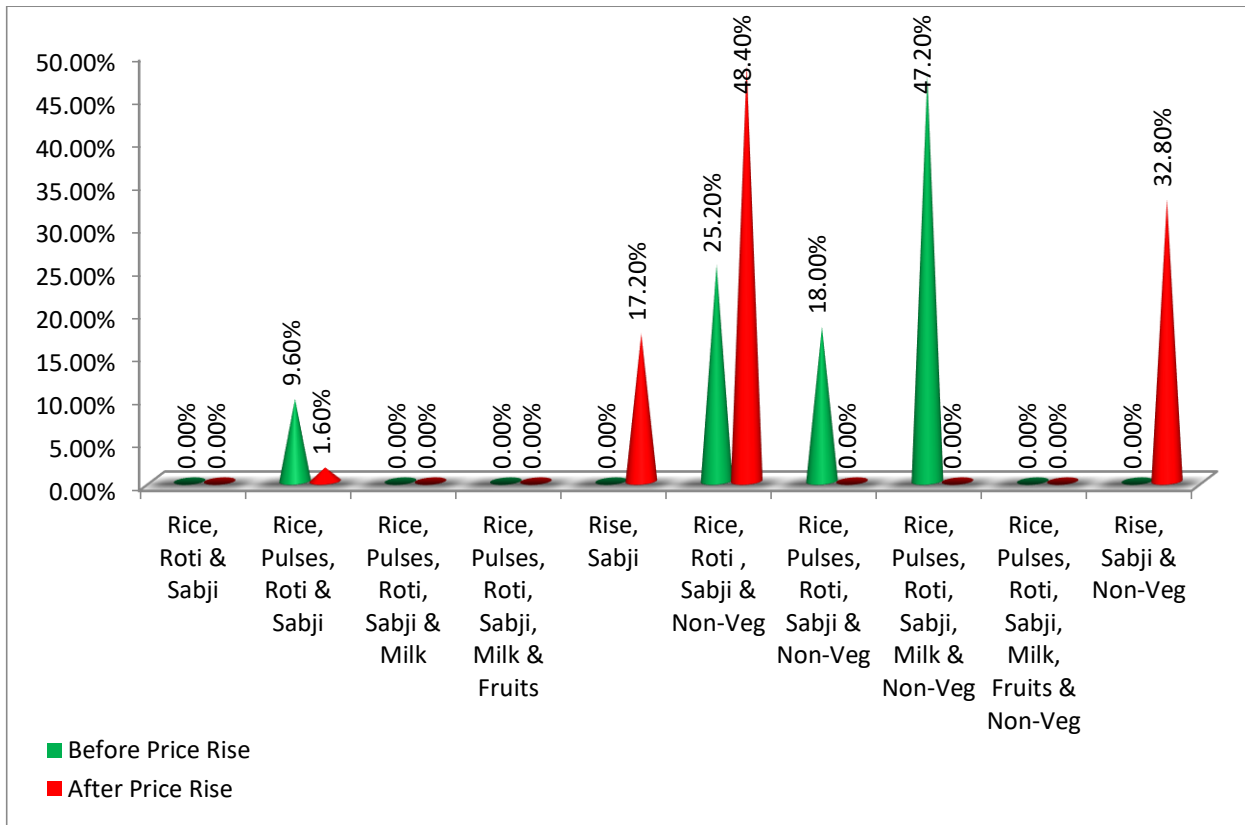


**Graph – B**

If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 18.40 per cent of sampled respondents are consuming Rice-Roti-Sabji, 18.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 25.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 4.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, none of the sampled respondents are consuming Rice-Sabji, 1.60 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 21.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 10.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, none of the sampled respondents are consuming Rice- Sabji-Non-Veg.

After price rise of food items only 19.60 per cent of sampled respondents are consuming Rice-Roti-Sabji, 24.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 3.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, 41.60 per cent of sampled respondents are consuming Rice-Sabji, 0.80 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 5.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 5.20 per cent of sampled respondents are consuming Rice- Sabji-Non-Veg.

Here composed data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In Mumbai, almost all respondents change their food bundle due to food inflation and here the situation is worse than New Delhi. Major 81 per cent respondents are consuming very much lighter food bundles (19.60 per cent choose Rice-Roti-Sabji; 24.00 per cent choose Rice-Pulses-Roti-Sabji; 41.60 per cent choose Rice-Sabji & 5.20 per cent choose Rice- Sabji-Non-Veg) due to inflationary price rice. Because of inflation, in this study area, only 3.60 per cent respondents are able to consume milk, 28.60 per cent respondents are able to consume pulses, and none respondents are able to consume fruits. So, we may conclude that in Mumbai study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor.



Graph – C

Graph C reveals consumable food bundles of sampled slum respondents of study area Hyderabad. Total sampled respondents are divided into ten groups. If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 9.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, none of the sampled respondents are consuming Rice-Sabji, 25.20 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 18.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 47.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, none of the sampled respondents are consuming Rice- Sabji-Non-Veg.

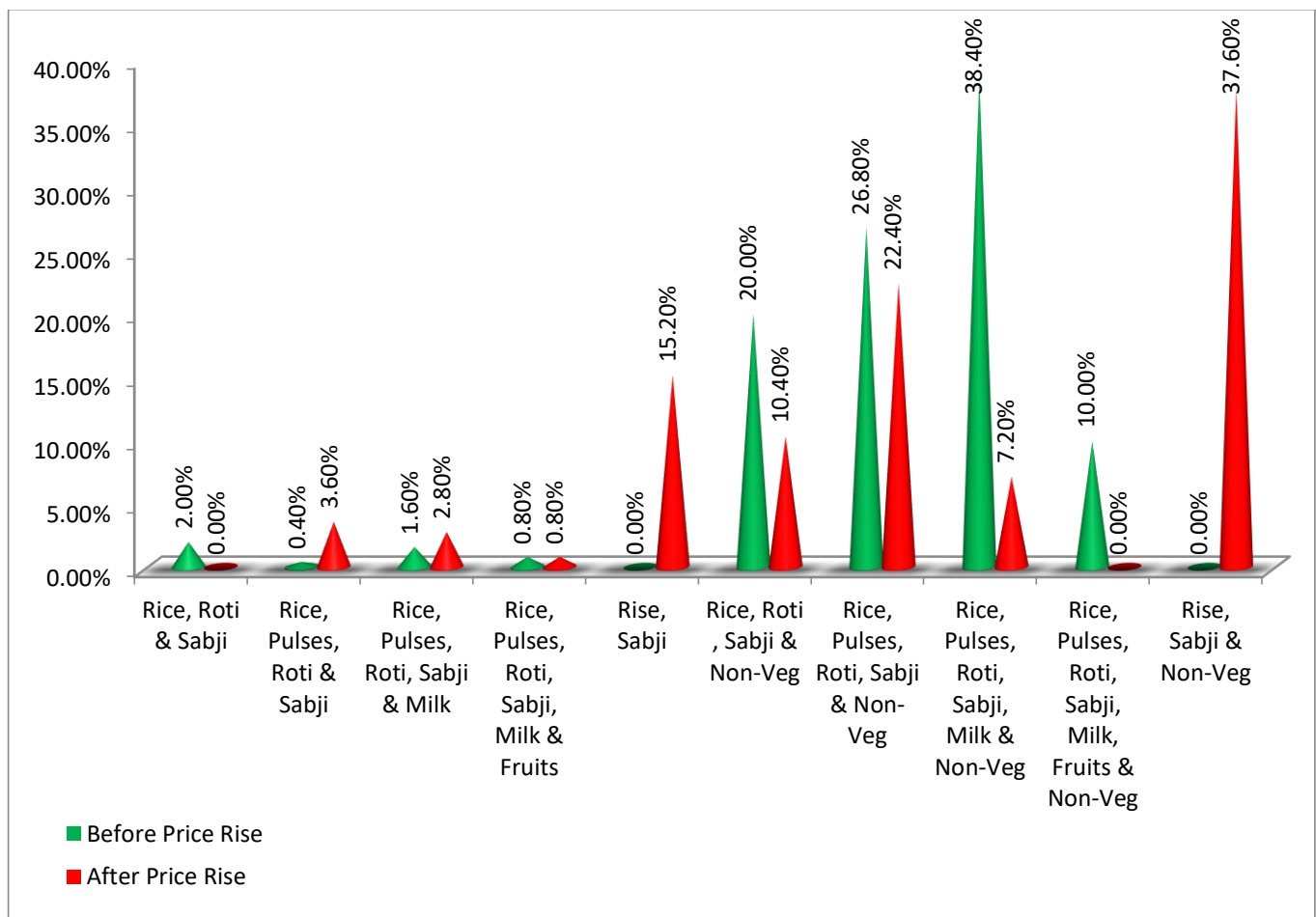
After price rise of food items only 1.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 17.20 per cent of sampled respondents are consuming Rice-Sabji, 48.40 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 32.80 per cent of sampled respondents are consuming Rice- Sabji-Non-Veg.

Here collected data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In Hyderabad, almost all respondents change their food bundle due to food inflation. Major 98 per cent respondents are consuming very much lighter food bundles (48.80 per cent choose Rice-Roti-Sabji-Non-Veg; 17.20 per cent choose Rice-Sabji & 32.80 per cent choose Rice- Sabji-Non-Veg) due to inflationary price rice. Because of inflation, in this study area, none of the respondents are able to consume milk, 1.60 per cent of respondents are able to consume pulses, and none respondents are able to consume fruits.

So, we may conclude that in Hyderabad study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor.

Graph D reveals consumable food bundles of sampled slum respondents of study area Kolkata. Total sampled respondents are divided into ten groups.





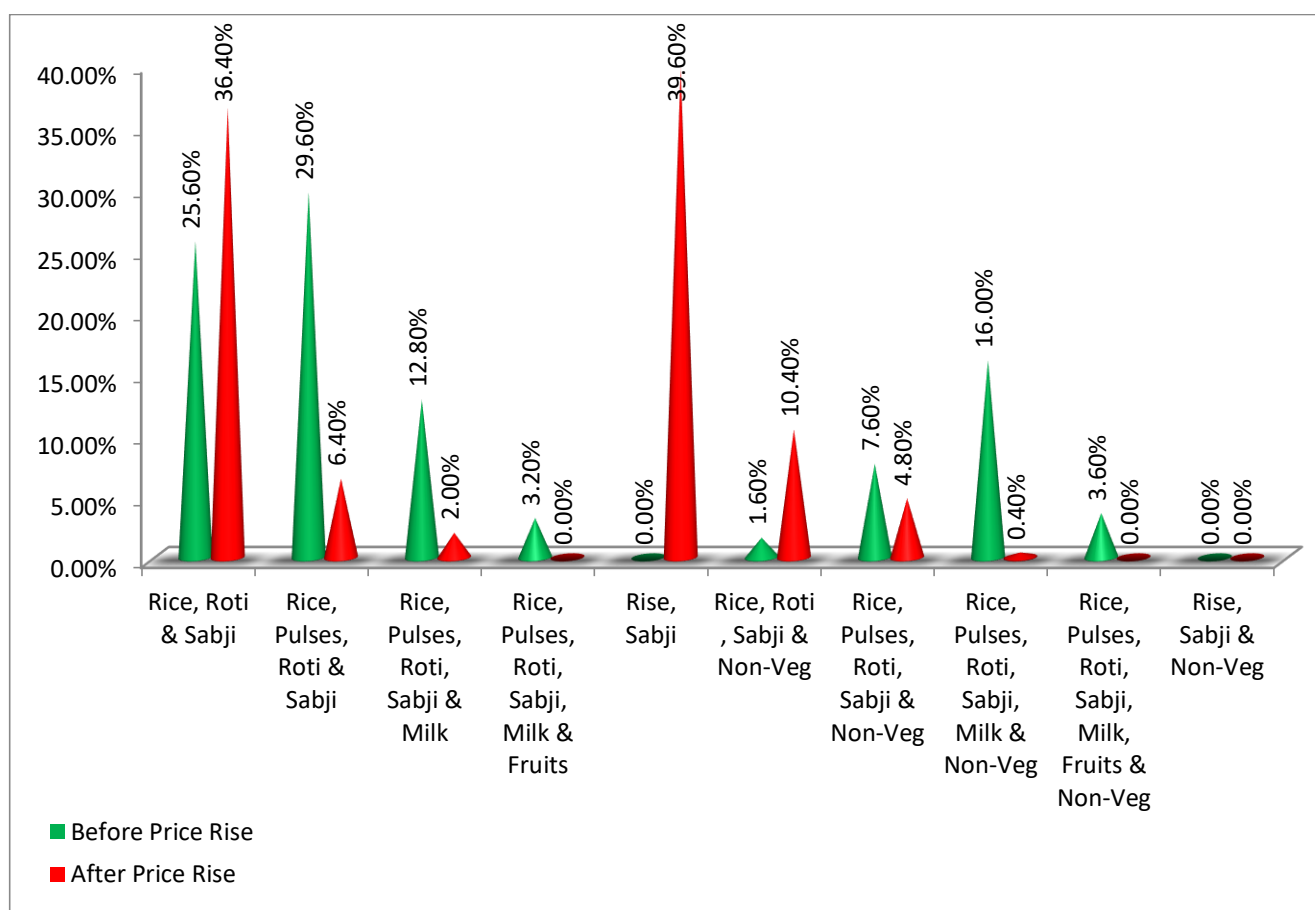
Graph – D

If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 2.00 per cent of sampled respondents are consuming Rice-Roti-Sabji, 0.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 1.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 0.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, none of the sampled respondents are consuming Rice-Sabji, 20.00 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 26.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 38.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 10.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg, none of the sampled respondents are consuming Rice- Sabji-Non-Veg.

After price rise of food items only none of sampled respondents are consuming Rice-Roti-Sabji, 3.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 2.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 0.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, 15.20 per cent of sampled respondents are consuming Rice-Sabji, 10.40 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 22.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 7.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 10.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 37.60 per cent of sampled respondents are consuming Rice- Sabji-Non-Veg.

Here composed data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In Kolkata, almost all respondents change their food bundle due to food inflation. Major 85 per cent respondents are consuming very much lighter food bundles (15.20 per cent choose Rice-Sabji; 10.40 per cent choose Rice-Roti-Sabji- Non-Veg; 22.40 per cent choose Rice-Pulses-Roti-Sabji-Non-Veg & 37.60 per cent choose Rice- Sabji-Non-Veg) due to inflationary price rise. Because of inflation, in this study area only 10.20 per cent respondents are able to consume milk, 36.80 per cent respondents are able to consume pulses, and 0.80 per cent respondents are able to consume fruits. So, we may conclude that in Kolkata study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor.

**Graph E** reveals consumable food bundles of sampled slum respondents of study area Patna. Total sampled respondents are divided into ten groups.



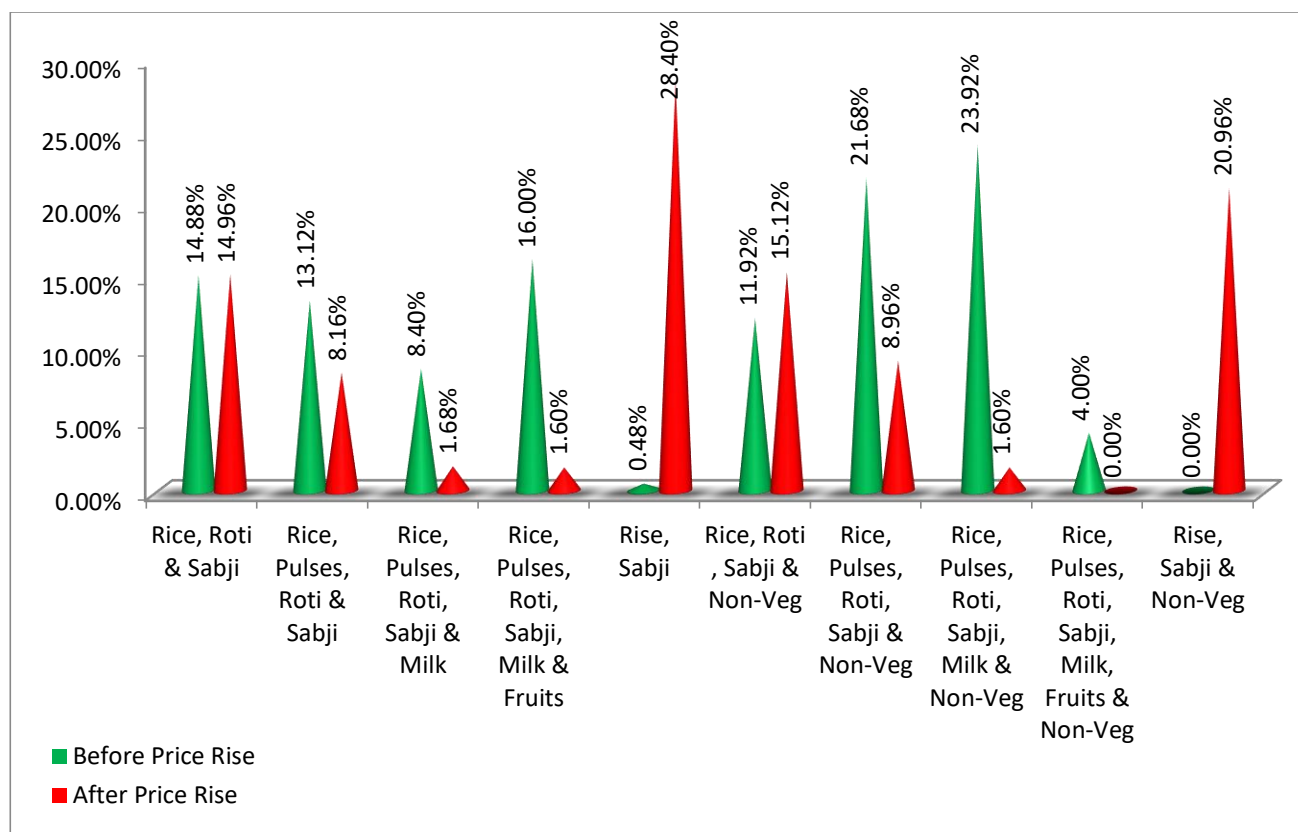
**Graph – E**

If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 25.60 per cent of sampled respondents are consuming Rice-Roti-Sabji, 29.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 12.80 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 3.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, none of the sampled respondents are consuming Rice-Sabji, 1.60 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 7.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 16.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 3.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg.

After price rise of food items only 36.40 per cent of sampled respondents are consuming Rice-Roti-Sabji, 6.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 2.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 3.20 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, 39.60 per cent of sampled respondents are consuming Rice-Sabji, 1.60 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 7.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 16 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 3.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg.

Here composed data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In Patna, almost all respondents change their food bundle due to food inflation. Major 86.40 per cent respondents are consuming very much lighter food bundles (36.40 per cent choose Rice-Sabji; 39.60 per cent choose Rice-Sabji and 10.40 per cent choose Rice-Roti-Sabji-Non-Veg) due to inflationary price rise. Because of inflation, in this study area, only 2.40 per cent respondents are able to consume milk, 13.60 per cent respondents are able to consume pulses, and none of the respondents are able to consume fruits. So, we may conclude that in Patna study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor.

**Graph F** reveals consumable food bundles of total sampled slum respondents by clubbing the sampled respondents of the five-study area. Total sampled respondents are divided into ten groups.



**Graph – F**

If we come across through the scenario of consumable food bundles, then we can see that in a normal pricing condition 14.88 per cent of sampled respondents are consuming Rice-Roti-Sabji, 13.12 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 8.40 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 16.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, 0.48 per cent of sampled respondents are consuming Rice-Sabji, 11.92 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 21.68 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 23.92 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, 4.00 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg, none of the sampled respondents are consuming Rice- Sabji-Non-Veg.

After price rise of food items only 14.96 per cent of sampled respondents are consuming Rice-Roti-Sabji, 8.16 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji, 1.68 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk, 1.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits, 28.40 per cent of sampled respondents are consuming Rice-Sabji, 15.12 per cent of sampled respondents are consuming Rice-Roti-Sabji-Non-Veg, 8.96 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Non-Veg, 1.60 per cent of sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Non-Veg, none of the sampled respondents are consuming Rice-Pulses-Roti-Sabji-Milk-Fruits-Non-Veg, 20.96 per cent of sampled respondents are consuming Rice- Sabji-Non-Veg.

Here collected data reveals that food inflation has a significant impact on food bundle of the Bottom of the Pyramid. In total sampled slum respondents (by clubbing the sampled respondents of the five-study area) approximately all respondents change their food bundle due to food inflation. Major 87.60 per cent respondents are consuming very much lighter food bundles (14.96 per cent choose Rice-Roti-Sabji; 8.16 per cent choose Rice-Pulses-Roti-Sabji; 28.40 per cent choose Rice-Sabji & 15.12 per cent choose Rice-Roti-Sabji-Non-Veg; 20.96 per cent choose Rice-Sabji-Non-Veg) due to inflationary price rise. Because of inflation, in these study areas only 4.88 per cent respondents are able to consume milk, 22 per cent respondents are able to consume pulses, and only 1.60 per cent respondents are able to consume fruits. So, we may conclude that in our total study area there is a significant impact of food inflation and this has made living conditions of this group more vulnerable than any other factor. This class of population is consuming very

less amount of nutritional food items like milk, pulses and fruits. So, the health condition is also very miserable in this segment of the population.

## 6. Conclusion

**To sum up**, the current chapter, what comes to light from the above is that the food inflation in India has been because of a few extensive factors, namely inordinately high rural wage boost, supply side incompetence, monsoon breakdowns and moves from food to commercial crops. On top of it all, politically aggravated increases in minimum support prices for different crops have played chaos with the food prices. In any industrial good, an increase in wage and input cost may not imitate so much in prices of final good if the productivity also increases commensurately, but that has not been the case with agricultural. So, first and foremost, the agricultural productivity needs to ascend. However, that is not a short term eventual and would take a long-term planning, incentivisation, appliance of technology and most importantly, fund. In the meanwhile, manifest efforts are required to tackle structural and monetary matters.

The most noteworthy feature of money management for controlling inflation, in general, is to administer deficits more thoughtfully. Although it is nobody's case to have high deficits, more crucial is to administer what that deficit is financing. A high shortfall which goes directly in stimulating consumption is scheduled to keep inflation at high pedestal and because the food supply is highly inelastic, it is food inflation which would be more eminent.

As for supply distress and bottlenecks, they need instant and all-inclusive refurbish. Long term planning requires addressing how almost half of the agricultural land in India which is unirrigated, can be irrigated. This is the only technique to avoid monsoon breakdowns from periodically blazing up food prices. Secondly, addressing infrastructural evils such as cold storage and proficient transportation could go a long way in keeping prices of protein-based foods and fruits and vegetables in manage. Controlling key input costs is a second spot on which concerted effort is required. This is easier said than done because not only comparative prices of urea and other fertilizers need consideration, but also the targeting of subsidies has to be looked into. Electricity and diesel subsidies to farmers have been more of a political matter so far and the actual impacts of these subsidies on production efficiency and production costs have not been correctly reviewed. Two of the most politically perceptive aspects of farming produce prices are MSPs and APMC Act. While the APMC Act desires to be done away with at earliest, a nuanced approach is requiring on MSP. Increasing MSP without any increase in agricultural productivity is just a means to transfer inflation to urban areas that purchases food and does not produce any of it. As such, a sensible balancing is required to make sure reasonable reimbursement to farmers and at the same time, not upset ultimate buyers.

All these measures could still come unwrapped if the crucial question of increasing farm productivity is not tackled. Only when increasing rural wage is gone along with by a proportionate rise in productivity, can ultimate food inflation be restricted. The Economic Survey of 2012–13 listed three basis of higher labour productivity; first, more physical capital employed per worker; second, more human capital per worker; and third, greater total factor productivity (TFP). In farming, this means higher productivity could come from greater farm automation and by enhancing the quality of farmers through right education. Needless to say, this cannot be done in one year, but an urgent beginning is required.

More than an economic occurrence, food inflation is a human predicament, because it hurts the majority of poor, who spend more than half of their entire earning just to fill up their plates. For far too long, political pragmatism and structural inefficiencies have enhanced a few at the expense of all, but as a society, we need to inquire ourselves how long can we carry on with this inhuman agony.

Its moment in time government gets up and act what is needed to protect the life and health of its people, or else, all its magnificent plans would fade under the burden of an unhealthy population who might not pay money for nutrient food.



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