



Remember Your Humanity: Pathway to Sustainable Food Security. M. S. Swaminathan. New India Publication Agency, No. 1, Vikas Surya Plaza, CU Block, L.S.C. Mkt, Pitampura, New Delhi 110 088. 2012. xi + 208 pp. Price: Rs 785.00/US\$ 35.00.

The author of the book under review, M. S. Swaminathan, is a well-known agricultural scientist. He has compiled his intellectual viewpoints and thoughts in 34 chapters that have focused on aspects relating to agriculture, environment, food sustainability, social and economic challenges that lead to human happiness. More or less, the presentation centres around the Government of India's initiative and enactment of the 'National Food Security Bill'.

The author talks about humanity by presenting the concerns raised from the first and most dreadful event of atomic explosion on human life in Japan and subsequent developments that have emerged towards nuclear weapons disarmament. The progress in science and technology in recent decades did provide opportunities for the UN Millennium Development Goals in the area of food, water, health, education and clean environment. However, diverse social and economic issues of countries have not been conducive in creating an environment for complete peace and harmony. A few meaningful thoughts relating to education and nutrition/health as well as the need for integration of academic excellence and social relevance in human life right from a young age drives home the message of ethics and science.

Moving towards the national food security scenario, the presentation of analysis of four pillars of sustainable

human happiness is detailed in the third chapter. The example of Bhutan developing the concept of Gross National Happiness (GNH) as an alternative to Gross Domestic Product (GDP), a deviation from measuring only money-related aspects is presented. The commitment of science towards making humankind free from hunger passing through different phases is appropriately linked to the noteworthy contributions of Norman Borlaug.

The author debates about the sensitive and serious consequence of the growing rural and urban divide in respect of investment, infrastructure and opportunities for employment and income. In this context, the concerns and objectives of Village Knowledge Centres (VKCs) based on modern information and communication technologies are detailed. Another topic of discussion relates to various aspects that could attract and retain the country's youth in farming and processing of value-added farm products making agriculture intellectually stimulating and economically viable. The strategies outlined also bring into focus the '4C approach', i.e. Conservation, Cultivation, Consumption and Commerce. The multi-faceted agri-life opportunities are highlighted that can lead towards agricultural rejuvenation and harness the demographic dividend.

In a move towards bringing in food security, the author proposes need for bringing in a legislation that provides food and nutritional security in human life by ensuring access to balanced diet at an affordable price. The discussion centres around legal entitlements, enabling provisions, reform of public distribution system and building the necessary infrastructure. These aspects more aptly relate to Mahatma Gandhi's vision for a hunger-free India. The positive aspects of the Green Revolution and action plans at different levels are also the focal points of the presentation. The pros and cons of wheat import and its significance on food security are discussed, wherein it is mentioned that the wheat import plan of the Government of India is to maintain adequate food stocks for the purpose of food security and public distribution system. The presentation drives home the point that imports or exports of food grains may be necessary from time to time, as they are linked to the livelihood security of the country's population.

The author provides an opportunity for the reader to understand the pre-

requisites and pathway for success of sustainable food security for all. The discussion centres around the aspects that have brought the enactment of National Food Security Act, wherein several organizations/centres have a role to play through their valuable inputs. The efforts of Central and State Governments through their various programmes have focused on the improvement of nutritional status of children, women and others. The aspects that could harness biodiversity for poverty alleviation are visualized through opportunities for jobs that could originate from biodiversity and generate income on a sustainable basis. Looking at the varied environmental factors in recent years, the author presents his concerns for sustaining biodiversity that is important for food security.

In support of the theme of the book, the author aptly discusses the focal point of what are those priorities that need to be outlined or identified in agricultural research and education. There is a cautionary mention of 'that if farm ecology and economics go wrong, nothing else will go right in agriculture' which was put forth as early as in 1968. The approach to meet the challenges and have a clear road map will result in a blend of traditional wisdom and modern science/technology. The progressive chapters present an overview of various options that Central and State Governmental organizations/bodies could put into action looking at predictions of increase in food prices, low production, low procurement and non-availability of selected food stocks and related issues. It is desired to have a comprehensive and co-ordinated approach to overcome the mismatch between production and post-harvest technologies.

The presentation visualizes the agri-life scenario of Punjab, Haryana and other grain-surplus regions of India. Certain concerns are mentioned like making the Green Revolution into an 'Ever Green Revolution' leading to enhancement of productivity and sustaining the agri-environment. In the human life-cycle approach, co-existence with fisheries and sea water-related resources is important in sustained food security. Modern technologies should be made available to the fishing communities so that there could be enrichment of sea water farming for the prosperity of coastal areas.

The later chapters include presentations about the risks and benefits of GM food crops, a subject of ongoing debate. The novel genetic combinations like molecular marker-assisted breeding and gene transfer do play a significant role to meet the challenges arising from biotic and abiotic stresses. Further discussion relates to sustainable management of land resources and conservation of prime farm land for agri-business that could enable sustained food security. The author also proposes linking of Darwinian concept of evolution with the principles and tools of Mendelian and molecular biology techniques that can lead us in marching ahead with food security amidst challenges of climate change and ecological barriers. Besides, a Climate Literacy Movement is proposed to safeguard the livelihoods of those in coastal areas and islands.

In a country wherein agriculture and sustained livelihood is very much

dependent upon a good monsoon, the author has brought into focus the strategies to be evolved and implemented to maximize the benefits of a good monsoon. In this direction, a sustainable water security system is also a necessity. With regard to drought management, the author proposes organizing 'Beyond the Drought Programme' that involves growing short-duration crops requiring less water, but which results in high-value crops in terms of nutritional value. In a move towards managing food and water security systems, the author presents the viewpoint of the 'National Commission on Farmers', wherein the need for a community managed food and water security system has been emphasized. Also issues relating to shaping the future of agriculture in the northeastern, western and eastern regions of India are discussed with emphasis on retaining the cultural richness and genetic biodiversity.

The book concludes with a thoughtful chapter titled 'From vision to impact', here the reader gets an opportunity to know about few of the focal themes like empowerment of women in agriculture, pulses villages, nutri cereals, price volatility and hunger, sea water farming, agricultural and biodiversity heritage, land and water care and human resource development. The book is supported with a list of acronyms.

In brief, the book provides an opportunity for the reader to have a better understanding of food and agriculture linked to humanity that could finally sustain the life on this planet.

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