# **Sustainable Food Systems for Food Security and Nutrition**

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Theme of the Year 2013 World Food Day observed on October 16

World Food Day is celebrated every year around the world on 16 October in honour of the date of Foundation Day of the Food and Agriculture Organization of the United Nations in 1945.

## **Importance of the Theme**

In celebrating Sustainable Food Systems, World Food Day is recognising the need for systemic change to end hunger and malnutrition. Systemic change is urgent because even though for decades the world has produced one and half times enough food for every man, woman and child on the planet, nearly 840 million people go hungry while almost 870 million are chronically undernourished. Unsustainable models of development and uncontrolled population growth are degrading the natural environment, threatening ecosystems and biodiversity that will be needed for our future food supply.

According to the International Food Policy Research Institute, about a quarter of the world's hungry are in India. As per IFPRI's Global Hunger Index, India falls under the 'alarming' category of countries classified by severity of hunger. Most of the other countries under this category are in Sub-Saharan Africa.

Ironically, most of the hungry are the very ones producing half the world's food: peasant women. Similarly, most of the food insecure people in the developed world are food and farm workers – as are many of those suffering from obesity and diet-related disease. Hunger and malnutrition are not by-products, but an integral part of the global food system. Ensuring environmental sustainability, food security and good nutrition around the world, will require a radical transformation in how we grow our food.

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Every aspect of the food system has an effect on the final availability and accessibility of diverse, nutritious foods – and therefore on consumers' ability to choose a healthy diet. Addressing malnutrition requires integrated action and complementary interventions in agriculture and the food system, in natural resource management, in public health and education, and in broader policy domains

#### **Evolution of the Right to Food**

The evolution of the right to food is derived from the larger human right to an adequate standard of living contained in the 1948 Universal Declaration of Human Rights (UDHR). Article 25 (1) of UDHR asserts that, 'Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services ...' The International Covenant on Economic, Social and Cultural Rights (1966) developed these concepts more fully, stressing 'the right of everyone to ... adequate food' and specifying 'the fundamental right of everyone to be free from hunger'.

In the United Nations Guidelines for Consumer Protection (UNGCP 1985), right to food was mentioned as the first need under the Right to Basic Needs.

In 1996, the formal adoption of the Right to Adequate Food by the World Food Summit paved the way for the possibility of a rights-based approach to food security. In India, Article 47 of the Constitution of India, *inter alia*, provides that "the State shall regard raising the level of nutrition and standard of living of its people and the improvement of public health as among its primary duties".

The internationally accepted definition of food security is that: "Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (given by the Food and Agriculture Organization of the UN (FAO) in the Rome Declaration on World Food Security, 1996, further refined in the FAO's State of Food Insecurity in the World, 2001)

Noted agriculture scientist, Dr M S Swaminathan has stressed the need for shifting to the concept of 'Nutrition Security', which he has defined as "physical, economic and social access to balanced diet, clean drinking water, environmental hygiene, primary health care and nutritional literacy". Three dimensions *viz*. availability, access and absorption are encompassed in the definition.

#### Rio+20 Outcomes Document: 'The Future We Want' and Food Security

"Food Security and Nutrition and Sustainable Agriculture" Section of the Rio+20 Outcome Document underlines the commitment of the right of everyone to have access to safe, sufficient and nutritious food, importance of sustainable agriculture and recognises the importance of addressing access of rural communities – including credit, financial services, markets, land tenure, health care and social services. The document further stresses the need "to have access to safe, sufficient and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger". It also emphasises the need to revitalise rural agricultural development acknowledging that a significant number of the poor live in rural areas and their considerable contribution to the attainment of sustainable food and agriculture.

The document highlighted the need to take action on the critical needs of two significant rural populations: (1) women, who are at the heart of global food and nutrition security, and (2) small scale farmers who utilise traditional agricultural systems. Creating an enabling environment for improved farming practices and increased productivity was noted to improve functioning of markets and trade systems, strengthen international collaboration, especially for developing countries, and promote higher investment in agriculture. Increased support in promoting crops, livestock, fisheries and aquaculture, which are vital to realising the *future* we want, was also highly emphasised in the document.

Furthermore the document also recognises the apparent need to address the root cause of excessive food price volatility; and non-discriminatory and equitable multilateral trading system to promote agricultural and rural development in developing countries and contribute to world food security.

## **Climate Change Impact on Global Food Security**

Climate change could potentially interrupt progress towards a world without hunger. A robust and coherent global pattern is discernible of the impacts of climate change on crop productivity that could have consequences for food availability. The stability of whole food systems may be at risk under climate change because of short-term variability in supply. However, the potential impact is less clear at regional scales, but it is likely that climate variability and change will exacerbate food insecurity in areas currently vulnerable to hunger and under nutrition.

Likewise, it can be anticipated that food access and utilisation will be affected indirectly via collateral effects on household and individual incomes, and food utilisation could be impaired by loss of access to drinking water and damage to health. The evidence from across the world shows the need for considerable investment in adaptation and mitigation actions toward a "climate-smart food system" that is more resilient to climate change influences on food security.

## **Current Status of Food Security in India**

The starting point is however, food production that determines the base of food availability. India's population is likely to reach 1.5 billion by 2030; the challenge facing the country is to produce more and more from diminishing per capita arable land and irrigation water resources and expanding abiotic and biotic stresses. India currently produces about 230 million tonnes of cereals to meet the needs of a population of 1.15 billion. While calculating food requirements, the needs of farm animals are often overlooked. The current situation in India is that cereal production has to be doubled by 2050 in order to meet the needs of the expected population of 1.8 billion, in addition to meeting the needs of livestock and poultry.

Almost 60 per cent of the Indian population continue to depend on agriculture and allied activities for their livelihood. Hence, growth of this sector is an essential perquisite for overall economic growth. According to the Economic Survey 2012-13, the agriculture and allied sector accounted for 14.5 per cent of the gross domestic product (GDP) in 2010-11 at constant 2004-05 prices. Whereas overall GDP has grown by an average of 8.62 per cent

during 2004-05 to 2010-11, agricultural sector GDP has increased by only 3.46 per cent during the same period.

Globally, India is the third largest producer of cereals, with only China and the USA ahead of it. India occupies the first position in milk production and is the third largest producer of fish and second largest producer of inland fisheries in the world. An estimate suggests that without a green revolution, about 30 million children would have died in the developing world between 1970 and 2000, with more than two-thirds of these children being in Asia alone.

From many perspectives, agriculture in the country today is in a state of crisis. A national survey some years back revealed that given a choice, 40 per cent of farmers in India would not like to be in farming.

It is clear that India will remain a predominantly agricultural country during most of the 21st century, particularly with reference to livelihood opportunities. Therefore, there is a need for both vision and appropriate action in the area of shaping our agricultural destiny. The Green Revolution had been largely confined to irrigated farming areas and to rice and wheat. The per unit area productivity of Indian agriculture today is much lower in India as compared to other major crop producing countries. There are also wide gaps in the yield among and within States.

#### **Food and Nutrition Security**

The Planning Commission of India has recognised the importance of optimal nutrition for health and human development.

At the time of Independence the country faced two major nutritional problems. One was the threat of famine and the resultant acute starvation due to low agricultural production and the lack of an appropriate food distribution system. The other was chronic energy deficiency.

The country has adopted multi-sectoral, multipronged strategy to combat these problems and to improve the nutritional status of the population. Successive Five-Year Plans laid down the policies and strategies for achieving these goals.

Over the years, there has been improvement in access to food through the PDS, in spite of its aberrations; the food for work programme has addressed the needs of the vulnerable out-of-work persons. The ICDS programme aimed at providing food supplementation for pre-school children, pregnant and lactating women. The Mid-day-meal programme aimed at improving the dietary intake of primary school children and reduction in the school dropout rates has been operationalised. There has been substantial improvement in access to health care. National programmes for tackling anaemia, iodine deficiency disorders and Vitamin-A deficiency are being implemented. As a result of all these interventions, there has been a substantial reduction in severe grades of under-nutrition in children and some improvement in the nutritional status of all the segments of population

However, several challenges remain. To meet all the nutritional needs of the growing population, the country will have to produce an extra five million tonnes of food grains annually and increase the production of livestock, fish and horticultural products. This has to be achieved in the face of shrinking arable land and farm size, low productivity, growing regional disparities in productivity and depletion of the natural resource base. Appropriate steps have to be taken to minimise the potential adverse consequences of globalisation on domestic production, employment and price stability of food commodities. In spite of huge buffer stocks, eight per cent of Indians do not get two square meals a day and there are pockets where severe under-nutrition takes its toll even today. Every third child born is under weight.

Inputs needed to achieve a sustainable increase in food grain production to meet the needs of the growing population have to be provided. In the last two decades, there has been a progressive decline in pulse consumption, especially among the poorer segments of the population. Innovative local efforts can go a long way in improving nutrition security especially for the poorer segments of the population living in vulnerable areas. Formation of local food grain banks under the supervision of the local elected representatives to help in achieving nutrition security for all and insulating the economically and socially deprived sections of the community from seasonal food insecurity

### **National Food Security Act 2013**

Recently India passed the historic National Food Security Act, an act that will dramatically increase the number of people who receive food subsidies from the government. While India's existing food distribution system, the Targeted Public Distribution System (TPDS), is already enormous, the NFSA proposes to increase coverage to 75 per cent of India's rural population and 50 per cent of the urban population – a whopping 800 million people.

At face value, the Act appears to be an important step in India's fight against hunger, but much debate still exists regarding whether its flaws would outweigh its benefits and whether the programme will be sustainable in the long-run or not.

The Act aims to simplify how food subsidy beneficiaries are identified, viewing households as either covered or uncovered based on data provided by the states. Whether or not a household is covered is determined based on a national cutoff-level for per capita consumption. Covered households will receive an entitlement of five kg per person per month of wheat and rice for the price of Rs. Two and three per kg, respectively. Coarse cereals, including sorghum and pearl millet, will be sold at Rs. one per kg. Extremely poor households, currently classified as Antyodaya Anna Yojana, will receive an additional 10 kgs of grain per household. The bill, which is a revision of previous proposals, also includes an additional allocation of 6.5 million tonnes of food grains for other welfare schemes, such as school feeding programmes and additional subsidies for pregnant women. All told, the NFSA aims to provide 61.2 million tonnes of food grains per year throughout India.

Clearly, such a wide-reaching programme will have significant financial costs. A conservative estimate places the law's costs at over US\$23bn per annum, equivalent to about 0.72 percent of India's GDP. These costs don't just come from the grains themselves: setting up and maintaining distribution centres and government agencies to monitor the subsidies also creates a big expense. Critics of the law argue that this money could be better spent on generating employment, improving rural and urban infrastructure, investing in agriculture, and a number of other competing uses.

Implementation also poses a significant challenge to the NFSA and will require careful attention at both the national and state levels. Storage, transportation, and distribution infrastructure and systems need to be improved in many parts of the country in order to prevent grain from going bad before it reaches the people who need it. Food safety and malnutrition due to micronutrient deficiency rather than simple caloric intake are also overlooked by the bill; these issues will need to be addressed in order to improve India's food security in the long run.

As the National Food Security Bill was discussed on various platforms of the Indian policy community and the government, several political challenges became clear. The first is the potential incompatibility of the NFSA with existing state programmes. Many states in India have tried to implement their own food distribution policies. In states that have already successfully implemented the TPDS system, such as Tamil Nadu, Andhra Pradesh, and Chattisgarh, the new system will not have significant impacts. In fact, the national government could see political resistance from these states, which may want to protect their already-functioning systems. While the National Food Security Act proposes a grievance redressal system, through which households can fight for increased access, weak infrastructure and political institutions in many parts of the country make the success of such a system somewhat doubtful. The second political challenge is the Act's potential incompatibility with other development programmes, such as a proposed cash transfer programme for food and fertilisers. While this programme has been tabled for now, it is unclear how cash transfers and food subsidies could impact each other, and India's economy, in the future.

Finally, the Act has several implications for India's agricultural sector. Providing food subsidies to more people means that more grain will be needed; it is likely that in order to procure the needed additional grain, the government will have to raise its minimum support price, potentially leading to higher food inflation. Farmers' production choices may also be affected by the NFSA; with increased demand for staples like wheat and rice, farmers may choose to invest more in these crops rather than in other (potentially higher value) crops, leading to a decrease in agricultural diversification towards high-value agriculture.

In addition to its potential economic and nutritional impacts, an increased focus on just a handful of crops can also have adverse environmental effects: for example, the Punjab faces water scarcity and thus is not ideally suited for persisting rice production, but it may be tempted to continue increasing rice production in order to take advantage of the increased demand and higher government payouts.

All in all, the National Food Security Act is a complex programme that could impact many aspects of India's economy, environment and food security. While time will tell if the programme's benefits are extensive enough to outweigh its flaws, it is crucial for India's policymakers to acknowledge and address those flaws in order to truly benefit the country as a whole. Proper targeted implementation remains the key to achieving any significant impact on food security for India's poor.

## State of the Indian Consumer: Findings of CUTS Study

In 2012, CUTS has done a national survey and published a report "State of the Indian Consumer 2012" under the project titled 'Indian Consumer in the New Age: A Forward looking Agenda to Address the Concerns of the Common People' (ConsumersUp) with the support of the Department of Consumer Affairs, Government of India.

The research (covering 19 states & three UTs – a sample survey of 11,000 households) shows that fair price shop (FPS) of the public distribution system (PDS) is the preferred source for food grains of 14 per cent of respondents while 52 per cent access a privately owned retail shop. Of those using the PDS-FPS, almost 73 per cent are poor families living below the poverty line. 26 per cent of the respondents accessing PDS FPS have never received their entire entitlement while 11 per cent have not received it at the prescribed prices. Five per cent and 10 per cent of such respondents respectively were unaware about their entitlements and the prescribed price. Only 14 per cent consumers were aware about the proposed Food Security Act. 11 per cent have never received food grains on government prescribed price. These figures underline the reasons behind the existence of a large number of hungry and malnourished population in India.

#### **Conclusions**

The issue of food security and nutrition in the Indian context should be viewed much beyond food availability *per se*. A mix of policies, such as effective implementation of anti-poverty

programmes, decentralisation of procurements, control of inflation, improvement in primary healthcare and sanitation facilities, etc. are needed for the betterment of food security and nutrition in the country.

The launch and progress of Mahatma Gandhi National Employment Guarantee Scheme and the National Food Security Act are significant moves, and together they can be considered as one of the most important steps. The right to food for the poor must take into account access to food entitlement. The National Food Security Act will hopefully address the existing issues of concern to make India food secured, and genuinely entitle people to their right to food.