



## Agriculture And Food Security In India: An Economic Analysis

### KEYWORDS

Agricultural Development, Food Security and Economic Development.

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**ABSTRACT** Ever since independence in 1947, agricultural development policies in India have aimed at reducing hunger, food insecurity, malnourishment and poverty at a rapid rate. Keeping this overarching goal in mind, the emphasis, which was initially (for 15 years or so) on keeping food prices low, shifted to macro food-security and subsequently to household and individual food-security. Later, the food security of vulnerable, sustainable use of natural resources, and equity between rural and urban or farm and nonfarm population became the issues of dominant discourse related to agricultural development. The policies and programmes related to marketing and trade were obviously guided by the overall objective sought to be achieved from the agricultural development strategy. The changes in marketing environment and production performance of the Indian agricultural sector should, therefore, be viewed in the context of weight age attached to these objectives at different points of time.

India's agricultural development strategy and approach to food security has yet again proved its resilience in the wake of recent global food crisis, which has created political and social unrest in several countries of developing world. It earlier helped India tide over the severe food crisis of mid- 1960s within a period of one and half decades, and also proved its appropriateness in the wake of economic liberalization and globalization since the early-1990s. Though, India's performance in terms of reducing hunger and malnutrition has not been as remarkable as that of China and some East Asian countries, given the political and initial socio-cultural milieu, the achievements have certainly been commendable.

### INTRODUCTION:

Food security both at the national and household levels has been the focus of agricultural development in India ever since the mid-sixties when import dependence for cereals had gone up to 16 per cent and the country faced severe drought continuously for two years. The new approach intended at maximizing the production of cereals and involved building a foundation of food security on three key elements, namely, provision of an improved agricultural technology package for the farmers, delivery of modern farm inputs, technical know-how and institutional credit to the farmer. For achieving these objectives, several policy instruments were used that influenced the production potential. South Asia, including Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka has high population pressure on land and other natural resources to produce food and meet other developmental needs. South Asian countries have made significant advancement in food production during the past three decades, transforming the region from a food deficit to a food self-sufficient region. This could occur due to developments in agriculture research and effective dissemination of research output. These changes have been elicited by the green revolution in South Asia, involving the development and diffusion of high yielding varieties (HYVs), especially of rice and wheat, from the mid- 1960s, accompanied by the use of increased levels of inputs, principally irrigation, fertilizers and tractors, and policy support. Government investment in infrastructure, research and extension, price and other policies along with strategies for crop, livestock and fisheries production have drastically helped to increase food production and its availability.

In spite of these attainments, producing additional food with limited land and providing economic access to food at the household level for ensuring food security would continue to be a major challenge for South Asian coun-

tries. At the same time, the food consumption pattern has been changing with wider availability of food choices, sustained economic growth and increasing urban population. Such changes in consumption pattern are likely to influence the crop choice, production, productivity, prices, international trade and environment. This in turn calls for an examination of the changes in agricultural productivity and future sources of agricultural growth accounting.

### Current Agricultural Scenario:

Agriculture is the basis of economy and sustenance of life of the people of India. Sustainable agriculture may be regarded as the successful management of resources for agriculture to satisfy the changing human needs while maintaining or enhancing the quality of environment and conserving natural resources. Sustainable agriculture integrates three main goals: environmental health, economic profitability, and social equity. Success in promoting sustainable agriculture can be achieved on seven fronts, namely, crop diversification, genetic diversity, integrated nutrient management, integrated pest management, sustainable water management, post harvest technology and sound extension programmes

### India's Food Security: Approach and Status:

#### Approach to Food Security

Food security, at both the national and household levels, has been the focus of agricultural development strategy in India ever since mid-1960s when import dependence for cereals had gone up to 16 per cent and the country faced severe droughts continuously for two years. The new strategy launched at that point of time was aimed at 'maximizing the production of cereals' and involved building a solid foundation of food security on three key elements, viz. (a) provision of an improved technology package to the farmers; (b) delivery of modern farm inputs, technical know-how and institutional credit to the farmers; and (c) assur-

ance of a remunerative marketing and pricing environment for farmers. For achieving these objectives, several policy instruments were used that influenced production potential, and marketing system of agricultural commodities in general and food products in particular. Some of the main policy instruments that reflect the policy package adopted by India are as follows:

- Creation, strengthening and expansion of the national agricultural research system (NARS) for developing and perfecting new production technologies for food grains and other agricultural commodities.
- Establishment, strengthening and expansion of agricultural education and training system for agricultural extension workers and farmers for transfer of new technologies at the farm level.
- An arrangement for the production and/or import and distribution of high-yielding farm inputs like improved seeds, fertilizers, agrochemicals and improved implements/farm machines to the farmers.
- Planning and execution of major, medium, and micro irrigation schemes for increasing the area under irrigation.
- Nationalization of commercial banks, creation of cooperative credit institutions, and reorientation of monetary policy to increase institutional credit flow to the farmers.
- Creation and expansion of physical and institutional infrastructure (primary market yards, roads, storage facilities, farmers' cooperatives and public sector organizations) for improvement of the marketing system to handle and distribute the emerging marketed surplus.
- Regulation of traders' exploitative marketing practices through a series of legal and regulatory measures such as licensing, levies, stocking limits and movement restrictions.
- Fixation of minimum support prices (MSPs) and arrangements for price support purchases and procurement by public or cooperative agencies.
- Building-up and maintenance of buffer stocks of cereals and distribution of cereals through public distribution system (PDS).
- Provision of food and input subsidies, explicit or implicit, for reconciling the conflicting objectives of cereal producers and consumers in terms of prices.

#### Dimensions of Food Security:

Food security is achieved when 'all people at all times have physical and economic access to food that is sufficient to meet dietary needs for a healthy and productive life'. In this sense, achievement of food security implies producing (or importing) sufficient food and making it accessible to all individuals throughout the year and on a sustainable basis from year to year. Further, fulfilling dietary needs for a productive and healthy life implies physical and economic access of all people to nutritive food, according to each individual's requirement. Food security thus connotes freedom from hunger and malnutrition.

The status of food security of a country needs to be assessed at three levels. First is the availability of food at national level on sustainable basis, which depends on level and growth of food production, or adequate capacity to import food (if availability elsewhere is assured). Second is the physical and economic access of all households to food. Physical access requires efficient marketing, transport, and storage system to carry the food within an easy reach or at a reasonable distance from human settlements (villages). Economic access of every household to food

depends on its purchasing power and prices of food at which it is available. And third is the utilization of available food by individuals, which depends on intra-family allocation of food, and maintenance of reasonable level of health of all individuals to consume and absorb required level of food. Social factors like education, primary healthcare, gender bias, and role of women in household decisions affect food security at the individual level. It is in this context that India tackled the hunger and food-insecurity situation through both long-term and short-term measures. As a part of long-term strategy, it adopted a development strategy encompassing maintenance of adequate growth of national food production, and employment and incomes of masses, improvement in marketing infrastructure and access to education and primary healthcare. These apart, the short-term strategy involved selective market intervention and targeted distribution of subsidized food to reduce hunger and food insecurity. Further, as the nutritional status is also influenced by non-food factors such as clean water and sanitation, it was recognized that attention to these aspects will help translate food security into good nutrition.

#### Price Policy and Support for Farmers:

Price support for farmers has been an important instrument of agricultural development and food policy since the mid-1960s. The main objectives of price policy are: (a) to provide incentives to farmers for adopting new technology and maximizing production, (b) to safeguard the interests of consumers or users of farm products by maintaining market prices at reasonable levels, and (c) to keep the fluctuations in prices within certain limits. The main instruments of price policy, *inter alia* are minimum support prices, buffer stocking, and operation of a public distribution system of cereals. The main challenge of the policy has always been to reconcile the conflicting price interests of farmers and consumers. It is partly achieved through the provision of food subsidy and supply of essential farm inputs (fertilizers, electricity and canal water) to farmers at reasonable prices or user charges. Currently, minimum support prices (MSPs) are announced for 25 farm products, that include cereals, pulses, oilseeds, raw cotton, raw jute, sugarcane and copra (dried coconut). Buffer stocking and public distribution system are operated for rice, wheat and to some extent for sugar. Commission for Agricultural Costs and Prices (CACP) is the advisory body of Government of India in all matters relating to agricultural price policy. The quantities that the government agencies need to purchase at support prices depend on the behavior of market prices and private trade, and fluctuate from year to year. For example, price support purchases of rice and wheat accounted for 15.8 per cent of the production during TE 1992-93, 24.6 per cent during TE 2002-03 and 22.7 per cent during TE 2006-07. In terms of absolute quantities, these varied between 20 Mt and 39 Mt at these points of time. About 25 per cent is retained by the producer farmers for self-consumption and rest, i.e. more than half of the production is handled by private trade. Several committees in recent years have reviewed the current price policy regime. These include Long-Term Grain Policy Committee (Abhijit Sen); Repositioning of CACP Committee (Y.K. Alagh); Planning Commission's Working Group for XI Five-Year Plan (S.S. Acharya); Food grain Policy Review Committee (Ramesh Chand); and National Commission for Farmers (M.S. Swaminathan). Some of the important suggestions of these committees are:

- Continuation of the policy of maintaining self-sufficiency in cereals.

- Continuation of the system of minimum support prices and making it effective in all the states/areas of the country.
- Continuation of the policy of buffer stocking of cereals and their subsidized distribution for maintaining price stability.
- Retaining Food Corporation of India as the national food grain handling agency on behalf of the Government of India.
- Fixing the minimum support prices at a level 50 per cent higher than the cost of production.
- Dovetailing of domestic price policy with trade policy by renaming the CACP and redefining its terms of reference.

### Conclusions and Suggestions:

Based on a brief review of the current policy regime relating to pricing, marketing and trade and current agricultural scenario, a road map for making agriculture profitable and efficient and for restoring farmers' faith in farming emerges clearly. In predominantly agricultural and rural economies, accelerated agricultural growth and an efficient agricultural sector is the key for reducing hunger, food insecurity and malnutrition at a rapid rate. Acceleration of agricultural growth and improving profitability and efficiency of agriculture in general, requires the following:

- Investment in agricultural research for continuously expanding the productivity potential.
- Investment in productivity-raising infrastructure like irrigation, soil and water conservation, and integrated natural resource management.
- Persuading farmers to increasingly shift to land-saving enterprises (livestock and fisheries) and high-value crops (horticulture).
- Adequate and efficient mechanism for transfer of new technology to farmers and supply of key farm-inputs at affordable prices or user charges.
- Efficient system of post-harvest and on-farm handling of farm-products (training of farmers and provision of appropriate technology).
- Efficient system of entire chain of marketing activities from farm-gate to consumers.

Indian agriculture is facing a policy paradox. In order to be effective, the food security policy must evolve as a basic element of a social security policy with proper coordination among the various government departments, private sector and non-government organizations. Centralized and state-level anti-poverty schemes should give way to local initiative and local participation based on the principles of efficiency, equity and environmental conservation. India is the major producer and consumer of food in the South Asian region and possesses huge potential that remains highly under-realized. Therefore, India has to play a major role not only to maintain its own self-sufficiency in food production but also to meet the additional requirement of its neighboring countries. The right research priorities and production strategies will promote future growth in agriculture and ensure sustainable food and nutritional security.

### REFERENCE

- Asokan, S.R. 2005. 'A Perspective of Contract Farming With Special Reference to India'. Indian Journal of Agricultural Marketing, 19 (2), p. 94-106. |
- Dhan Foundation. 2006. Themes- 'Rainfed Farming' - [http:// www.dhan.org/rainfed.php.6k](http://www.dhan.org/rainfed.php.6k). |
- Economic Survey, 2008. Ministry of Finance, Government of India, New Delhi. |
- FAO. 1991. 'Sustainable Agriculture and Rural Development'. In Asia and Pacific, Regional Document No. 2, FAO / Netherlands Conference on Agriculture and the Environment, Hertogenbosch, The Netherlands, 15-19 April. |
- Feder, Gershon, Just, Richard E and Zilberman, David. 1985. 'Adoption of Agricultural Innovations in Developing Countries: A Survey', Economic Development and Cultural Change, 33 (2): p. 255- 98. |
- George, P.S. 1996, 'Public Distribution System, Food Subsidy and Production Incentives'. Economic and Political Weekly, Volume 31, No. 39, September 28, p. A-140-144. |
- Government of India. 2007-08. Economic Survey, Ministry of Finance, New Delhi. |
- Kumar P and Surabhi Mittal 2006. 'Agricultural Productivity Trends in India: Sustainability Issues'. AERR, Volume 19, p.71-88. |