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PM at DefExpo 2018



The Prime Minister, Shri Narendra Modi visiting the pavilions, at the inauguration ceremony of the DefExpo India-2018

The 10th edition of DefExpo India, a biennial exhibition on Land, Naval and Internal Homeland Security Systems was held from April 11-14, 2018 at Chennai. It was inaugurated by the Prime Minister Shri Narendra Modi.

The DefExpo 2018 showcased India's defence manufacturing capabilities to the world which was also reflected in the tagline for the Expo, 'India: The Emerging Defence Manufacturing Hub'. The Expo attracted over 670 defence firms, including 154 international and over 500 domestic defence firms. The Expo projected the strengths of India's substantial public sector and also uncovered her growing private industry and spreading MSME base for components and sub-systems.

Indian participation include majors like Tata, L&T, Kalyani, Bharat Forge, Mahindra, MKU, DRDO, HAL, BEL, BDL, BEML, MDL, GRSE, GSL, HSL, MIDHANI, Ordnance Factories, and many others. Major international companies including Lockheed Martin, Boeing (USA), Saab (Sweden), Airbus, Rafael (France), Rosonboron Exports, United Shipbuilding (Russia), BAE Systems (UK), Sibat (Israel), Wartsila (Finland), Rhode and Schwarz (Germany) among many others participated at DefExpo 2018.

In his inaugural address, the Prime Minister said that the situation has never been this strong for India to implement its strategy for Make in India and Make for India. He said, our commitment to peace is just as strong as our commitment to protect our people and our territory. And for this, he added, we are ready to take all steps required to equip our Armed Forces, including through the establishment of a strategically independent defence industrial complex. The Prime Minister said that his government has launched the 'Innovation for Defence Excellence' scheme. It will set up Defence Innovation Hubs throughout the country. Enumerating the reform measures taken by his government, the Prime Minister said that defence manufacturing licenses, defence offsets, defence export clearances, Foreign Direct Investment in defence manufacturing, and defence procurement have been made easy. He said that in all these areas, regulations, processes and procedures have been made more industry-friendly, more transparent, more predictable and more outcome oriented.

Shaping Food Consumption

Pullaiah Dudekula



When the same households are compared over time, the trends in food expenditure and food consumption vary between households that experience income growth vis-à-vis those that experience income declines. Regardless of access to PDS, food expenditure among households that suffer economic distress does not change substantially, possibly because they economise in other areas. However, food expenditure for households experiencing income growth increases. This suggests that food expenditure has a sticky floor. Growth in incomes leads to a higher increase in food expenditure by households without BPL/AAY cards than for those with these cards, even after implicit food subsidies are taken into account

The National Food Security Act primarily focuses on providing food security via expansion of the PDS. However, the extent to which this would lead to nutritional security depends on how households respond to the availability of cheap cereals. There are two potential effects that PDS subsidies may have on household consumption decisions. Households continually try to balance their various needs including ensuring adequate caloric consumption, enhancing the quality of their diets, improving living conditions and investing in the health and education of household members. For households that value dietary diversity, being able to buy cheap cereals will free up money to purchase other foods such as milk, fruits, nuts, and perhaps eggs and meat (income effect). For households that have other dominating consumption needs, money saved by purchasing subsidized cereals may be devoted to those needs and diverted from food expenditure (substitution effect). Which effect dominates remains an empirical question.

The Global Nutrition Report 2017 shows that, despite the significant steps the world has taken towards improving nutrition and associated health burdens over recent decades, nutrition is still a large-scale and universal problem.

According to the report, India is facing a serious burden of

undernutrition, which shows that more than half the women of reproductive age in the country suffer from anaemia. The Global Nutrition Report 2017, which looked at 140 countries including India, found 'significant burdens' of three important forms of malnutrition used as an indicator of broader trends. The report tracks global nutrition targets on maternal, infant and young child nutrition and on diet-related Non-Communicable Diseases adopted by member states of the World Health Organization as well as governments' delivery against their commitments. It aims to make it easier for governments and other stakeholders to make - and deliver on - high impact commitments to end malnutrition in all its forms. The Global Nutrition Report highlights that the double burden of undernutrition and obesity needs to be tackled as part of India's national nutrition strategy.

Public Distribution System

The Public Distribution System (PDS) in the country facilitates the supply of food grains and distribution of essential commodities to a large number of poor people through a network of Fair Price Shops (FPSs) at a subsidized price on a recurring basis. With a network of more than 4.9 lakh fair price shops claiming to distribute annually commodities worth more than Rs. 40,000 crore to about 190 million families, the PDS in India is perhaps the largest distribution network of its type in the world. The Public

distribution system (PDS) is an Indian food Security System for the poor people established by the Government of India under the Ministry of Consumer Affairs, Food, and Public Distribution. While the Central government is responsible for procurement, storage, transportation, and bulk allocation of food grains, the State governments hold the responsibility for distributing the same to the consumers through the established network of approximately 5 lakh Fair Price Shops. Major commodities distributed include wheat, rice, sugar, and kerosene.

The role of PDS in Shaping the Household and Nutritional Security was carried out by the erstwhile Independent Evaluation Office, now the Development Monitoring and Evaluation Office, on a request received from the Ministry of Agriculture, Government of India. The study was designed with an objective to explore the effectiveness of PDS in ensuring food and nutritional security to the beneficiaries. The other aspects explored were efficiency in PDS, the importance of food grains provided to the beneficiaries, balancing between cereal and non-cereal and food and non-food expenditures, effects of change in income on food expenditure/ consumption patterns, etc.

Motivation

It has been observed that even though the Indian economy has achieved remarkable economic growth along with a decline in poverty over the last two decades, improvements in nutritional status have not kept pace with this economic growth. The National Sample Survey (NSS) data also documents that the per capita cereal consumption steadily declined for both the rural and urban population between 1993-94 and 2011-12. The reasons for the disjunction between economic advancement and nutritional improvement in India by analysing the role and performance of the Public Distribution System (PDS) in determining food consumption patterns and nutritional outcomes over a period of time. The PDS, conceptualized as one



of the largest safety net programmes in the country, was envisaged as a means of dealing with nutritional deficiency by supplying rice, wheat, sugar and kerosene at highly subsidized prices to the poor. It was launched as a universal programme in the context of food shortages during the early years after Independence. However, since it was widely criticised for its urban bias, it was subsequently streamlined through the launch of the Targeted PDS (TPDS) in June 1997, which aimed at providing very poor families access to food grains at reasonably low costs to help them improve their nutrition standards and attain food security. The National Food Security Act also focuses on providing food security via expansion of the PDS. In this context, greater access to subsidized grains for the poor was expected to reduce malnutrition, leading to a concomitant fall in the number of underweight children.

Income, Food and Nutrition Puzzles

Although we must rely on the National Family Health Survey of 2005-06 (International Institute for Population Sciences and Macro International, 2007) for national data on nutrition, the results from a variety of other surveys suggest only a modest improvement in the proportion of underweight children the poverty decline against trends in underweight children from the National Family Health Surveys 1, 2 and 3; surveys from the National Institute of Nutrition

(National Nutrition Monitoring Bureau, 2012) and those from the National Council of Applied Economic Research and University of Maryland (Thorat and Desai, 2016).

The National Sample Survey (NSS) data, presented in view of the steady decline in poverty over this period, the decline in cereal consumption is puzzling. Caloric consumption also seems to have fallen. As suggested by Deaton and Drèze (2009), disaggregated analysis shows that most of this decline took place at the upper-income levels, which may be due to a reduction in physical activity and the resultant caloric demands.

Coverage of TPDS

PDS cards are ubiquitous with households that do not own any card declining from 19 per cent to 14 per cent of the total households between 2004-05 and 2011-12. Bureaucratic difficulties are seen as being the single most important reason for households not having a card. The proportion of households holding Below Poverty Line (BPL) or Antyodaya Anna Yojana (AAY) cards increased from 36 per cent of all households to 42 per cent between 2004-05 and 2011-12. Much of this increase comes from the expansion of the AAY programme. Although BPL and AAY card holders come from the poorer sections of the society, this concordance is not perfect. The use of the consumption-based poverty line cut-off suggested by the Tendulkar

Committee indicates that only 29 per cent of the BPL cardholders are poor while 71 per cent are not poor. In contrast, about 13 per cent of the APL cardholders are poor while 87 per cent are not poor. Thus, many non-poor have BPL cards while some of the poor are excluded from the ownership of BPL cards.

Access and Use of the TPDS

There was a striking rise in PDS use between 2004-05 and 2011-12. In 2011-12, about 27 per cent of all households purchased cereals from the PDS whereas, by 2011-12, this proportion had risen to 52.3 per cent. Every category of cardholders has recorded a growth in PDS use during the period under study. While almost all the BPL and AAY cardholders are seen to purchase PDS grains, as many as 32 per cent of the Above Poverty Line (APL) cardholders also use the PDS. Despite the increase in the use of PDS by the purchasing households, the amount of purchase or the share of PDS grain to the total grain consumed has remained more or less stable.

PDS use increased not just for food grains but also for kerosene, with 79 per cent of the PDS card holders purchasing kerosene from PDS shops. Although the use of kerosene as a primary cooking fuel is negligible, nearly 28 per cent of the households uses kerosene in conjunction with biomass (e.g. firewood) and LPG.

Targeting Efficiency

Exclusion errors in PDS targeting have declined between 2004-05 and 2011-12 while inclusion errors have increased. However, both types of errors remain high. This change can be attributed both to a decrease in the poverty levels as well as a slight increase in the number of cards being distributed to the whole population. Inclusion errors increased across all regions between 2004-05 and 2011-12 and were particularly high for the Southern states. While exclusion errors are decreasing, they remain highest for the marginalized groups.



Use of Propensity Score Matching as an Analytical Technique

In order to examine if the TPDS is the best way of enhancing food security for all households, it is important to compare households with access to food subsidies to those without such access, while holding income constant. However, this is a difficult proposition due to the general lack of availability of data on household income. The India Human Development Surveys I and II contain detailed data on household income as well as a brief consumption expenditure module that allows for an analysis of different aspects of consumption.

Role of BPL/AAY Subsidies in Shaping Food Expenditure

Application of the Propensity Score Matching (PSM) techniques highlights notable distinctions between consumption patterns of households with BPL/AAY cards and those not having access to these cards. The results show that at any given income level, households with BPL/AAY cards are more likely to buy cereals from PDS shops than those with APL cards. Since only BPL cardholders are eligible for subsidized cereals, this is not surprising. The expenditure incurred on food by households with BPL/AAY cards is less than the corresponding expenditure incurred by their counterparts who do not have these cards. Once implicit subsidies via PDS transfers are factored in, this difference is smaller but remains

statistically significant. Households with BPL/AAY cards are ostensibly trying to obtain their caloric needs from cheaper cereals rather than from more expensive items like dairy, fruits, nuts and meats. Rising incomes lead to greater dietary diversification for households without BPL cards than the matched households with BPL cards.

Shaping Food Consumption

When the same households are compared over time, the trends in food expenditure and food consumption vary between households that experience income growth vis-à-vis those that experience income declines. Regardless of access to PDS, food expenditure among households that suffer economic distress does not change substantially, possibly because they economize in other areas. However, food expenditure for households experiencing income growth increases. This suggests that food expenditure has a sticky floor. Growth in incomes leads to a higher increase in food expenditure by households without BPL/AAY cards than for those with these cards, even after implicit food subsidies are taken into account. While all households experiencing substantial income growth increase their cereal consumption, this increase is lower for households without BPL/AAY cards as compared to those with these cards.

National Food Security Act, 2013

The National Food Security Act, 2013 (NFSA) was enacted by the Government in the year 2013 to

provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity. The Act inter alia entitles up to 75 per cent of the rural population and up to 50 per cent of the urban population for receiving subsidized food grains under TPDS, thus covering about two-thirds of the population. Eligible households comprise of priority households and Antyodaya Anna Yojana (AAY) households. Persons belonging to priority households are entitled to receive 5 kg of foodgrains per person per month at subsidized prices of ₹3/2/1 per kg. for rice/wheat/coarse grains. AAY households, which constitute the poorest of the poor, will continue to receive 35 kg. of food grains per household per month @ ₹3/2/1 per kg., for rice/wheat/coarse grains.

The PDS needs to be effectively monitored and there is a need to

explore the possibility of introducing innovative ideas such as smart cards, food credit/debit cards, food stamps and decentralized procurement, to eliminate hunger and make food available to the poor wherever they may be in a cost-effective manner.

The results presented in this status thus paint a complex picture of the TPDS programmed. While on the one hand, the rising proportion of the Indian population relying on the TPDS for procuring subsidised cereals points to the ubiquity of the TPDS, it also has alarming implications in terms of skewing the dietary composition of households by increasing their cereal consumption. This poses a critical problem particularly for a society facing an epidemiological transition from the dominance of communicable diseases to the rise in non-communicable diseases (NCDs) like cardiovascular diseases, strokes, diabetes and cancer, the four leading NCDs in India. The country also has

the highest number of people with diabetes in the world, and this burden has been rising over time, which is why it is sometimes referred to as the 'diabetic capital of the world'. At least some of this increase in the occurrence of the disease could be due to the rising consumption of processed foods and refined foodgrains as unprocessed foods and healthier cereals like small millets are considered inferior foods that households abandon as they get rich. Nutrition challenges continue throughout the life cycle, particularly or girls and women. A woman with poor nutritional status, as indicated by a low body mass index, short nature anaemia, or other micronutrient deficiencies, has a greater risk of obstructed labour, having a baby with a low birth weight, having adverse pregnancy outcomes, adversely lactation, death due to postpartum hemorrhage, and illness for herself and her baby. □

(E-mail: pullaiahapril20@gmail.com)

SWACHH BHARAT GRAMIN CONFIRMS 93 PER CENT USAGE OF TOILETS

The National Annual Rural Sanitation Survey (NARSS) 2017-18, conducted by an Independent Verification Agency (IVA) under the World Bank support project to the Swachh Bharat Mission Gramin (SBM-G), has found that 93.4 per cent of the households in rural India who have access to a toilet use it. The NARSS also re-confirmed the Open Defecation Free (ODF) status of 95.6 per cent of villages which were previously declared and verified as ODF by various districts/states. The survey was conducted between mid-November 2017 and mid-March 2018 and covered 92040 households in 6136 villages across States and UTs of India.



The key findings of NARSS 2017-18 are as follows:

- 77 per cent of households were found to have access to toilets during the survey period
- 93.4 per cent of the people who had access to toilets used them
- 95.6 per cent of villages which were previously declared and verified as ODF were confirmed to be ODF. The remaining 4.4 per cent villages also had sanitation coverage of over 95 per cent 70 per cent of the villages surveyed found to have minimal litter and minimal stagnant water

The IVA presented their findings to the Expert Working Group (EWG) constituted for oversight of NARSS. The EWG noted the satisfactory completion of the survey. Since its launch in October 2014, the SBM, the world's largest sanitation program, has changed the behaviour of hundreds of millions of people with respect to toilet access and usage. 300 million people have stopped defecating in the open since the SBM began, down from 550 million at the beginning of the programme to about 200 million today. Over 6.5 crore toilets have been built across rural India under the Mission. Over 3.38 lakh villages and 338 districts have been declared ODF, along with 9 ODF States and 3 Union Territories, namely Sikkim, Himachal Pradesh, Kerala, Haryana, Uttarakhand, Gujarat, Arunachal Pradesh, Chhattisgarh, Meghalaya, Chandigarh, Daman & Diu and Dadra and Nagar Haveli.