



CHALLENGES IN ACHIEVING FOOD SECURITY IN INDIA



Presented by

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Food insecurity per se, exists when all people, at all times, do not have physical and economic access to the sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation, FAO, 1996)

Food insecurity can lead to **lower cognitive ability**, **diminished work performance** and **substantial productivity losses**.

All of these can **hamper** the growth and development of **national economy**.

- ❑ **Food security** is the **back bone of national prosperity and well being**
- ❑ The **health of any nation** is directly linked to food security
- ❑ Food security may be defined as availability of food and access to it.
- ❑ **A family** is considered to be **food secure** when it's **members do not live in hunger** or fear of starvation.
- ❑ As per definition of FAO-
Food Security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Need for food security

The need for achieving food security is felt significantly in the recent years due to **enormous pressure** from the ever **increasing population in India.**

Over the years,

India has made substantial progress in health determinants :

- Infant Mortality Rate,
- Maternal mortality ratio,
- Disease prevalence, and
- Morbidity as well as mortality rates



which have shown consistent decline over the years.

- ✓ Though an impressive economic progress with achievements in the domain of agriculture are contributing significantly for food security
- ✓ However, the problem of chronic hunger and malnutrition seems to prevail on a large scale
- ✓ India currently has the largest number of undernourished people in the world *i.e.* 212 million

Reasons for the existing food insecurity in India

1. In rural and tribal areas

- ✓ Due to **lack** of improvement in agricultural productivity owing to inadequate resources and markets needed to obtain **agricultural stability**.
 - ✓ The availability and expansion of irrigation facilities, improvement in agricultural technology and overall food grain output are in a decreasing trend
 - ✓ Lack of education and job opportunities in rural areas
 - ✓ Climate change too, has an impact on the agricultural productivity, which affects the availability of food items and thus, food security.
- Example: on rain fed crops, other than rice and wheat

2. In urban population

- The **large proportion of informal workforce** resulting in **unplanned growth of slums** which lack in the **basic health and hygiene facilities**
- **Rural-to-urban migration** has gradually increased
- These rural migrants form a large chunk of population referred to as **'informal sector'**
- The emergence of these rural origin pockets in the urban areas has resulted in a number of slum settlements characterized by inadequate water and sanitation facilities, insufficient housing and increased food insecurity

➤ Another important point which might promote food insecurity is the **dependence of this labourer class on daily employment wages** which tends to be variable on different days of the month and thus the **food procurement and access is also fluctuating**

➤ A striking issue is that in India, all the privilege of the government schemes and programmes, aimed at helping the urban slum people, is enjoyed only by those slums that are notified.

➤ Ironically, around **50 % of the urban slums are not notified**

➤ People from **these un-notified slums** have to buy their food from the common market at the competitive price and are **devoid of the subsidized food** made available through Public Distribution System (PDS)

3. In children and mothers

- Overpopulation, poverty, lack of education and gender inequality
- Overpopulation is linked to competition for food and can lead to malnutrition amongst children
- Lack of adequate knowledge amongst mothers regarding nutrition, breast-feeding and parenting is another area of concern
- Gender inequality places the female child at a disadvantage compared to males and causes them to suffer more because they are last to eat and considered less important

- Also, there is neglect in form of lack of preventive care (specifically immunization) and delays in seeking health care for disease
- There is also an issue of wage differentials
- These factors contribute to limiting the productivity of women, in turn jeopardizing their long term purchasing power

4. Faulty food distribution system

- Inadequate distribution of food through public distribution mechanisms (PDS *i.e.* Public Distribution System)
- The criterion for identifying a household as BPL is arbitrary and varies from state to state
- Low quality of grains and the poor service at PDS shops

5. Unmonitored nutrition programmes

- A number of programmes with improving nutrition are **planned but** these are **not properly implemented**
- In states such as **Bihar and Orissa** where the poverty ratio is very high, poor implementation of nutritional programmes that have proven effectiveness has a significant impact on food security

6. Lack of intersectoral coordination

Lack of coherent food and nutrition policies along with the **absence of inter-sectoral coordination** between **various ministries of government** such as Ministry of Women and Child Health, Ministry of Health and Family Welfare, Ministry of Agriculture, Ministry of Finance etc.

Challenges and Way Ahead

- ❑ There is a compelling need to operationalise the concept of nutrition security which implies physical, economic and social access to balanced diet, clean drinking water, safe environment, and health care
- ❑ Ensuring food security alone will aid in reducing hunger but will not eliminate malnutrition or impact nutrition status largely if other components such as safe drinking water and health care are also not envisaged

Implementing measures to improve agricultural productivity and food storage

- ❑ The government policy needs to adopt an **integrated policy framework** to facilitate the **increased use of irrigation** and newer farming techniques
- ❑ The rationale distribution of cultivable land, improving the size of the farms and providing security to the tenant cultivators
- ❑ Providing the farmers with improved technology for cultivation and improved inputs like irrigation facilities, availability of better quality seeds, fertilizers and **credits at lower interest rates**
- ❑ One main reason **why food is not distributed equitably** is that a **significant amount is wasted**

❑ It would be useful to **adopt strategies for food storage** which have been implemented successfully in other countries

❑ For example, **China** has an excellent system of grain storage education and research

❑ The country has invested in building advanced storage facilities that are armored with modern equipments

❑ India should improve the quality of **food storing facilities** so that the food grains that are wasted and spoiled could be used to satisfy the hunger of those people who really need it

Ensuring food availability and accessibility to below poverty line (BPL) candidates

- ❑ It is essential to ensure availability of food grains to the common people at an affordable price
- ❑ This can be done by **more accurate targeting of the BPL population** so that they get food at substantially low price
- ❑ There is a problem associated with the BPL listing
- ❑ There should be a provision for **subsidy on the sale of food grains to above poverty line (APL)** customers too
- ❑ Also, all restrictions on food grains regarding inter-State movement, stocking, exports and trade financing should be removed
- ❑ This will reduce the food prices and increase affordability
- ❑ The Public Distribution System must be made **transparent and reliable**

Improving purchasing power through employment generating schemes

- ❑ Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
- ❑ Poverty alleviation programmes like the Integrated Rural Development Programme (IRDP) and
- ❑ Employment generation schemes like Jawahar Rozgar Yojana,
- ❑ Nehru Rozgar Yojana etc

Need to be re-oriented and up scaled to make a positive impact on the purchasing power of the lower socio-economic segment

- ❑ It is equally important to enhance the quantity and quality of wage-paid employment

Crop diversification, establishing food grain banks and promoting household gardening

- ❑ Growing of **non-cereal crops such as oilseeds, fruits and vegetables etc. need to be encouraged**
- ❑ The creation of **decentralized food grain banks** in each village or block of the district, from which people may get subsidized food grains against food coupons, will be a good option
- ❑ This concept will **improve the delivery** of food grains and **eliminate corruption**
- ❑ One of the ways to ensure direct access to good quality food that can be easily grown and prepared could be the **concept of home gardening.**

❑ One excellent example of **household gardening** can be seen in Bangladesh where as part of its global effort to eliminate **vitamin A deficiency** and nutritional blindness, the NGO Helen Keller International implemented a home gardening and nutrition education project

❑ The concept worked upon was that promotion of **low-cost vegetable gardens amalgamated with nutrition education** could prove to be instrumental for improving the nutritional status, particularly women and young children

❑ As a result of this intervention, the average household income increased and also the nutritional intake

Community awareness and social marketing

- ❑ Local community education on key family health and nutrition practices using participatory and planned communication methodologies will be helpful
- ❑ Incorporating **health and nutrition education** into formal school curriculum for **girls and adult literacy programmes** could greatly improve women's health and nutrition
- ❑ Social marketing of iodized salt, iron and folic acid and vitamin A supplements, nutritious food mixes and other low cost vitamin/mineral preparations will prove to be beneficial

Monitoring and timely evaluation of nutritional programmes

❑ A complete community based approach needs to be adopted

❑ Focus on even simple interventions like promoting exclusive breastfeeding, proper complementary feeding and growth monitoring and promotion (GMP) can be expected to give outstanding results

❑ Efforts should be made by the concerned health departments and authorities to

Initiate and supervise

Conduct annual surveys and rapid assessments surveys

Evaluations at timely intervals

❑ Use of information technology to improve program monitoring

Community participation and intersectoral coordination

- ❑ Revamping of existing direct nutrition programmes along with orientation and training of community health workers, Panchayati Raj Institution (PRI) members, other opinion leaders, care givers and other stakeholders
- ❑ Delivering very basic, well-targeted package of nutrition services through a multi-sectorial approach to improve the nutrition level of people
- ❑ Attention needs to be given to school based interventions including hygiene, sanitation and nutrition education
- ❑ Community based nutrition programs (CBNP) which create scope for community participation, must be facilitated by effective policy implementation

Perspectives for food security (2015 – 2050)

Even with relatively small income increases, **demand** increases for basic food staples **will exceed supply**, mostly due to the underlying metrics (population, land area).

Imports might not forestall major food price increases due to logistical constraints (volumes) and farm income realities in high income countries.

Emerging technologies including **biotechnology** can support productivity increases which can help in addressing problems of **hunger and poverty** provided risk assessment has been done and public confidence won

With appropriate **policy support and judicious blending of traditional technologies with biotechnological tools**, smallholder women farmers and rural youth can become the engines for agricultural productivity growth and contribute to avoid food crisis in near future

Increasing production –Let us pledge

- Develop varieties/ hybrids/ transgenics that help increasing production by **25%** from current levels
- **Develop / refine technologies** that increase production by at least by **25%** from current level
- Develop varieties and technologies that use fewer resources (**¼ th**) but permit acceptable or relatively better output
- **Improve profitability** of farming and living conditions of farmers
- Involve **women and rural** youth in agriculture

Sustainable Production – Food Security

Food security is achievable but business-as-usual policies, practices and technologies will not work. To produce diversified array of crops, livestock, fish, forests, and biomass (for energy) in an **environmentally and socially sustainable manner** we need to:

- Embed economic, environmental and social sustainability into agricultural policies, practices and technologies
- Address today's hunger problems with appropriate use of current technologies, emphasizing agro-ecological practices (e.g., no/low till, IPM and INRM), coupled with decreased post-harvest losses
- Address future demands by supplementing or complementing emerging technologies for increased productivity and crop protection in era of climate change and diminishing natural resources but the risks and benefits must be fully understood

Conclusions

- If we fail to feed the present generation due to pre-concieved fears of frontier technologies then there would probably increased hunger & under/ malnutrition in future generations.
- Responsible **emerging technologies** including biotechnology are **not the enemy** but **hunger is real enemy** that affects around one billion and starvation that causes million of deaths every year.
- Without adequate food supplies at affordable prices to needy we cannot expect world health or peace

Feeding hungry is our duty



Poverty (food insecurity) is the worst kind of violence

Mahatma Gandhi

**If a free society can not help the many who are poor
and food insecure, it can not save the few who are rich**

John F Kennedy

Thank You