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Dichotomy Between Grain Surplus and Widespread Endemic Hunger



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Dichotomy between Grain Surplus and Widespread Endemic Hunger

We have sufficient stock of foodgrains. No one need go hungry in this country. Nevertheless, it is true that many millions of our countrymen still go hungry to bed every night. Malnourishment, especially among women and children, is widespread. We are determined to change this situation...

While we need to substantially increase our food production, we are faced with the paradoxical problem of surplus food stocks. There is also the related problem of substantial quantities of food being wasted. This has happened because of inadequate attention in the past to its storage, preservation, processing, and proper distribution.

— Atal Bihari Vajpayee*

Introduction

India has the largest number of women, children and men in the world going to bed undernourished. Although, there are numerous safety net measures of Government of India, for economically and socially underprivileged sections of the society, the FAO has listed India as one of the countries that has not been able to achieve the target of the World Food Summit of 1996, in terms of reducing the number of undernourished. This calls for serious introspection of both our strategies for fighting hunger as well as of our ethical commitment to the cause of hunger-free India. The prevalence of endemic hunger should no longer be accepted as unavoidable.

Agricultural Progress serves as the best safety net against poverty, hunger and unemployment. Therefore, sustainable agriculture is the foundation for sustainable human security. The capacity to support even the existing human and animal populations has been exceeded in many parts of the developing world. Hence, the future of food security depends upon population stabilisation, the conservation and care of arable land, through attention to soil health and replenishment of fertility, and the conservation and careful management of all water sources, so that more crop can be produced per drop of water.

To quote the famous Harvard biologist, E.O. Wilson, “The problem before us is how to feed billions of new mouths over the next several decades and save the rest of life at the same time, without being trapped in a Faustian bargain that threatens freedom and security. No one knows the exact solution to this dilemma. The benefit must come from an evergreen revolution. The aim of this new thrust is to lift food production well above the level obtained by the green revolution of the 1960s, using technology and regulatory policy more advanced and even safer than those now in existence” (E.O. Wilson: 2002, *The Future of Life*).

The Growing Paradox: Grain Mountains and Hungry Millions

India has fortunately, through concerted efforts of scientists and farmers, surmounted the state of food deficit and come to a stage of food surplus. In fact, it is now

* *Inaugural Address by the Hon'ble Prime Minister of India on the occasion of release of the Food Insecurity Atlas of Rural India, United Nations World Food Programme, M.S. Swaminathan Research Foundation, Chennai, 2001.*

faced with the paradox of a huge buffer stock of foodgrains, while also housing the largest population of undernourished in the world. As per the *Economic Survey of India, 2002-03*, we had a buffer stock of 63 million tonnes of food grains in July 2002, as against a requirement of 24 million tonnes; and on January 1, 2003, we had a buffer stock of 48.2 million tonnes of food grains as against a requirement of 16.8 million tonnes. The Survey Report further goes on to state that given a distorted policy of minimum support price not aligned with the cost of production, the Food Corporation of India has become the sole buyer, seller and stockist of foodgrains. Shortage of storage space has pushed up the costs due to wastage and deterioration of stocks. Food subsidy increased from Rs. 6066 crores in 1996-97 to nearly Rs. 17600 crores in 2001-02. Continued rise in the MSP and the consequent rise in economic cost without rise in issue price have led to a continuous rise in food subsidy.

The Public Distribution System (PDS) with a network of 4.74 lakh fair price shops is the largest network of its kind in the world. It is operated under the joint responsibility of the central and state governments. In June 1997, the Targeted PDS was introduced which brought in a two-tier subsidised pricing structure for Above Poverty Line (APL) and Below Poverty Line (BPL) families. In view of the surplus stocks, the monthly allocation was increased to 35 kilogrammes per family for both APL and BPL families. However, low off take from the system due to various reasons, viz. poor quality, poor delivery and lack of purchasing power, to cite a few, call for a relook at the whole system. The Long Term Grain Policy of the government has, in fact, emphasised on reintroducing the universal PDS.

Thanks to the Green Revolution, we have attained self-sufficiency in food grain production, but there is no room for complacency on that front in the face of continued population growth and growth in agricultural production reaching a plateau and even declining. If everyone was able to consume the required quantity of cereals as per the recommended daily allowance, we are just about producing enough. Availability of foodgrains in the year 1999, was only 428.8 grams per capita per day as against the requirement of 420 grams per capita per day, recommended by the Indian Council of Medical Research. The per capita availability has declined to 428.8 grams per capita per day in 1999, from 468.5 grams per capita per day in 1991.

This calls for serious attention to the production front and measures to diversify the production base and the food basket.

In fact, not only agricultural production, but factor productivity, investment in irrigation, post-harvest technology and rural infrastructure are all declining in India. Prices of many agricultural commodities have collapsed. Since about 70 per cent of our population depends on agriculture and allied activities (fisheries, forestry, animal husbandry, agro-processing) for their livelihood, this has had a major impact in terms of purchasing power. Indian agriculture is at the crossroads today. As an immediate measure for strengthening food security on the production front, systematic efforts have to be initiated to identify and remove the constraints responsible for the prevailing yield gaps. Food and ecological security are closely linked. We have to link conservation, cultivation and consumption in a mutually reinforcing manner. Future agricultural production programmes have to be based on a strategy that defends the gains already made, extends the gains with the use of yield enhancement technologies in rain-fed, semi-arid and hill areas, makes new gains through farming system intensification, diversification and value

addition, and institutional support by way of infrastructure and market linkages. Land and water care, water harvesting, restoration of degraded and wasted lands, all need focussed attention. Our agriculture extension services need to be reorganised to bring a viable mix of traditional and frontier technologies to the farmers and can be a source of jobs for the agricultural graduates that we are churning out.

The Food Insecurity Atlas of Rural India has analysed the problem of food insecurity in India in great detail. It examines food insecurity from the perspective of the three major dimensions of food availability, food access and food absorption.

Availability of food—a function of production, vulnerability to natural disasters and environmental sustainability (which will have an impact on production in the long run).

Access to food—a function of purchasing power/access to sustainable livelihoods, socioeconomic and gender discrimination and existence of infrastructure facilities like roads, and measured in terms of indicators like the percentage of population below the poverty line, percentage of population dependent on labour income, calorie intake of the lowest deciles, percentage of literacy and sex ratio.

Absorption of food in the body—determined by access to safe drinking water and non-food factors like environmental hygiene, primary health care and primary education, measured in terms of indicators like life expectancy, mortality rate, percentage of population suffering from chronic energy deficiency, stunting, wasting, etc. Integrated attention to these components of food security is crucial. The problem in India today in the face of huge food grain stocks, is largely one of access both due to poor infrastructure, low off take from the government delivery system and lack of purchasing power among a large majority. The food is there but it is not reaching the people. To ensure that the food reaches all, there is the basic issue of addressing the questions of access and affordability. It calls for a thrust on job-led economic growth. We are facing a paradoxical situation, where we are sitting on mountains of grain while millions are going hungry due to lack of access or purchasing power.

The National Academy of Agricultural Sciences (NAAS) organised a Workshop to deliberate on this paradoxical situation.* The recommendations of the Workshop are detailed below.

Recommendations

1. Food for Sustainable Development Initiative

There are now unique opportunities for launching a Food for Sustainable Development Initiative, in the form of a 'grain for green' movement. Such a programme could accord priority to the :

* NAAS Workshop (July 11, 2002) "Dichotomy between Grain Surplus and Widespread Endemic Hunger", under the convenorship of Dr. M.S. Swaminathan. Invited speakers drawn from organisations like Food Corporation of India, the World Food Programme, FAO, Hunger Project, TISCO, IGIDR, IRRI, JNU, MSSRF and IARI presented their views which were deliberated upon.

- Restoration of hydrological and biodiversity 'hot spots', particularly in mountain ecosystems.
- Coastal agro-aqua farms (planting of Salicornia, mangroves, Casuarina, palms, etc. along with coastal agriculture and aquaculture).
- Water harvesting, watershed development, wasteland reclamation, and anti-desertification measures.
- Recycling of solid and liquid wastes, and composting.
- Agroforestry and other sustainable land use systems in the fields of resource poor farmers.

The Food for Sustainable Development Initiative could be managed at the local level by Community Food Banks (CFB) operated by women's self-help groups. Such CFBs can be designed in a manner that they can concurrently address issues relating to chronic, hidden and transient hunger. The merit of CFBs is low transaction cost and transparency. They can also help to widen the food security basket, thereby saving what could become 'lost crops'. Wherever animal husbandry including poultry farming, is important to provide additional income and nutrition to families living in poverty, CFBs can also operate feed and fodder banks, if needed.

Conferring the right to food and thereby an opportunity for a productive and healthy life on those who go to bed undernourished, now is the fundamental duty of the state as well as of the well to do sections of the population. Thanks to both the spread of democratic systems of governance at the grassroot level and technological advances, we now have a unique opportunity to foster a community centred and controlled nutrition security system. Such decentralised system of community management will help to improve delivery of entitlements, reduce transaction and transport costs, eliminate corruption and cater to the twin needs of introducing a life cycle approach to nutrition security, and meeting the challenge of seasonal fluctuations in nutritional status. If the CFBs are operated by women, this will help to bridge the gender divide in the area of nutrition. The CFBs may be organised with the following four major streams of responsibilities.

- *Entitlements:* The benefits of all government and bilateral and multilateral projects intended for overcoming under- and malnutrition can be delivered in a coordinated and interactive manner (as for example those intended for overcoming the deficiencies of macro- and micro-nutrients).
- *Ecology:* Food for sustainable development with particular reference to the establishment of water banks, land care, control of desertification and promotion of afforestation. Thus, grains can be used to strengthen local level water security
- *Ethics:* This group of activities will relate to nutritional support to old and infirm persons, pregnant and nursing mothers and infants and preschool children.
- *Emergencies:* This activity will relate to the immediate relief operations following major natural catastrophes like droughts, floods, cyclones and earthquakes, as well as to meet the challenge of seasonal slides in livelihood opportunities due to, natural causes as well as human conflicts/and mini-wars.

Each of the above four streams of activities can be managed by four separate self-help groups of local women and men. This will help to generate a self-help revolution in combating hunger. The overall guidance and supervision may be provided by a multi-stakeholder Community Food Bank Council. A CFB for 1000 persons may need annually about 250 tonnes of foodgrains.

2. Adopting a Whole Life Cycle Approach to Nutrition Security

2.1 Pregnant Mothers

Overcoming maternal and foetal under- and mal-nutrition is an urgent task, since nearly 30 per cent of the children born in countries in South Asia are characterised by low birth weight (LBW), with the consequent risk of impaired brain development. LBW is a proxy indicator of the low status of women in the society, particularly of their health and nutrition status during their entire life cycle.

2.2 Nursing Mothers

Appropriate schemes will be necessary to provide support to enable mothers to breast feed their babies for at least six months, as recommended by WHO. Policies at work places, including the provision of appropriate support services should be conducive to achieving this goal.

2.3 Infants (0-2 years)

Special efforts will have to be made to reach this age group through their mothers, since they are the most unreached at present. Eighty per cent of brain development is completed before the age of two. The first four months in a child's life is particularly critical, since the child is totally dependant on its mother for food and survival.

2.4 Preschool Children (2-6 years)

A well-designed integrated child development service will help to cater to the nutritional and health care needs of this age group.

2.5 Youth (6 to 18 years)

A nutrition based noon meal programme in all schools (public and private and rural and urban) will help to improve the nutritional status of this group. However, a significant percentage of children belonging to this age group are not able to go to school due to economic reasons. Such school 'push-outs' or child labourers, need special attention.

2.6 Adults (18 to 60 years)

The nutrition safety net to cater to this category should consist of both entitlement programmes like Food Stamps and Public Distribution System (PDS), as well as a Food for Sustainable Development programme (also called 'Food for Work' programme). The Food for Sustainable Development programme can accord priority to the use of foodgrains as wages for the purpose of establishing water harvesting structures (Water Banks) and for

the rehabilitation of degraded lands and ecosystems. In designing a nutrition compact for this age group, persons working in the organised and unorganised sectors will have to be dealt with separately. Also, the intervention programmes will have to be different for men and women taking into account the multiple burden on a woman's daily life.

2.7 Old and Infirm Persons

This group will have to be provided with appropriate nutritional support, as part of the ethical obligations of society towards the handicapped.

The above whole life-cycle approach to nutrition security will help to ensure that the nutritional needs of everyone in the community and of every stage in an individual's life, are satisfied. Such an integrated approach is being adopted under the 'Malnutrition-free Tamil Nadu' programme, as shown below.

Pregnant Mothers	:	Special support to prevent the incidence of low birth weight children.
Nursing Mothers	:	Appropriate support for six months.
Infants (0 to 2 years)	:	Programme designed to reach the infant through the mother.
Child (2 to 6 years)	:	Integrated child development service.
School Children (6 to 18 years)	:	Nutritious noon meal in schools.
Adults (18 to 60 years)	:	Food for sustainable development.
Old and Infirm Persons (over 60 years)	:	Special programmes.

Note: Over seven million tonnes of foodgrains (wheat and rice) were allotted for the above programmes during 2001 and 2002 in India.

3. Developing and Spreading a Holistic Action Plan to Achieve Sustainable Nutrition Security at the Level of Each Individual

The major components of such an integrated action plan are the following:

- *Identification:* Request the local families themselves to identify those who are nutritionally insecure. Trained community volunteers of the kind mobilised in Thailand will be useful for this purpose. Invariably, the ultra-poor who do not have any productive asset, fall under this category.
- *Education and Information Empowerment:* Empower those who are not aware of their entitlements about the nutritional safety nets available to them and also undertake nutrition education. An entitlements database can be developed for each area and household entitlement cards can be issued, indicating how to access nutritional, health care and educational programmes. The educational programmes should also lay stress on culinary habits in relation to the conservation of essential nutrients in cooked food.

- *Overcome Protein-calorie under Nutrition:* The various steps indicated under the whole life-cycle approach will have to be adopted. The problems of child labour and of persons working in the unorganised sector will need specific attention.
- *Eliminate Hidden Hunger Caused by the Deficiency of Micronutrients in the Diet:* Introduce an integrated approach including the consumption of vegetables and fruits, millets, grain legumes and leafy vegetables and the provision of fortified foods like iron and iodine fortified salt and oral dose of Vitamin A. The basic approach should be a food based one, with emphasis on home and community nutrition gardens, wherever this is socially and economically feasible.
- *Drinking Water, Hygiene and Primary Health Care:* Attend to the provision of safe drinking water and to the improvement of environmental hygiene. Also, improve the primary health care and primary education systems. Non-food factors like health care and education are equally important for nutrition security.
- *Sustainable Livelihoods:* Improve economic access to food through market-linked micro-enterprises supported by microcredit. Also, create an economic stake in the conservation of natural and common property resources. Ensure that agreements under the World Trade Organization (WTO) provide a level-playing field for products coming from decentralised small-scale production (production by masses or farmers' farming) as compared to those emerging from mass production or factory farming often supported by massive inputs of subsidy, capital and technology. Promote job-led economic growth and not jobless growth.
- *Pay Special Attention to Pregnant and Nursing Mothers and Preschool Children:* Measure progress through monitoring maternal mortality rate (MMR), infant mortality rate (IMR), incidence of LBW children and male-female sex ratio. Iron-folate supplements during prenatal care should be accompanied by steps to overcome protein-energy deprivation. A carefully designed maternity and childcare code will help to speedily bring down MMR, IMR, LBW and stunting. Sex ratio is a good index of the mind-set of a society in relation to the girl child.

4. Institutional Structures for Extending the Extrapolation Domain of Successful Experiences and Efforts

Without appropriate institutional structures, isolated success stories will remain just talking points. Based on local cultural traditions and socioeconomic conditions, institutional structures should be fostered which can take new technologies to the unreached and which can give the power of scale to small producers at the production, post-harvest and marketing phases of farming. The following are some of the structures which have given promising results in India. They are based on a 'win-win' situation for all, as otherwise the efforts will not be sustained over time.

	<i>Sector</i>	<i>Institutional Mechanism</i>
1.	Dairy	Cooperatives
2.	Poultry	Egg and broiler coordination councils

3.	Integrated on-farm and off-farm employment	Biovillages
4.	Power of scale to small producers consortium	Small farmers' agri-business
5.	Technological upgrading of production and post-harvest sectors	Agri-clinics Agri-business centres
6.	Group action for micro-enterprises supported by micro-credit	Self-help groups
7.	Timely and affordable credit	Kisan (Farmer) Credit Cards, integrated informal and formal banking system
8.	Ensuring minimum support price	Food Corporation of India and state corporations; buy-back arrangements with the private sector

Without socially compatible and socially owned institutional structures, the extrapolation domain of successful experiences and development efforts will remain limited. Community involvement will ensure low transaction costs and a high percentage of success and help to convert unique examples into more universal ones.

5. National Alliance against Hunger: Launching a National Food Guarantee Scheme

The huge stock of foodgrains provides a unique opportunity for launching a national alliance against hunger, with the alliance partners reaching the remotest village and hamlet based on Mahatma Gandhi's principle—"To the hungry, God is bread; this God should be present in every house and hut of the country." The strategy of a hunger-free nation could consist of the following three inter-related groups of activities :

- Ensuring a whole life-cycle approach to nutrition security at the level of each individual by providing the needed horizontal linkages among ongoing vertically structured programmes (often operated by different national, bilateral and UN agencies).
- Organisation of a Food Guarantee Scheme on the model of the Employment Guarantee Scheme (EGS) of Maharashtra. This will essentially be a 'Food for Work' programme having the following features—highest priority in this project, which should cover both rural and urban areas, needs to be given to water harvesting, watershed and wasteland development, eco-restoration of hydrologic and biodiversity 'hot spots' and waste recycling (composting) and bioenvironmental management of mosquitoes.
- Promoting the establishment of Community Food Banks at the local level, to serve as the focal point for according concurrent attention to ending poverty induced endemic hunger, micronutrient deficiency induced hidden hunger and transient hunger caused by human conflicts and natural calamities.

The national alliance against hunger can provide policy guidance and undertake resource mobilisation (financial, technical and managerial) for achieving the goal of 'food for all'. While the above approach would help to alleviate hunger today, we can avoid hunger tomorrow only by sustaining advances in agricultural production through an evergreen revolution approach using environment-friendly ecotechnologies.

Immediate Action Points

Although, the Food Corporation of India has huge foodgrain stocks, the country still has the largest number of undernourished in the world. This calls for serious introspection of both our strategies for fighting hunger as well as of our ethical commitment to the cause of hunger-free India.

- This paradoxical situation can be effectively addressed by introducing the social security systems for the able-bodied poor in the form of a National Food Guarantee Scheme on the model of Maharashtra's employment guarantee scheme. The public distribution system should be strengthened and should be designed to reach the unreached. On the basis of ICMR norms, about 158 million persons, belonging to about 32 million households, fall under the category of ultra-poor and need immediate assistance to help them to lead a healthy and productive life. They are best identified by *Gram Sabhas* and local bodies. They can be issued with Food Entitlement Coupons, which should entitle them to be provided with work under the Food Guarantee Scheme. The total requirement for such an open-ended employment-cum-food security project may need at the maximum about 10 million tonnes of foodgrains per year. Meeting this need is well within our national capacity.
- Consumption inequality decreases as income increases. Diversification of diets also happens with increased purchasing power. Unfortunately, inequality of income distribution is growing. A job-led economic growth strategy will help to reduce protein-energy malnutrition, and at the same time, stimulate farming systems' diversification.
- A whole life-cycle approach should be introduced by providing a horizontal dimension to the numerous on-going vertically structured programmes supported by the central and state governments as well as by bilateral and multilateral agencies. At the local level, the management of a life-cycle based nutrition security system, beginning with pregnant women and extending up to old and infirm persons, is best left to the one million elected women members of the *Panchayats*.
- Proactive approach to implementation of recommendations submitted by the Committee on Long Term Grain Policy, with regard to MSP, universal PDS.
- Decentralised procurement and decentralised storage will help to minimise transport and transaction costs. Uttar Pradesh, Madhya Pradesh, West Bengal and Tamil Nadu have accepted the principle of a decentralised procurement system. The storage can be done through a national grid of Community Food Banks (CFBs) managed by self-help groups. The construction of CFBs can be done at the local level under the 'Food for Work' programme.

- We must strive to produce more in a manner that high yields can be obtained in perpetuity without associated ecological or social harm. Farming systems' intensification, diversification and value addition are extremely important to generate the needed on-farm and non-farm employment. Productivity improvement in both irrigated and rain-fed areas will help to increase marketable surplus at the household level and thereby the cash income. Livestock husbandry and livelihood security tend to be closely correlated in the case of poorer households. There is greater equity in livestock ownership as compared to land. Hence, support services should be organised for small scale livestock farming families in the form of fodder and feed banks and healthcare and insurance facilities.
- There is an urgent need for spreading quality literacy including Codex Alimentarius standards and sanitary and phytosanitary measures. In addition, there is need for greater research in the field of breeding crop varieties having the quality characteristics needed for food processing and exports. If productivity and quality are improved, farm income will go up substantially.
- Sustainability of food security measures should be ensured. PDS at the local level should provide reasonable income to those operating the ration shops. Community Food Banks may receive their initial food supply from government but subsequent replenishment should come from local communities.
- There is a need for Organisation of a National Consortium for Sustainable Food Security. NAAS can act as a catalyst to promote the organisation of a National Consortium for Sustainable Food Security consisting of representatives of FCI, CII, FICCI, ASSOCHAM, NHDB, NDDDB, APEDA, TISCO, Hindustan Lever and appropriate agricultural universities and ICAR institutes for fostering sustainable food security both in the hunger 'hot spots' of India as well as in other countries in Asia and Africa.

There is no time to relax, both, on the production and consumption fronts. The stock of 63 million tonnes should not lull us into complacency. Concurrent attention to production and consumption is important. Enhancing production through an evergreen revolution is a priority task. However, eliminating widespread endemic hunger is a prime responsibility and ethical obligation. A universal and user-sensitive Public Distribution System, Food Guarantee Scheme, Community Food Banks and various other food entitlement projects need to be implemented in an integrated manner, so that the goal of hunger-free India can be achieved. Nutrition status will, however, continue to fall, unless the purchasing power of the poor is increased. Hence, livelihoods for all should be the bottom line of all national development and import and export policies.