

# Food for Peace and Sustainable Development

*M S Swaminathan*

The year 2001 has seen unprecedented spread of violence in the human heart as well as unprecedented perfection in the art of causing death to the innocent. Will this trend continue in 2002 and will we witness more hatred and killings? Will the ranks of suicide bombers and killers swell further? The answer to these questions lies in the steps we take to curb the culture of violence and change the nature of the discourse. If past experience is any guide, violence will breed violence. Obviously, there will be no end to this vicious circle, unless attempts are made to unravel the roots of this most serious of all human maladies.

Who are the violent? There are obviously some who are convinced that they can achieve their religious, political or social objectives only by causing suffering to others. Most of the so-called terrorists however suffer from a feeling of social exclusion, injustice and deprivation. Such feelings may have their roots in real or imaginary causes. If the causes for the feeling of alienation are real, what steps do we need to take to dispel them? In other words, what are the basic pre-requisites for replacing the culture of violence with a spirit of harmony and respect for diversity and pluralism in human societies?

The year 2002 represents the 30<sup>th</sup> anniversary of the Stockholm Conference on the Human Environment and 10<sup>th</sup> anniversary of the Earth Summit held at Rio de Janeiro. Both these conferences pleaded for the adoption of the principle of non-violence towards nature. Obviously, we cannot be non-violent to nature, if we are going to be violent to each other. A Summit is scheduled to be held in Johannesburg in September 2002 to discuss the progress made since 1992 in promoting sustainable development. Many speeches will be made on the importance of protecting the environment and much money will be spent both in organising the Summit and in protecting the participants. Johannesburg is the home of thousands of unemployed young men and women. While they lack sustainable livelihoods,

they often have guns. A superficial observer will classify them as criminals. Is this just? Are they not entitled to the right to work? Should they continue to wake up in the morning not knowing how to earn their daily bread?

Globalisation is accelerating the pace of jobless economic growth. It is obvious that without first ensuring that development is socially sustainable, expressions of the urgency of environmental sustainability may have little impact. The coexistence of unsustainable lifestyles on the part of over a billion persons and unacceptable poverty affecting nearly 2 billion, is not conducive to laying the foundation for peace and harmony within humankind or between humankind and nature. Hunger is the extreme manifestation of poverty. The poor spend a large percentage of their income on food, since food and drinking water occupy the first position in the hierarchical needs of human beings. The World Food Summit held in Rome in 1996 resolved that the number of persons going to bed hungry should be reduced from about 800 million in 1996 to 400 million in 2015. This target ignores the addition to the rank of the hungry during the 20-year period as a result of population growth. Even then, progress in achieving the 1996 target is poor in global terms. In fact, chronic hunger is increasing in several parts of the world inspite of the abundance of food in the market.

We witness this paradox in our country – about 70 million tonnes of wheat and rice in Government godowns and over 200 million children, women and men chronically undernourished. Pregnant women are the worst affected, since maternal and foetal undernutrition results in the birth of children with low weight (less than 2.5 kgs). Such LBW children are handicapped at birth in brain development – the cruellest form of inequity in this Knowledge and Information Age. Charity begins at home. What can we do to bridge the ever-increasing nutrition divide, so that the first requisite for a productive and healthy life, namely, freedom from hunger, is satisfied?

First, we must change our mindset with reference to farming. While agriculture may be a food producing machine in industrialised countries, it is the very backbone of our livelihood and ecological security systems, as well as our national sovereignty.

Opportunities for assured and remunerative marketing hold the key to increasing the productivity of small farm and animal holdings. This is clear from our experience in wheat, rice and milk. Post-harvest technology hence needs priority attention, particularly in the context of global prices and competition.

A second thrust area relates to enlarging the space for economically viable self-employment in the on-farm and non-farm rural sectors for educated youth. Government must desist from expanding its own staff, if initiatives like *Agri-clinics* and *Agri-business Centres* to be run by self-employed agricultural, veterinary, commerce, fisheries and home science graduates, are to be economically viable. There is need for a New Deal for the Self-Employed through appropriate infrastructure and public policies including venture capital for small scale enterprises.

Third, there are a large number of Technology Missions in operation now. Their major goal is the introduction of an end-to-end approach in production, processing and marketing. Unfortunately, several of these community-centred Missions are not having the desired impact, as is clear from the increasing import of pulses and oilseeds, although these very crops can be the catalysts of agrarian prosperity in dry farming areas. It would be useful to link the various crop-centred Missions horizontally with the water harvesting and watershed management programmes in the form of a *National Mission for Farmers' Wellbeing*. The goals of such an integrated Mission should be to assist rural families in increasing productivity and income per every unit of water and land and to link producers with markets.

Four, there is a growing gap between academic know-how and field level do-how. Farm families need integrated and timely advice on both production and post-harvest operations. There is also need for proactive advice on land use so that there is a proper match between production and market demand. To get the best of our investment in scientific research related to rural professions, it is necessary to develop a mechanism which will enable all the principal national and state scientific agencies to provide both dynamic and generic information to rural and tribal families in every part of the country. An *Inter-Agency Action*

*Council for Rural Technologies* is an urgent need. Such a Council could provide a single window service to farmers as well as the youth operating agri-clinics and agri-business centres through a computer and internet aided *Virtual College* system.

Finally, even if we are able to accelerate the pace of creation of livelihoods/ jobs in rural and peri-urban areas, the problem of chronic hunger will still haunt families without assets like land or livestock. This is where recently launched schemes like the Sampoorn Gramin Rozgar Yojana, Grain Banks for tribal areas and Annapoorna could make an important contribution, if implemented with the total involvement of community organisations. It is also necessary to launch a *Nagarpalika Rozgar Yojana* for undertaking bioenvironmental management of mosquitoes, harvesting rain water and recycling solid and liquid wastes. Another urgent need is a *Food for Ecodevelopment* programme in the Himalayan, Western and Eastern Ghats regions as well as in coastal areas and islands, for the restoration of hydrologic and biodiversity "hot spots" and for the rehabilitation of mangrove wetlands. Above all, there is an immediate need for a "*Food for Healthy Children*" programme to help overcome maternal and foetal undernutrition as well as malnutrition in infants in the 0-2 age group, when over 80% of brain formation is completed. All these programmes can be knit in the form of a well-planned *Food for Peace and Sustainable Development* movement, involving a total allocation of 15 million tonnes of food grains during 2002 (this includes the quantities already approved for different programmes).

The causes for the growing violence in the human heart are many and varied. While there is no time to relax in the area of identifying and eliminating terrorists, we should begin the New Year with a firm determination to address the substrate conditions under which violence breeds. A doable starting point will be the ending of poverty-induced hunger and youth unemployment. In this task, we have the uncommon opportunity provided by large grain stocks and a large untapped technological and management know-how.

## M S SWAMINATHAN: Some Recent Contributions

1. The major focus of recent work has been in the broad area of **Food for Peace and Sustainable Development**. Since hunger represents the extreme form of poverty and deprivation, I have concentrated on working for a hunger-free India by the year 2007, which marks the 60<sup>th</sup> anniversary of India's independence. The political will for-achieving this goal has been generated as will be clear from a few publications being sent by courier. The enclosed article in *The Hindu* of Madras and a copy of my letter to the Prime Minister will provide a glimpse of the steps taken.
2. Partnerships and skill, knowledge and management empowerment have been the pathways to achieve rapid progress in the elimination of poverty-induced hunger. The approach has been to enable everyone to earn his or her daily bread. By avoiding social exclusion, both in gender and economic terms, a "win-win" situation has been created for all. The various *Food for Sustainable and Equitable Development* initiated at my instances in recent months are listed below.

### *Components of a Food for Sustainable Development Programme*

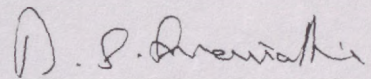
• Sampurn Gramin Rozgar Yojana	- 5 million tonnes
• Grain Banks for Tribal Areas	- 1 million tonnes
• Nagarpalika Rozgar Yojana (for bio-environmental control of mosquito, rain water harvesting and solid and liquid waste recycling)	- 2 million tonnes
• Restoration of Hydrologic and Biodiversity "Hot Spots" in the Himalayas and Western and Eastern Ghats. A classic hydrologic hot spot is Chirrapunji in Meghalaya	- 2 million tonnes
• Coastal ecosystem restoration with particular reference to mangrove wetlands (east and west coast, Andaman and Nicobar and Lakshadweep group of islands)	- 2 million tonnes
• <b>Food for Healthy Children:</b> Special programmes for pregnant and nursing mothers and infants (0-2 years), the major goal being to eliminate maternal and foetal undernutrition leading to low birth weight babies	- 2 million tonnes

3. Enlisting technology as an ally in the movement for social and gender equity will be possible only if we adopt an *antyodaya* approach to bridging the digital, genetic, technological, nutritional and other divides. The *antyodaya* concept propounded by Mahatma Gandhi, involves a bottom-up approach starting with the poorest person. This is the technique I used in 1964 while organising demonstrations with new wheat varieties, ultimately resulting in the wheat revolution of 1968. I explained the *antyodaya* methodology of bridging the divides in my plenary lecture at the World Congress on Science held at Budapest in 1999. This is why I am increasingly being referred to as Modern Gandhi or the Father of the *Antyodaya* model of bridging the divides engulfing our planet.

4. To summarise, recent contributions include:

- a. *Food Production*: Achieving an ever-green revolution (this term was coined by me for emphasising the need for enhancing productivity in perpetuity, without associated ecological and social harm) through ecotechnologies.
- b. Generating sustainable livelihoods for all through biovillages.
- c. Ensuring nutrition security at the level of each individual through a whole life cycle approach to nutrition and by organising a national grid of community grain banks.

5. The President of India, Mr KR Narayanan has kindly agreed to be a referee.



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