

# Academic Script

## INTRODUCTION

Food security has been a major goal of development policy in India since the beginning of planning. Food availability and price stability were considered measures of food security till the 1970s and the achievement of self-sufficiency was accorded high priority in policy. The stress on food grain production provided a solid base for food security at the national level. India achieved self-sufficiency in food grains in the 1970s and has sustained it since then. It improved its capacity to cope with year-to-year fluctuations in food production. The achievement of macro food grain security at the national level did not percolate down to households and the level of chronic food insecurity in India is still high. According to the Food and Agriculture organisation, over 225 million Indians remain chronically undernourished. The National Nutrition Monitoring Bureau has estimated that in 2000-01 about half of the rural children below five years of age, suffer from malnutrition and 40 per cent of adults from chronic energy deficiency. This is due to the fact that a substantial proportion of the people are too poor to buy enough food and also exposed to diseases caused by poor sanitation, which results in poor conversion of food into energy. The nutritional status of tribals is worse.

The government has been implementing a wide range of nutrition intervention programmes for achieving food security at the household and individual levels. The high levels of food insecurity forced the Indian Government to introduce three food intervention programmes during the 1970s. The programmes are –

1. Public Distribution System (PDS)
2. Integrated Child Development Services (ICDS)
3. Food-for-Work (FFW)

Another approach adopted by the government is to target women and children directly; this includes:

- The mid-day meal programme for school going children.
- Supplementary nutrition programme for children and women.

## **National food security act, 2013**

The National Advisory Council (NAC) submitted its proposals on National Food Security Bill, 2011. The objective of the proposed National Food Security Act (NFSA), was defined as to ensure "public provisioning of food and related measures, to enable assured economic and social access to adequate food with dignity, for all persons in the country, at all times, in pursuance of their fundamental right to be free from hunger, malnutrition and other deprivations associated with the lack of food and related matters." The NAC recommended the shifting from household food entitlements to individual food entitlements. It presented two arguments in favour of this.

First per capita entitlements are fairer: households with more members will be entitled to more food.

Second, per capita entitlements would do away with the need for a precise definition and identification of households', which tends to be difficult and prone to manipulation.

The National Food Security Bill (NFSB) was in the Lok Sabha on December 22, 2011. The Bill, envisaged coverage of 75 per cent of the rural population and 50 per cent of the urban population for subsidised food grains under the Targeted Public Distribution system, besides provisions for nutritional support to women and children. After its introduction, the Bill was referred to the parliamentary standing committee on Food, Consumer Affairs and public distribution for examination.

The National Food Security Act (NFSA), 2013 seeks to provide and nutritional security in human life cycle approach, by ensuring access to adequate quantity of dignity and affordable prices to people to live a life for matters connected therewith or incidental 2013. It extends to signed into law on September 12, of the Act are as the whole of India. The main highlights are:

1. The Act gives legal entitlement to 75 per cent of the rural and 50 per cent of the urban population for subsidised grains under TPDS.

2. A beneficiary will be entitled to 5 kg of rice, wheat or coarse cereals a month at R 3, R 2 and R 1 per kg and will be identified by the States based on the parameters prescribed by the Union government (thus, the Act provides individual food entitlements).

3. The price for providing food grains will be initially valid for 3 years from the date of commencement of the act and thereafter, at such price, as may be fixed by the Central government, not exceeding the minimum support price.

4. Although entitlements under the Act has been reduced from 7 kgs to 5 kgs, there is no change in entitlement for 2.43 crore 'poorest of poor' families under the Antyodaya Anna Yojana' which remains at 35 kg per household per month.

5. The State governments shall identify the eligible households under the Act within a period not exceeding 365 days, after the commencement of the Act.

6. For children in the age group of 6 months to 6 years, the Act guarantees an age-appropriate meal, free of charge, through the local anganwadi. For children aged 6-14 years one free mid-day meal shall be provided every day in all schools run by local bodies government and government aided schools, upto Class VIII. For children below 6 months, exclusive breastfeeding shall be promoted.

7. Every pregnant and lactating mother is entitled to a free meal at the local anganwadi as well as maternity benefits of Rupees 6,000 in instalments.

8. The Act provides for the creation of State Food Commissions. Each commission shall consist of a chairperson, five other members and a member Secretary. The main function of the State Commission is to monitor and evaluate the implementation of the Act, give advice to the State governments and their agencies and enquire into violations of entitlements.

9. In case of non-supply of the entitled quantities of food

grains or meals to entitled persons under the Act, such persons shall be entitled to receive food security allowance from the concerned State government.

10. The Act has three schedules.

Schedule 1 prescribes issue prices for the PDS.

Schedule 2 prescribes nutritional standards for mid- day meals, take-home rations and related entitlements. For instance, take-home rations for children aged 6 months to 3 years should provide at least 500 calories and 12-15 grams of protein.

Schedule 3 lists various 'provisions for advancing food security', under three broad headings:

- i. Revitalisation of agriculture (for example, agrarian reforms, research and development, remunerative prices);
- ii. Procurement, storage and movement of food grains.
- iii. Other provisions -for example, drinking water, sanitation, health care and 'adequate pensions' for senior citizens, persons with disability and single women.

## **The public distribution system (PDS)**

The public distribution system (PDS) refers to a network of retail outlets-popularly known as 'ration shops', through which the government sells grain (principally, rice and wheat) and kerosene. Grain sales occur at a fixed price called the 'issue price' that is typically lower than the market price. The PDS-a producer price support-cum-consumer subsidy programme-has its roots in the food grain shortages of 1960's and has evolved since then. Till late 1970's emphasis was on price stabilisation and it was confined to urban and food deficit areas. The distribution of subsidised food especially to the poor came into

light from early 1980's and thus its coverage was extended to rural areas. In the wake of 1990's economic reforms, PDS was the main safety net to protect the poor from the adverse effects of potential price fluctuations in short-run. With a network of more than 4,00,000 Fair Price Shops (FPS), the Public Distribution System (PDS) in India is perhaps the largest distribution machinery of its type in the world. PDS is said to distribute each year commodities worth more than Rs 15,000 crore to about 16 crore families.

Two conditions govern the sale of subsidized grain.

- First, the buyer of grain must possess a 'ration card'.
- Second, grain purchases are subject to a quota.

The public distribution system is supported by a procurement operation that procures and funnels supplies to the PDS. Through the Food Corporation of India (FCI), the government procures grain at the 'procurement price' and then stores and transports it to the various consuming locations.

More than 70% of the poor use the PDS in Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Between 50 to 60% of the poor use the PDS in Assam, Gujarat, Maharashtra and Orissa. Participation rates of the poor vary between 6 to 22% in Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. As for the non-poor, their participation rates are lower than that of the poor.

A variety of reasons for low participation rates of the poor can be:

- Difficulty of obtaining ration cards.
- Limited liquidity of poor households (as ration entitlements can be accessed only once every fortnight rather than continuously).
- Uncertain ration supplies.
- Inferior quality of PDS grain.
- Inconvenient location of PDS shops.
- Slender subsidy offered in most states.

Lack of geographical access to the PDS network seems to be a

powerful factor inhibiting participation. States where households have easy access to PDS shops also are states with high participation rates.

### **PDS was criticised on a wide front:**

- The annual food subsidy involved in maintaining the system is huge. The level of food subsidies as a proportion of total government expenditure has gone up from a level of 2.5 per cent in the early 1990s to more than 5 per cent in 2002-2003.
- The high carrying cost of stocks in excess of the buffer norms pushes up the food subsidy bill.
- Its failure to serve the population Below Poverty Line (BPL).
- For its perceived urban bias.
- Negligible coverage in states with a high density of rural poor.
- Lack of transparent and accountable arrangements for delivery.

Given that backdrop, the Government acted to streamline PDS during the Ninth Five Year Plan period by issuing special cards to BPL families and selling to them food grains through PDS outlets at specially subsidised prices.

### **Malnutrition**

What is the impact of poverty reduction on child malnutrition?

Radhakrishna and Ravi (2004) estimated that malnutrition would persist even when the poverty level is brought down to zero. Their results indicate that a 10 per cent reduction in poverty would reduce malnutrition by 6 per cent. Also revealed that malnutrition declines slowly with improvements in the standard of living. The probability of a child falling into malnutrition decreases with improvement in the mother's nutrition status, mother's education, mother's age and ante-natal visits, but increases when the mother is working. The adverse effect of the working status of the mother may be a

characteristic among the poor households. The risk of malnutrition also decreases with the increase in standard of living of the household and it increases with household size. Children of the poor communities suffering from malnutrition not only do not achieve full genetic growth potential and end up as adults with small body size, but are also exposed to a greater risk of child mortality.

The efficacy of conversion - food into energy of an individual depends on his/her access to safe drinking water, health care and environmental hygiene. The advances in the control of communicable diseases and improvement in health care significantly improved the efficiency of food energy conservation by reducing food wastages caused by diarrhoea and dysentery. A consensus has emerged that the assessment of malnutrition should be based on the nutritional outcome. Anthropometric measures, clinical signs of malnutrition, biochemical indicators and physical activity are the suggested indicators of malnutrition. Among these anthropometric measures should be preferred since body measurements are highly sensitive to even minor levels of malnutrition, whereas biochemical and clinical indicators are useful only when the level of malnutrition is extreme.

The National Nutrition Monitoring Bureau (NNMB) reports provide estimates of child malnutrition based on the Gomez classification and chronic energy deficiency of adults based on body mass index. The NNMB estimates show that in rural areas, the incidence of child malnutrition declined slowly from 61.5 per cent in 1975-79 to 47.7 per cent in 2000-01. In spite of some improvement in nutritional status, nearly half the rural children were suffering from malnutrition. This means that about half of the children of India may not have reached their physical or mental potential and a sizeable proportion of them may be functionally impaired. It is noteworthy that the level of malnutrition is much higher than the incidence of income poverty. Also, reduction in malnutrition is much slower than that of income poverty.

## **Role of the government**

India is home to the world's largest child care programme. Ousting malnutrition completely from our country is a herculean task. It is one of the top agendas in the priority list of the present government and is now receiving proper attention at the highest levels. The government has envisaged a 'multi sectoral approach' and 'direct and specific interventions' to address the issue of malnutrition. Some of the 'direct and specific interventions' can be seen as:

- 1) Integrated Child Development Services (ICDS) specially programmed for lactating and pregnant mothers and children below the age of 3.
- 2) National Rural Health Mission (NRHM)
- 3) Mid-Day Meal Scheme (MDM)
- 4) Rajiv Gandhi Scheme for Employment of Adolescent Girls (RGSEAG) SABLA
- 5) Indira Gandhi Mitrayo Sahayog Yojana (IGMSY)
- 6) Annapurna Scheme (APS)

Governments "Multi-sectoral approaches include:

1. Targeted Public Distribution System (TPDS)
2. National Horticultural Mission
3. National Food Security Mission
4. Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
5. National Rural Drinking Water Scheme.

As per the National Family Health Survey, the proportion of under-weight children below 3 years declined from 43% in 1998-99 to 40% in 2005-06. As per the Rapid Survey on Children 2013-14, commissioned by Ministry of Women and Child Development, there is a reduction in underweight among under 5 years of age from 42.5% in NFHS-III to 29.4% and wasting from 19.8% in NFHS-III to 15.1%.



## **Recent developments in agriculture**

The agriculture sector recorded satisfactory growth due to improved technology, irrigation, inputs and pricing policies. Livestock, poultry, fisheries and horticulture are surging ahead in production growth in recent years and will have greater demand in the future. Industrial and service sectors have expanded faster than agriculture sector resulting in declining share of agriculture in national accounts. Despite the structural change, agriculture still remains a key sector, providing both employment and livelihood opportunities to more than 70 percent of the country's population who live in rural areas. The contribution of small farmers to the national and household food security has been steadily increasing. The water availability for agricultural uses has reached a critical level and deserves urgent attention of all concerned.

The research and educational efforts, duly supported by the developmental efforts and the creation of the infrastructure, such as irrigation system, fertilizer and chemical industry, surface transport system, rural credit system, marketing and storage facilities, have ensured that India enters the next millennium as a food-secure nation.

The Indian Council of Agricultural Research (ICAR), an apex organization for conducting and co-ordinating agricultural research, has been at the forefront to lead these agricultural revolutions in the country. The ICAR, since its inception in 1929, has emerged as a vibrant organization, comprising 4 National Institutes, 45 Central Institutes, 30 National Research Centres, 10 Project Directorates, 4 Agencies, 80 All-India Co-ordinated Research Projects, 261 Krishi Vigyan Kendras and 29 State Agricultural Universities (SAUs), serving the needs of the country. In addition, during the last few years, we have seen the emerging role of private sector, non-governmental organizations and farmers' associations in the field of agricultural technology generation and distribution.

Now Friends, Let's have look at different Yojanas programmes or implemented by the government through the hands of ICAR.

### 1. Farmer FIRST:

It is an ICAR initiative to enhance farmers-scientists contact with multi stake holders-participation. FIRST refers to Farm, Innovations, Resources, Science and Technology. The project focuses on enabling interaction of scientists with farm conditions and problems.

### 2. Mera Gaon – Mera Gaurav

It is launched by ICAR to provide farmers with required information, knowledge and advisories on regular basis.

### 3. Attracting and Retaining Youth in Agriculture (ARYA) Scheme

ICAR has initiated a programme on 'Attracting and Retaining Youth in Agriculture' to empower youth in rural areas to take up agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts.

### 4. Pradhan Mantri Krishi Sinchayee Yojana

It is a central scheme that aims at providing irrigation facilities to every village in the country by converging ongoing irrigation schemes implemented by various ministries. It will focus on 'end-to-end solution' in irrigation supply chain by implementing new programme in a "project mode" with decentralised state-level planning and execution. This scheme has amalgamated three ongoing programmes of three different ministries:

- 1) Accelerated Irrigation Benefit Programme of the Ministry of Water Resources;
- 2) Integrated Watershed Management Programme of the Ministry of Rural Development;
- 3) Farm water management component of the National Mission on Sustainable Agriculture.

Soil Health Card

The scheme is launched to provide every farmer a Soil Health Card in a mission mode. The card will carry crop wise recommendations of nutrients/fertilizers required for farms, making it possible for farmers to improve productivity by using appropriate inputs.

### Paramparagat Krishi Vikas Yojana

Paramparagat Krishi Vikas Yojana (Traditional Farming Improvement Programme) has been launched by Government of India to support and promote organic farming and thereby improving soil health. This will encourage farmers to adopt eco-friendly concept of cultivation and reduce their dependence on fertilizers and agricultural chemicals to improve yields.

Agri-Tech Infrastructure Fund (ATIF) ATIF is aimed at implementation of an appropriate common e-market platform to regulate 585 regulated wholesale markets in the states across the country. National Agriculture Market (NAM) NAM is envisaged as a pan-India electronic trading portal which seeks to network the existing Agricultural Produce Market Committees (APMCs) and other market yards to create a unified national market for agricultural commodities. NAM will be implemented as a Central Sector Scheme through Agri-Tech Infrastructure Fund (ATIF). Price Stabilization Fund Scheme To control the rising prices of agricultural commodities a Price Stabilization Fund of Rs. 500 Crore for agricultural commodities was announced in the Union Budget 2014-15 with a view to mitigate volatility in the prices of agricultural produce.

### **SUMMARY**

The availability of food grains is not a sufficient condition to ensure food security to the poor. It is also necessary that the poor have sufficient means to purchase food. The capacity of the poor to purchase food can be ensured in two ways – by raising the incomes or supplying food grains at subsidised prices. While employment generation programmes attempt the first solution, the PDS is the mechanism for the second option.

Generally, the risk of child malnutrition is high among the poor households where mothers have poor nutritional levels. The performance of food-based interventions needs to be improved by making them more demand driven. Merely scaling up the coverage of the programmes without improving their quality may not be the best way to reduce malnutrition.

While ICDS covers the nutritional needs of children of 6 months- 6 years' age, pregnant and lactating mothers, Rajiv Gandhi Scheme for Adolescent Girls covers the nutritional and non-nutritional components for adolescent girls. Under these schemes, age appropriate supplementary nutrition is provided to the beneficiaries at the Anagnwadi Centres spread across the country.