



## Book reviews

### Scientist and Humanist - M.S. Swaminathan

R.D. Iyer

Bharatiya Vidya Bhavan, Kulapati K.M. Munshi Marg, Mumbai 400 007, 2002, Pp. 245, Rs. 300.00 (PB)

Receiving a biography of one of its Life Member, Fellow and past Secretary for eight terms (1955-62) and President for three terms (1964, 1975, and 1983) from Bhartiya Vidya Bhavan for review in our own Society's journal was a pleasant surprise for the reviewer. It is rare to find published books solely devoted to life and works of an individual scientist. It is all the more rare to find a book being published about the work and scientific contributions of a person during his own active life time. Dr. Swaminathan's case, however, is really an exception. A similar volume "Science and Agriculture - M.S. Swaminathan and the Movement for Self-reliance" edited by S. Ramanujam, E.A. Siddiq, V.L. Chopra and S.K. Sinha, presenting the major contributions of Dr. Swaminathan to agricultural research, education and extension over a period of three decades, from 1947 to 1980, was published in 1980 at the initiative of several learned Societies led by Indian Society of Genetics and Plant Breeding, which was also responsible for its marketing. The present volume is largely an up to date fully revised edition of the same.

It was however, no surprise that an interesting book on the life and works of Professor M.S. Swaminathan, a scientist and humanist, rarest amongst the rare was brought out by such a publisher like Bhartiya Vidya Bhavan. The book under review 'Scientist and Humanist - M.S. Swaminathan' by R.D. Iyer, one of his own Ph.D. student at IARI during seventies is a complete treatise on the life-time research contributions as a scientist, teacher, conservationist and a rare social extension worker - the humanist face of this world renowned and distinguished agriculture scientist and thinkers with innumerable honours and awards to his credit right from his school and college days till date.

The message dated 6th May, 2002 published in the book from the then President of India Shri K.R. Narayanan sums up in brief the various facets of Swaminathan's personality in the following lines. "Renowned agricultural Scientist, M.S. Swaminathan, has been working with dedication since 1947 for the agricultural development of our country by harnessing both traditional and frontier technologies. He has been consistently remaining in the forefront of India's quest for food security on a sustainable basis. Acknowledged worldwide for his outstanding scientific work, he has significantly contributed to the practical application of agricultural science for higher yield of food grains and

for ecological security, while ensuring accelerated agricultural growth through applications of science and technology, Professor Swaminathan has been relentlessly focusing attention on ecological conservation and on gender and social equity. This integrated approach has remained one of the distinguished aspects of Professor Swaminathan's original and path breaking contributions towards the revolutionary growth of agriculture in our country and indeed the world. He articulated his concerns for ecological security and gender and social equity in 1968 and later continued his mission of giving a gender dimension to our development when he, for the first time in the history of planning in Independent India, authored a separate chapter for the Sixth Plan entitled 'Women and Development'. Subsequently, he coined the term "ever-green revolution" not only to stress the augmentation of production but also to refashion the whole strategy of the Green Revolution to make it pro-environment, pro-women, and pro-poor. His approach in pioneering the ever-green revolution is at the very heart of what is now called sustainable agriculture".

The foreword of the book is written by none other than Shri R. Venkataraman, the former President of India. The foreword to the book states "Dr. Swaminathan belongs to a rare group which is brilliant at school as well as in later life. He is one of the brilliant starters winning several gold medals for excellence in studies and who more than fulfilled his early promise. His career has been one of continuous success in every sphere of activity. Even in his younger days, Dr. Swaminathan was deeply distressed by the poor yield of lands and the poverty of agriculturists. He had learnt that the yield in India was far below that of the USA, Japan and Thailand. From that distressing situation where we were unable to feed 360 million people in 1950 and went about begging for food aid, India has increased its food production from 50 million tones in 1950 to over 200 million tones and has become self-sufficient in food to cover over one billion people. The person who achieved it is the miracle man, Dr. Swaminathan. He experimented with wheat and achieved tremendous success. And he did achieve his goal in increasing food production in India spectacularly through the Green Revolution."

The contents of this biographical book lists seven chapters: (1) Introduction, (2) Biographical Sketch, (3) Swaminathan, the Scientist (*i. Potato and Allied Species, ii. Wheat iii. Rice*), (4) Swaminathan, the Conservationist (*i. Mangrove Ecosystems, ii. Biodiversity Conservation, iii. Genetic Conservation, iv. Conservation of Nature and Natural Resources, v. Environmental protection in India, vi. Swaminathan's Fifty Years of Contribution to the Conservation of Plant Genetic Resources and their Sustainable and Equitable Use*), (5) Swaminathan, the Humanist (*The Antyodaya Approach*), (6) Swaminathan, the Institution Builder (*i. Genius for Organisation, and ii. The M.S. Swaminathan Research Foundation*), (7) The Man and His Philosophy of Life.

The first chapter gives an account of the initial interactions of the author with M.S. Swaminathan during the fifties and sixties and then subsequent years of his close observations about Swaminathan, his research and teaching activities at IARI and the post-green revolution period. The Second chapter gives a detailed account of his parents, child hood, schooling and college education in India and then his doctoral work at Wageningen, Netherlands and Cambridge in U.K. and Post-Doctoral work at Wisconsin, USA. This chapter also gives a chronicler account of his active research career in various capacities during the next five decades. Details of his scientific contributions on potato, wheat and rice and several other areas, where Swaminathan has made valuable original contributions have been separately dealt with in the third chapter. The major contributions of Dr. Swaminathan on conservation issues e.g. Mangrove Ecosystems, Biodiversity Conservation, Genetic Conservation and conservation of nature. Natural Resources and Environmental Protection have been presented in detail in chapter four.

The next chapter - Swaminathan - the Humanist, describes his *Antyodaya* approach including his philosophy and approach on Food for Sustainable Development and Farmer's Rights in detail. The next chapter gives a vivid account of his greatest strength in institution and capacity building within national sphere at IARI, ICAR, revitalizing the Indian science Congress and his reforms at the Planning Commission. His significant contributions in the institution building in the international arena have been covered under the sub-heads - United Nation Committees. The book has Appendices running into more than 85 pages on the following heads and sub-heads with number of entries in each case mentioned in figures: *i. Awards and Recognitions (National Awards -29; International Awards -24), ii. Honorary Doctorates (Indian Universities -33, and Universities Abroad -11); iii. Recognition by Scientific Academies/Societies (Indian -9, and International -32);*

*iv. Honorary Positions in International Committees/Organizations -19; v. Honorary positions in Organizations Devoted to nature Conservation and Sustainable Development -15; vi. National Committees Chaired -28; vii. Current Honorary Positions -12; viii. Post-graduate Students (Associateship of IARI -12, M.Sc. IARI -10, Ph.D. Students -69, Students Currently Working for their Ph.D. Degrees -8); ix. Bibliography of M.S. Swaminathan's Writings and Speeches (Research Articles-000, Books Authored/Co-authored -10, Editor/Co-Editor of Books -19, Addresses and Speeches -165, Reports Submitted as Chairman/Member Expert Committees-National Committees -21, International Committees/Commissions -6).* These appendices are bound to be of outmost value as reference material to students and researchers.

The book is copiously illustrated with some of the rare photographs of Professor Swaminathan and his family. A complete and comprehensive survey of the life and achievements of one of the most eminent scientists that India has produced, this splendid biography adds light and lustre to the multi-splendoured achievements of Dr. Swaminathan.

The Reviewer is, however, highly surprised to note one major omission by the author, may be in veridantly. In spite of the fact that Dr. Swaminathan, who was one of the early founder member, a Life Member and Fellow of the Indian Society of Genetics and Plant Breeding, one of the oldest, largest and most prestigious learned Society in the field of biological sciences, his association with the society has not been mentioned at all. Dr. Swaminathan has been very closely associated with all the major activities of this Society since its inception, as is evident from the fact he was Secretary of this Society for eight consecutive terms (1955-62) and occupied the prestigious office of the President of the Society for three terms (1964, 1975, and 1983), again a rare distinction, but these facts have not been at all listed at any place in the entire book, not even in the appendices where his such associations have been mentioned in detail ! It is hoped that the author may like to rectify these short comings in the next edition, if there is any in future.

The author, Dr. R.D. Iyer, and the publishers Bharatiya Vidya Bhavan, deserve complements for a comprehensive survey of the life and achievements of Professor M.S. Swaminathan. The Reviewer is sure that this volume will help younger generations to emulate Professor Swaminathan as a scientist and as a role model of fine human virtues. This volume deserves a special place in the libraries of all the colleges, universities and research institutes as well as in personal collections.

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