# 9. CONCLUSION

"A world where every person has access to sufficient food to sustain a healthy and productive life, where malnutrition is absent, and where food originates from efficient, effective, and low-cost food systems that are compatible with sustainable use of natural resources. The benefits to poor and hungry are obvious – the possibility of a healthy and productive life, perhaps for the first time. Yet the gains to the well-off also bear mentioning: not only a healthier global economy, but also a world with less risk of conflict over scarce resources, less need for costly emergency relief, less poverty-driven migration, and less environmental degradation."

- Reaching Sustainable Food Security for all by 2020, IFPRI 2002.

### **Right to Development**

Poverty is the biggest human scourge on this planet. About 1.2 billion people, mainly in the 122 Third World Countries (TWCs), are in absolute poverty. About 65% of them are in South and East Asia, and another 25% in Sub-Saharan Africa. Every year, 36 million people, one-third of them children, die either directly or indirectly as a result of hunger and malnutrition. Such extreme hunger and deprivation is the ugly manifestation of man-made inequity, injustice and unethical order in sharing resources. Poverty is an attack on human dignity. It is a moral and political shame on humanity that such massive human rights violations are continuously allowed. Availability and access to food are fundamental to combating poverty. Sustainable access to food can be achieved only by national participation in the food and agricultural system and other economic activities, which confer purchasing power to the hungry.

It is the declared intent of every state to enhance the well being of its people and to safeguard their dignity and self-respect. A collective affirmation of this intent is also made in the Universal Declaration on Human Rights: "everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security ....." (Article 25). In the context of unabated global poverty and malnutrition, the right to food was re-stated in 1996 by the Rome Declaration on Food Security. Further, the Millennium Declaration by the UN General Assembly in 2000 urged nations to halve the proportion of people whose income is less than one dollar a day by 2015.

Science and Technology activity in the contemporary world is the engine to economic development. Advances in relevant technologies, and access to them, are powerful determinants of economic development leading to poverty alleviation and social security. In corollary, backwardness of nations in S&T capability and their incapability to access and absorb appropriate technologies have become the major force driving the economic divide between the rich and the poor countries. Extreme poverty, consequent low human development and the need for investing huge capital over a long period for establishing a competent indigenous S&T capability have trapped these poor countries into a vicious circle; there is no easy way out from their poverty and under-development of human and social capital. Poverty and under-development are, in addition, causing inefficient and wasteful use of natural resources leading to rapid resource shrinkage, environmental degradation, pestilence and population increase, all denying a dignified life to many people.

In this context, the increasing shift in R&D investment in developed countries from public science for the common good, to private science for corporate profit, along with globalization of a rigid intellectual property regime with unprecedented coverage on processes and products from all fields of science and technology, including biological organisms and their genetic constituents, is virtually foreclosing any little chance the technologically backward countries have in accessing S&T to mitigate poverty, usher in development and ensure a dignified life to their peoples.

These countries are inherently incapacitated in establishing and promoting their own national S&T system to engine their economic growth and advancement towards the UN Millennium Development Goal. They are, in general, net importers of technology, most of which is from developed countries. The ethical issues associated with this paradigm are explicit. The decreasing role of international institutions of public good in relevant technology development to assist these countries, and the increasing role of private R&D in developed countries, is severely narrowing the TWC opportunity to access technology for development. The Declaration on Right to Development (RTD), affirmed by the UN General Assembly in 1986,<sup>1</sup> established as a universal and inalienable right that every human person and all peoples are entitled to, participate, contribute, and enjoy economic, social, cultural and political development, by which all human rights and fundamental freedoms can be realized. States have the primary responsibility for the creation of national and international conditions favourable to the realization of the RTD and to cooperate with each other in ensuring development and by eliminating obstacles to development. In the case of many TWCs which lack S&T capability, realization of RTD may not be possible without support and cooperation from international institutions of public good and liberal technology transfer from developed countries. Here, the functioning of international financial institutions in promoting Third World development, the role of developed countries in assisting

<sup>&</sup>lt;sup>1</sup> Declaration on the Right to Development adopted by General Assembly resolution 41/128 of 4 December 1986. http://www.unhchr.ch/html/menu3/b/74.htm

technology transfer, the bridging of the knowledge divide in the context of intellectual property regimes, and the impact of international trade on TWCs and their market access, all have a major bearing on the realization of the RTD.

The contemporary world order appears to have dumped the RTD somewhere in the past. While the capability of TWCs to take a development course at a pace commensurate with the UN Millennium Development Goal has not been strengthened, the climate of development, including the functioning of international financial institutions, the technology transfer regime and international trade has changed to their disadvantage. The Bretton Woods institutions championing liberalization, privatization and the compression of State domestic budgets are chartering a development model that accentuates the inequalities.

It is in this context that it has been attempted to analyze the various aspects of Ethics of Economics and Development in the preceding sections. Successful case studies/efforts have been highlighted in boxes. The basic premise from which the whole analysis has been made is that the approach to development should be pro-poor, pro-women and pro-nature. Swami Vivekananda,<sup>2</sup> an Indian visionary, has said that men and women are like the two wings of a bird: just as a bird cannot fly on one wing, no society can progress at the cost of neglecting its women. The pro-nature approach is advocated through emerging technologies, particularly in the area of precision farming, plant scale agronomy, ecotechnology and crop-livestock-fish integrated production systems that hold promise for fostering an ever-green revolution in farming, rooted in the principles of ecology, economics, gender and social equity, energy conservation and employment generation.<sup>3</sup> The approach has to be inclusive and must ensure that every child has the opportunity for a healthy and productive life. The Right to Food and the Right to Development are inalienable human rights and should be recognized as such. Examining the ethical aspect of development pathways is crucial in terms of whether an approach will cause a further rich-poor divide. Mahatma Gandhi's talisman of "Recall the face of the poorest and the weakest person you have seen, and ask yourself, if the steps you contemplate are going to be of any use to him." We have to find affordable and doable methods of integrating ethical pathways to development in practical ways for the sustained well-being and happiness of all. The example below is one such attempt.

<sup>&</sup>lt;sup>2</sup> Vivekananda, Swami. Complete Works of Swami Vivekananda, Advaita Ashrama, Almora.

<sup>&</sup>lt;sup>3</sup> Swaminathan, M.S. 1996. Sustainable Agriculture: Towards an Evergreen Revolution. Konark Publishers, New Delhi and Swaminathan M.S. (2000), An Evergreen Revolution, Biologist, 47(2), 85-89.

## A proposal for Ethical Approach to Development<sup>4</sup>: Towards hunger-free India: Count down to 2007<sup>5</sup>

The Challenge: The quantitative and qualitative dimensions of the challenge of achieving a hunger-free India are daunting. The incidence of poverty, endemic hunger, communicable diseases, infant and maternal mortality rates, low birth weight children, stunting and illiteracy is high. There are, however, many examples where progress in the elimination of poverty-induced hunger has been rapid because of a symphony approach in dealing with the multi-dimensional problem of hunger and malnutrition. Successful experiences in the elimination of hunger and poverty have shown that synergy between political will and action and strategic partnerships can help local communities to achieve seemingly impossible tasks. Such 'messages and methods of hope' should therefore be documented and spread widely, since they not only inspire confidence that the goal of a hunger-free India can be achieved, but will also help to build the self-confidence of all engaged in the mission of overcoming under- and malnutrition.

## Basic approach: Food with human dignity

Food with human dignity should be the basic approach. The poor should not be subjected to a patronage approach, but should be treated as partners in achieving the aim of ensuring that every child, woman and man in their country has an opportunity for a productive and healthy life. The right to adequate food and clean drinking water should be regarded as a basic human right.

#### Thrust of the Tenth Five-Year Plan (2002-2007)

The Tenth Five-Year Plan has shifted the emphasis from food security at the household level to nutrition security at the level of each individual. Emphasis has been placed on employment, education, health and nutrition, which are all important for poverty eradication and hunger elimination. The inter-sectoral nature of chronic hunger has been recognized. By shifting the attention to individuals, the strategies adopted will be based on the principle of *social inclusion* and will help to foster a life cycle approach in nutrition interventions. For example, pregnant women will need special attention, since maternal and foetal under-nutrition leads to the birth of babies characterized by a weight of less than 2.5 kg at the time of delivery. Such low birth weight (LBW) children suffer several handicaps in later life and may not be able to express their innate genetic potential for mental and physical development.

<sup>&</sup>lt;sup>4</sup> Swaminathan, M.S. 2003. Commentary in Current Science, Vol. 84, No. 10, 25 May.

<sup>&</sup>lt;sup>5</sup> These steps were discussed at a Consultation convened by MSSRF, World Food Programme (WFP) and the Food and Agriculture Organization of the United Nations (FAO) at New Delhi on 4-5 April 2003.

Such inequity at birth is inexcusable since we are now entering a knowledge-based economy. Similarly, old and infirm persons need special attention. Thanks to advances in preventive and curative medicine, we are now adding years to life. However, we should pay equal attention to adding life to years through nutrition and health care. We should recognize that we are now entering a new chapter in human longevity. There is therefore need for a proper match between nutrition requirements and nutrition support at different stages in the life of an individual. Hunger is the extreme manifestation of poverty, since the poor spend a high proportion of their earning on food. The elimination of hunger is, thus, the first requisite for eradicating poverty. Without adequate nutrition, the energy needed for higher work output will not exist in malnourished individuals.

### Guiding principles for converting goals into accomplishments

*Decentralization:* The desired goal can be achieved speedily and surely only if a decentralized approach to implementation is adopted. 'Think, plan and act locally,' with support at the state and national levels, should be the motto. Elected local bodies, together with the concerned Departments of Government (health, education, women and child welfare, rural and tribal development, etc.) should prepare micro-level action plans. They should form a local level 'Alliance for a healthy and productive life for all'. The one million elected women members of local bodies can be empowered to spearhead the freedom from hunger movement, since they are more aware of the problems of nutrition and drinking water. Decentralization will enhance accountability, reduce transaction costs and remove corruption in delivery systems.

*Life-cycle approach:* For ensuring nutrition security at the level of each individual, a life-cycle approach is necessary so that the nutritional needs of the individual can be met from birth to death. Special programmes for adolescent girls, pregnant women, nursing mothers, infants (0-2 years) and old infirm persons should continue. What is needed is the horizontal integration of numerous vertically structured programmes. Such a functional integration will help to create a symphony at the level of each village/town/city to ensure that all links in the food availability-access-absorption chain function at a high level of efficiency and effectiveness. Management tools and not additional monetary support will be needed to bring about at the field level such convergence and synergy among ongoing programmes.

*Food for Work as the vehicle:* In keeping with the basic approach of food provision with human dignity, it was agreed by all participants that Food for Work (FFW) was the best existing vehicle of delivery. Effectiveness of the FFW programme could be ensured through two approaches. One is that of fine-tuning, i.e. ensuring that FFW is made available during the peak hunger season, which varies across agro-climatic regions. The other major change required is to broaden the scope of the programme to ensure wider coverage, suitability to pregnant and lactating

women, the old and weak, and to help embark on achieving the stated nutrition targets in a mission mode. It is suggested that FFW be broadened in scope to include community work related to cooking and serving of midday meals, door-to-door delivery of nutritional supplements, polio-drops, vitamin A and iron tablets, etc. maintenance of anganwadi centres, school buildings, food banks, village drinking water systems, cleanliness of the village, school kitchen gardens, fuel plantations, village forests and other community assets. This would ensure that even those handicapped by age, pregnancy or poor health could participate in the programme and earn their food with dignity, and with no adverse physical impacts. Priority could be given to the employment of women in the most food-insecure districts. Identification of projects could be left to the gram panchayats. Monitoring of community work could be carried out by school teachers or anganwadi workers. A brief 'on the job' training/awareness module would prepare this hunger-elimination task force for their new semi-skilled assignments. This would also ensure the availability of a semiskilled work force within the village, which could be involved in the implementation of existing and new schemes coming from the central and state governments.

Information, education and communication: There is need for launching a nutritional literacy movement to spread awareness of the adverse consequences of malnutrition-induced intellectual and physical dwarfism among children. The nutritional literacy movement should include issues relating to food safety, codex alimentarius standards, sanitary and phytosanitary measures, etc. Mass media, particularly those in the public sector, like Doordarshan and All India Radio, can play a very important role in making the hunger-free India movement a success. Community radio stations, giving location-specific information, should be encouraged to assist other mass media in spreading messages of hope. It will be useful to set up Media Resource Centres for a Hunger-free India. Such centres can provide credible and timely information to the print, audio, video and new (i.e. internet) media.

*Household entitlement card:* It will be useful to provide every family with an entitlement card, giving information on the various government projects which they can access. The information may be disaggregated by gender, age, religion, caste and class, and precise addresses of contact persons and offices may be given. Such information will enable everyone to make the best use of their entitlements. A single step of this kind will help enormously to ensure the effective utilization of all the schemes of central and state governments and bilateral and multilateral donors.

*Capacity building:* Since a decentralized approach involving the empowerment of over three million women and men members of local bodies holds the key to the success of this national movement for food and clean drinking water for all, it is essential that a national consortium of Agricultural, Rural and Women's Universities, as well as government and non-governmental training and research

institutions, is formed for undertaking capacity building in areas such as management, communication and organizational skills with reference to the implementation of the hunger-free area programme. The capacity-building programmes can be organized on a 'Trainers' Training model,' in order to achieve a multiplier effect.

Asset building and community development: The poor are poor because they have no assets like land, livestock or fish ponds. They often are illiterate and lack proper dwellings. They survive on wage employment, which, particularly in the case of women, does not reach the level of even the prescribed minimum wage. A massive effort is needed to help them to shift from unskilled to skilled work through training in market-driven skills. The on-going micro-finance led self-help revolution will be the speediest way to help them to rise above the poverty level. This will call for establishing effective forward and backward linkages, particularly with technology sources and markets. Insurance and Venture Capital support should also be available to micro-enterprises. We have now an opportunity to leapfrog in achieving our goal of enabling everyone to earn his/her daily bread.

### Initiation of a National Food for Social Capital Programme

The social capital of a country is the product of interaction between the human capital and the cultural, political, economic, nutritional and natural environments. Human and social capital constitutes the most precious wealth of a nation. Mahatma Gandhi and Vinobha Bhave advocated the principles of antyodaya and sarvodaya for achieving high social synergy and capital. A society committed to building its social capital will try to promote programmes which represent a 'win-win' situation for all, thereby avoiding winners and losers and the consequent social conflict and disruption. During the last few years, the Government of India, as well as some state governments, has initiated many programmes like Sampoorna Gramin Rozgar Yojana, Annapoorna, Antyodaya Anna Yojana, and Universal Noon-meal Programme for School Children, etc. It is now clear that our farmers will produce more if we can enhance consumption and, thereby, opportunities for assured and remunerative marketing. Therefore, the initiation of a National Food Guarantee Scheme will help to ensure that all who are hungry today due to lack of livelihood opportunities or other constraints are able to have food for a productive life. Such a National Food Guarantee Scheme can serve as an umbrella for all ongoing projects like those mentioned earlier. In addition, it can provide food grains for initiating a Nagarpalika Rozgar Yojana, as well as for a wide variety of social support initiatives like Food for Health (TB, HIV/AIDS, Malaria, etc.), food for those employed in ICDS, Nutritious Noon Meal and other similar projects.

In other words, food can become a powerful currency for achieving the goal of a hunger-free India. Using food as a currency has twin advantages, namely, there could be greater off-take of food grains from farmers, thereby providing them with an incentive to produce more, and secondly, for meeting the immediate needs of the poor, destitute, migrant labour and all others who are undernourished today. The Urban Food Insecurity Atlas released by the President in October 2002 clearly brings out the urgent need for attending to the hunger problems of the bottom 10% of the poor (ultra-poor) in towns and cities. Therefore, the setting up of an umbrella programme combining the principles of the Employment Guarantee Scheme of Maharashtra and of various Food for Work Programmes under a National Food for Social Capital Programme will be timely. This could serve as a hub of a series of activities. It can start with a total allocation of 15-20 million tons of food grains during 2003-04. Such a block grant of food grains can be managed by a Malnutrition-free India Trust, headed by the Deputy Chairman of the Union Planning Commission; The Trust can sanction small projects to meet specific local requirements as well as to fill gaps in the ongoing programmes. At least 5 million tons of grain should be available to support local level Community Food Banks in 'hunger and hydrologic hot spot' areas and specific programmes designed to improve maternal and foetal nutrition as well as to provide nutrition support to those affected by TB, leprosy and other diseases. Such a Food Guarantee Initiative will be psychologically an important index of the capability of Indian farmers, on the one hand, and a political commitment to achieve the Prime Minister's goal of a hunger-free India by 15 August 2007, on the other. Such a programme could be announced by the Prime Minister in his address to the nation on 15 August 2003.

# Monitoring and evaluation

This could be done at various levels starting with Gram Sabha and Citizens Groups (like the Right to Food Group) and government agencies and research institutions. An effective and transparent monitoring system will also help to ensure the implementation of the directives of the Supreme Court of India.

## Consultative Group for Freedom from Hunger

Both at the national and state levels multi-stakeholder consultative groups for 'Agenda 2007: Hunger-free India' could be organized, comprising representatives of the concerned Government of India ministries and departments, professional experts, National Commission for Women, civil society organizations, business and industry, mass media and bilateral and multilateral donors, with the Union Planning Commission serving as the nodal agency for such a consultative group. Such a group would help to foster strategic partnerships as well as synergy among political leaders, professionals and peoples' organizations.

## Standing Committee of the National Development Council

A Standing Committee of NDC could be set up for monitoring progress and ensuring the success of Agenda 2007. The NDC Committee chaired by the Prime Minister could include Chief Ministers of states where there is widespread under-and malnutrition as well as of food secure states, so that there could be lateral sharing of experiences among states. Such a Standing Committee could provide the political guidance and support needed for implementing this important programme.

#### Immediate action during 2003-04

Besides the announcement of the 20 million tons Food for Social Capital programme and the setting up of a Malnutrition-free India Trust by the Prime Minister on 15 August 2003, immediate action needs to be taken to end poverty-induced chronic hunger and the transient hunger caused by drought and natural calamities through a series of Community Food, Fodder and Feed Banks. Such banks may be established in all the 'hunger hot spots' of the country. CFBs managed by local Self-help Groups, preferably of women, would save considerable transaction and transport costs. They will also help to widen the food security basket through the inclusion of local grains like millets, pulses, oilseeds and tubers. It will also be advisable to reclassify coarse cereals as 'nutritious grains' in order to underline their desirable nutritive properties.

## No time to relax on the food production front

While the alleviation of hunger by improving access to income, balanced diets and safe drinking water should receive high priority, there is no time to relax on the food production front. We need to bring about productivity, quality (including food safety), profitability and sustainability revolutions in farming based on a Farming Systems Approach. There is an urgent need for enhancement of investment in agriculture and rural infrastructure development. There is also need for conferring on small producers the power of scale through cooperatives, self-help groups and other socially viable methods of group endeavour both at the production and post-harvest phases of farming. Our spectacular progress in the dairy sector is largely through such management innovations. There is need for a movement for trade and quality literacy including an understanding of sanitary and phytosanitary measures and *codex alimentarius* standards. There is also need for launching a Jal Swaraj and Water Literacy Movement. Above all, there is need for a paradigm shift from jobless to job-led growth in order to ensure that every poor person is enabled to earn his or her daily bread. In a predominantly rural and agricultural country like India, agricultural progress (i.e. crop and animal husbandry, fisheries, forestry and agro-forestry and agro-processing) will be the most effective social safety net against hunger and poverty. Hence, the ongoing fatigue of the green revolution in wheat, rice and other major crops should be converted into an evergreen revolution designed to promote productivity improvement in perpetuity without associated ecological harm. Agricultural and rural development, if given adequate and appropriate attention, will help the country to take to the path of job-led economic growth. Our substantial grain and foreign exchange reserves and the three million elected women and men members of local bodies have provided us with an uncommon opportunity for launching a frontal attack on hunger and poverty. It will be a tragedy if we do not act, when we are in a position to act.

To conclude, the 'Agenda 2007: Hunger-Free Area Programme' should keep in mind the following advice of Gandhiji given before his death: 'Forget the past. Remember every day dawns for us from the moment we wake up. Let us all, every one, wake up now.'