

# Food Security

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**Abstract**—Although the street food sector plays an important role in urban food security, state-led food security measures in India have failed to provide a role for poor urban street food vendors to engage in the distribution and consumption of healthy foods. Instead, state-led food security schemes, whether production, distribution, or consumption oriented, have viewed the urban poor simply as beneficiaries of subsidized grain. This case study illustrates how the street food sector, operated by poor urban vendors selling ready-to-eat, healthy millet-based porridges in Madurai, has improved access to nutritious foods and created livelihood opportunities for the urban poor. The paper provides an overview of the informal street food sector, socioeconomic conditions of vendors. Analysis of the data indicates the marginalization of street food vendors under the existing policy environment in urban India. The paper discusses how the state, as a regulatory body and a service delivery agent, as well as research and development organizations can strengthen the rights and capabilities of street vendors and, in doing so, improve urban food security.

## 1. INTRODUCTION

Food Security programs aim to make measurable and sustainable improvements in farming production and resource utilization through instruction and skills improvement in growing, processing and marketing practices. We provide direct technical assistance to farmers through field extension agents, who live and work in communities to promote changes in attitudes and systems, while enhancing clients' skills in agriculture. Food security does not simply give rural farmers new tools; we empower rural farmers with the skills needed to generate increased production and profit, and also with knowledge, promoting respect for the environment and improving the quality of life of the community as a whole.

Over the past 40 years, improved food security for populations at risk through technical interventions in areas such as post-harvest management; processing and storage; animal husbandry; agricultural marketing; bullock traction; agro-forestry; inventory credit; and the formation of farming groups and committees.

### Food Security programs are to:

- Increase food availability and food access through improved farming systems, invigorated entrepreneurship, and strengthened market systems

- Improve food utilization through food distribution and better care practices, such as improved food processing, preservation and storage

## 2. IMPACT OF NATIONAL FOOD SECURITY ACT (NFSA) ON THE INDIAN ECONOMY: AN APPLICATION OF MODIFIED LEONTIEF AND GHOSH MODEL

Topic: Impact Analysis: Multipliers Author: Priyam Sengupta Co-Authors: Kakali Mukhopadhyay In September, 2013 the Parliament of India passed an act called "National Food Security Act (NFSA)". The act has stupendous importance for a country like India which is long suffering from problems like hunger and starvation. But the implications of this act are not yet fully known. Counter arguments suggest that NFSA would exert inflationary pressure to the country's economy. In this perspective, we have tried to measure four aspects of NFSA using.

Input-Output framework. Firstly, the required production and growth rates of different sectors of the economy to match the extra demand of food grains by the Government. Secondly, the required production and growth rates of different sectors of the economy to achieve growth target of food grain during 2016-17, as mentioned in the 12th Five year Plan of India (Planning Commission, Govt. of India). Thirdly, we measured the impact on price due to the adoption of NFSA. Lastly, we also estimate the additional water requirement to meet the extra demand for food grains. A modified IO model has been used to capture the NFSA impacts on the Indian economy. The most suitable methodology to capture knock-on effects of output change in an inter-dependant industrial scenario is Input-Output framework. Both demand driven Leontief model and supply driven model of Ghosh have been applied to evaluate the impact of NFSA. The direct and indirect linkage effects could be captured under this methodology to analyse sectoral impacts of output change. We have considered Input-Output Transaction Table (130X130) of 2007-08 published by Central Statistical Organisation and suitably aggregated 130 sectors into 23 broad categories. We have assumed that the earliest when the effects of Food Security Act would be perceivable would be 2016-17. The result shows that the food grain sector has to grow by 3.75% annually to match provision

of food grains according to the norm set by the act. Apart from that few sectors has to grow in higher percentage compared to the rest of the economy. These sectors are: Chemicals and Chemical Products, Mineral Fuels, Live stock products and Other Oilseeds and crops. The other sectors which need to gear up significantly to supplement this growth are Chemicals & chemical products, Mineral Fuels and Live Stock Products. From supply side the important sectors are: Other Oil seeds and crops, Food products and livestock products. Impact on prices due to imposition of food security bill has shown that the food grain inflation would remain as high as 8.36%, even if the productivity in agricultural production increases significantly. For rest of the sectors the inflationary impact will be minimal with some effect on: Miscellaneous Manufacturing Products, Electrical & Electronics Equipments, Non-Electrical Equipments, Precision Tools and Chemicals & Chemical Products. Additionally, our analysis showed that with very prudent planning and field level application, India can meet its food demand provided it commits to work on water security. To implement Food Security Act, the production structure of Indian agricultural sector has to be revised thoroughly. What is needed would be increase in productivity rather than increase in production. Secondly, given the same size of cultivable land, the productivity has to improve substantially. For this to happen, use of fertilizers, pesticides, more intense irrigation and modern agricultural equipments would be required. Thirdly, since in India, most of the farm sizes are small and fragmented, the productivity might have reached a saturation point where no significant improvement in productivity is possible. In this case, the only option left is to supplement "Food Security Act" by import food grains. But that would result in huge burden on country's exchequer. Fourthly, there could be a re-allocation of farm land from non food grain to food grain sector. But that may have negative repercussion on availability of non-food grains and cash crops like tea, jute, rubber etc. This would again have a negative impact on country's exchequer, as most of the Page 1 22nd IIOA Conference in LISBON non-food items are exported. Fifthly, replacing cultivation of cash crops by food grains is not always feasible. It depends a lot on the texture of soil, its fertility and local climate. Sixthly, there would be always a tendency of increase in food grain prices. This inherent tendency could surmount any attempt to control it by Government or any other agency. Lastly, the inflationary pressure would not be confined within the periphery of agricultural sector rather it would spread to other sectors which seemingly do not have any relation to food grain production, for example "Precision Tools". In a nutshell, in this paper we have tried to throw some lights into possible macroeconomic impacts of NFSA on the Indian economy.

### 3. IMPORTANCE OF FOOD SECURITY.

Food security refers to the availability of food and one's access to it. A household is considered food-secure when its occupants do not live in hunger or fear of starvation.

According to the World Resources Institute, global per capita food production has been increasing substantially for the past several decades.

#### I. *Food Availability:*

Sufficient quantities of appropriate, necessary types of food from domestic production, commercial imports, or donors, are consistently available to individuals, are in reasonable proximity to them, or are within their reach.

#### II. *Food Access:*

Individuals have adequate incomes or other resources to purchase a appropriate food needed to maintain consumption of an adequate diet and nutritional level.

#### III. *Food Utilization:*

Food is properly used and many suitable techniques are employed for storage. At the local level, the food inequality results by the lack of nutritional education, poor quality of food, and from inadequate quantities of the rights kinds of food. Weaknesses in the variables of access, availability, and proper utilization of food lead to what individuals and households experience as hunger. There are considered to be two types of food insecurity: chronic and temporal.

#### IV. *Food Insufficiency:*

There are 6 groups of nutrients: carbohydrates, protein, fat, minerals, vitamins and water. It is essential to consume a percentage of each nutrient everyday for overall health, without any of these nutrients a person will be malnourished, undernourishment & malnourishment.

### 4. NEED FOR FOOD SECURITY

- For the poor sections of the society.
- Natural disasters or calamity like earthquake, drought, flood, tsunami.
- Widespread crop failure due to drought

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.

**A healthy diet is one that helps maintain or improve health.** It is important for the prevention of many chronic health risks such as: obesity, heart disease, diabetes, and

cancer. Decreasing one's intake of fatty foods, especially fried food, will go a long way in preventing heart diseases. On the other hand, a healthy diet chart with an adequate amount of high fiber foods is seen to prevent heart diseases. A healthy diet involves consuming appropriate amounts of all nutrients, and an adequate amount of water. Nutrients can be obtained from many different foods, so there are a wide variety of diets that may be considered healthy diets.

## 5. SURVEY-FOOD SECURITY

Q. Age 18-25  26-32  33-40  over 40

Q. Country of origin \_\_\_\_\_

Q. How much do you spend o food per week?

Rs.10-Rs.20

Rs.20-Rs.30

Rs.30-Rs.40

Rs.40-Rs.50

Q. How often do you eat a home cooked meal?

Every day

3 or more times per week

Less than 3 times per week

Rarely

Q. Do you ever miss a meal?

Yes, every day

No, never

Occasionally

Q.If you miss a meal,what is the reason?

Not hungry

Lack of time

Lack of money

Q. Do you grow your own food?

Yes

No

Would like to

Q. Do you wprry about what is in the food you eat?

Not really

Yes ,absolutely

Q. Are you concered about hunger and famine in other countries ,eg.Africa?

Yes

No

## REFERENCES

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