

NUTRITIONAL SECURITY IN INDIA

Sameera Saurabh

Raising rural income is central to ensuring Food and Nutrition Security for which colossal improvements in rural infrastructure are required. The structure of poverty alleviation programmes should suit the specific needs of poor communities, especially in rural areas. Food & Nutrition Security need to be given high priority and efforts to increase production and economic accessibility needed to be addressed by technological innovations, investments in irrigation, creating rural infrastructure and raising rural employment opportunities.

In the contemporary scenario, our nation is set to emerge as one of the world's most thriving and promising economies. It is imperative that an inclusive approach to resolve the problems facing rural India be undertaken. India is largely an agrarian based rural economy with a predominant unorganized sector. 68.84 per cent of India's population lives in rural areas. Distribution of main workers by industrial category in Census-2011 shows that agriculture sector still employs the largest number of workers. The dependence on agriculture is brought out by the fact that of the 313 million main workers in the country, 166 million (56.6 per cent) have been engaged in 'Agricultural and allied activities'.

'Sustainable Development Goals (2030) aim to end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age and address nutritional needs of adolescent girls, pregnant and lactating women and older persons. The United Nations Decade of Action on Nutrition (2016-2025) promotes policy coherence between food systems, nutrition and health to accelerate efforts to reduce malnutrition.'

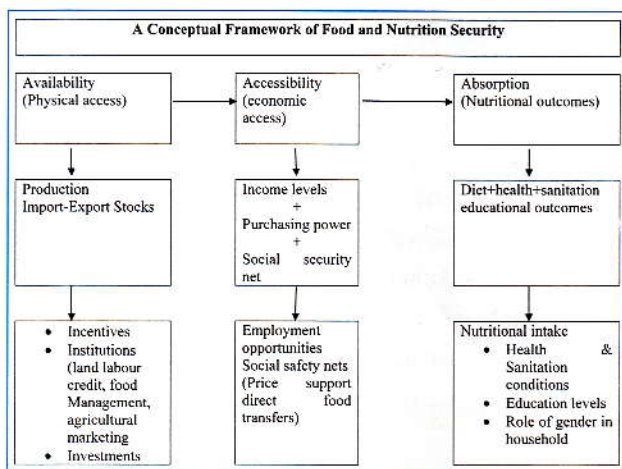
Food Security means availability of sufficient food grains to meet the domestic demand as well as access at the individual level, to adequate quantities of food at affordable prices. This is a paradigm shift from a welfare approach to a rights based approach. About two

thirds, approximately 67 per cent of population will be entitled to receive subsidized food grains under Targeted Public Distribution System. Also Malnutrition is adversely impacting the country's development and health expenditure.

Food Security has evolved over time from 'freedom from hunger' in the early 1940s into broad concept encompassing three determinants: availability of food, access to food and absorption. Food Security concerns can be traced back to the trauma faced during the Bengal Famine in 1943 under British Colonial rule. Revolutionary self-sufficiency in food was achieved with the Green Revolution in the late 1960s and 1970s. The White Revolution (Operation Flood) and structural transformation in agriculture has helped to ensure food security to a large extent.

Ensuring food and nutrition security is a challenge for India even though it is a net





(Source: ADB Sustainable Development Working Paper Series No.16)

agricultural exporter, particularly of milk, fruits, vegetables and cereals. However, food availability is affected by climatic conditions, declining water resources and pests which decrease agricultural output. Despite rapid economic growth in recent years, economic access to food by persons living below poverty line remains problematic. The level of food absorption is also low. About 44 per cent of children under the age of 5 are underweight, 72 per cent of infants and around half of pregnant women are anaemic. Research has conclusively shown that malnutrition during pregnancy causes the child to have increased risk of future diseases like physical retardation and reduced cognitive abilities. India has been ranked 97th in 118 countries in Global Hunger Index in 2016. The GHI is a multidimensional index composed of four indicators – proportion of undernourished, prevalence of child mortality, child stunting and child wasting. The seriousness of hunger is reflected by data which shows that 15.2 per cent Indians are undernourished. The United Nations



annual report for 2014-15 stated that India has the world's highest number of hungry people in the world. Around one-fourth of world's hungry population is in India.

Determinants of Food Security:

- 1. Availability of Food (Physical Access):** Food availability is determined by domestic production, import capacity, food stocks and food aid.

India's Per Capital Availability of Food grains (2009-2013)

| Year | Food grains (gms per day) |
|------|---------------------------|
| 2009 | 444.0 |
| 2010 | 437.1 |
| 2011 | 453.6 |
| 2012 | 450.3 |
| 2013 | 510.8 |

(Source: PIB, Government of India)

Fluctuations in per capita net availability are mainly due to changes in production on account of variations in weather conditions, increasing population, change in stocks etc. Government of India implements various programmes/schemes e.g. Rashtriya Krishi Vikas Yojana, National Food Security Mission etc. with the objective of increasing productivity. In addition, Indian Council of Agricultural Universities have developed a number of improved varieties/hybrids of food grains crops to enhance production and productivity. Government also imports agricultural commodities to augment their domestic availability.

2. Accessibility (Economic Access):

In the post reform period, more than 300 million people continue to live in poverty and food accounts for more than 50 per cent of monthly per capita expenditure in India. To tackle with food security problem, India operates one of the largest food safety nets in the world- the National Food Security Act 2013.

Government of India is implementing this scheme which provides nearly 800 million people (67 per cent of the country's population and 10 per cent of the world's) with subsidized monthly households

rations. India's PDS (Public Distribution System) is the largest distribution network of its kind in the world. In addition, the Antyodaya Anna Yojana was launched in 2000 for the poorest of BPL families. Other measures taken by the Government include providing incentives through higher Minimum Support Prices of agricultural commodities, developing rural infrastructure through MGNREGA, increase in credit flow to agriculture sector, interest subvention on crop loans etc.

3. Absorption (Nutritional Outcomes)

An interrelated aspect which needs immediate address is nutritional security. The Tenth Five Year Plan focused on comprehensive interventions aimed at improving nutrition security. Population needs adequate quantities of balanced diet to remain healthy. This can be supported by encouraging intake of pulses and eggs which remain important protein sources in the Indian diet.

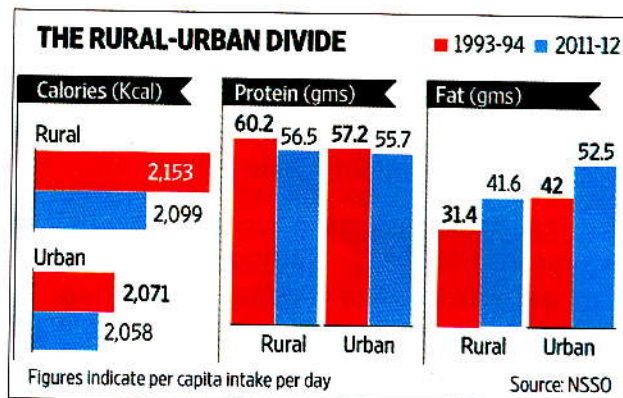
Nutrition Security has evolved over time from Multi-Sectoral Nutrition Planning approach in the 1970s and UNICEF conceptual framework. Body size and physical activity levels are two major determinants of human nutrient requirements. The 1996 World Food Summit provided a comprehensive definition of food security bringing into focus the linkage between food, nutrition and health. Nutrition includes assessment of under five underweight and low BMI in adults. The National Nutrition Monitoring Board and National Family Health Survey provide data on nutritional status using Gomez classification and Bio-Mass Index (BMI).

All India Projections of Households Food Demand

(Million tons per annum)

| | 2010 | 2020 |
|----------------------|--------|--------|
| Rice | 97.99 | 118.93 |
| Wheat | 72.07 | 92.37 |
| Pulses | 14.58 | 19.53 |
| Milk & Milk Products | 106.43 | 165.84 |
| Meat and Fish | 7.25 | 10.80 |
| Fruits and vegetable | 75.21 | 113.17 |

(Source: Centre for Economic and Social Studies, Hyderabad)



Nutritional Security requires 'food', 'health' and 'care' simultaneously. Nutrition Security, therefore, cannot be achieved without Food Security at the household level. The nutrition status can be improved even if food insecurity and poverty continues to exist, through improved 'nutrition supportive' decisions and behaviour or measures such as mandatory fortification of carefully chosen food consumed by majority of population to deliver much needed micronutrients. In practice, Food Security is not always understood comprehensively. The term does not give adequate emphasis on importance of food for better nutrition. Nutrition Security encompasses access to adequate food, child care and feeding practices and socio-economic indicators such as health and sanitation.

The two major determinants of human nutrient requirements are body size and physical activity. The revised recommended dietary allowances (RDA) for Indians takes cognizance of the current body weight and physical activity while computing the energy and nutrient requirements. In policy formulation, a distinction should be made between transient and chronic food security. Transient food insecurity is related to risks in either access or availability of food during the off-season, drought or inflationary years. In contrast, chronic food security is associated with poverty and arises due to continuous inadequate diet. Market oriented policies expose the rural poor to the risks of market uncertainties.

The policy guideline to overcome this issue includes intervention by the Government to encourage agricultural production programme and productivity, create sustainable rural infrastructure and providing rural skilling and training to raise the purchasing power of the rural poor. Achieving

long term food security demands that research in production of non-cereal food and technology access to rural small farmers should be improved. Enhancing food quality and improving market access need to be priority goals.

The National Sample Survey Office (NSSO) data for 2011-12 data on Nutritional intake showed that per capita calorie consumption rose to 2099 kilocalories per day in rural areas and 2058 kilocalories per day in urban areas. However, the erstwhile Planning Commission's benchmark was 2400 calories per day. The implications of the per capita calorie intake in India which grew marginally after three decades are unclear. For one, India's most developed States have the lowest average calorie consumption, pointing to the fact that higher calorie intake may not be directly correlated to overall well being. However, calorie consumption is expected to rise steadily with family incomes. The top five per cent of rural Indians consume double the calories as the bottom five per cent. The share of cereals in total calorie intake has steadily declined and is down to 50 per cent in rural India. The average Indian had access to 2455 kilocalories per day with protein and fat availability at 60 gm and 52.1 gm respectively, according to OECD(2014). This is far lower than at least the 3000 kilocalories per day availability for OECD nations. Factors such as wastage of stocks are also to blame for poor availability. For instance, the Food Corporation of India data show 3000 tonnes of food grains were damaged in 2015-16. In 2014-15, quantity of damaged grains stood at 19,000 tonnes. However, per capita food availability does not reveal the whole picture. Data from NSSO shows that both total calories and proteins consumed have fallen in the two decades to 2011-12. The overall nutritional status of half of the population is not very encouraging as there is severe under-nourishment in the bottom 30 per cent of the expenditure class

Conclusion:

As the country's economy grows rapidly, the expected trend is for people to eat less cereals and switch to more costlier nutritious food such as meat, milk, fruits and fish. Indians, including the poor, are now consuming fewer cereals but they are not increasing their intake of calorie-rich food. NSSO data also reveals that, over time, more

and more Indians, despite rising wages, have not been meeting recommended calorie requirements of 2400 calories per person per day in rural areas and 2100 in urban areas. It is important to note that in the past decade, access to and availability of food has increased through the Public Distribution System, Midday Meal Scheme for school children and the Integrated Child Development Services for kids upto the age of six and their mothers. The MGNREGA, which was launched more than a decade back, guarantees at least 100 days of work a year for every rural household, has also improved the purchasing power of the rural poor and has created rural assets which have resulted in better calorie intake in rural areas. Annapurna Scheme under the National Social Assistance Programme (NSAP), under which 10 kg of food grains per month are provided free of cost to those senior citizens who, though eligible under Indira Gandhi National Old Age Pension Scheme (IGNOAPS), are not receiving old age pension scheme under NSAP need to be reviewed with implementation of National Food Security Act, 2013. The Act provides for coverage of up to 75 per cent of the rural population for receiving subsidized food grains under Targeted Public Distribution System (TPDS). Under the Act, the eligible persons are entitled to receive 5 Kgs of food grains per person per month at subsidized prices of Rs.3/2/1 per Kg. for rice/wheat/coarse grains. 2.49 crore Antyodaya Anna Yojana (AAY) families, which constitute the poorest of the poor, continue to receive 35 Kgs of food grains per household per month.

Raising rural income is central to ensuring Food and Nutrition Security for which colossal improvements in rural infrastructure are required. The structure of poverty alleviation programmes should suit the specific needs of poor communities, especially in rural areas. Food & Nutrition Security needs to be given a high priority and efforts to increase production and economic accessibility needed to be addressed by technological innovations, investments in irrigation, creating rural infrastructure and raising rural employment opportunities.

(The Author is IES and Director, Ministry of Rural Development. Email: sameera.saurabh@gmail.com)