

## **Tributes to**

## Dr. M. S. Swaminathan

## The father of India's Green Revolution

Dr. MS Swaminathan born on August 7, 1925 in Kumbakonam, Tamil Nadu and completed postgraduate degree in Genetics and Plant breeding at the Indian Agricultural Research Institute (IARI), New Delhi during 1949. He earned his PhD from the University of Cambridge. After completing further studies at Wisconsin University, he turned down the offer of professorship and decided to return home. He said, "I asked myself, why I studied genetics? It was to produce enough food in India. So I came back." He aimed to improve crop yields, promoting ecological sustainability, and empower small farmers while integrating cutting-edge technology and promoting gender equality in agriculture. His collaborative scientific efforts with Norman Borlaug, spearheading a mass movement with farmers and other scientists and backed by public policies, saved India and Pakistan from certain famine-like conditions in the 1960s that led to 'Green revolution in India'. He developed high-yielding varieties (HYV) of wheat and rice; and later, promoted sustainable development, which he called, the 'evergreen revolution'. He played main role in the development of the world's first high-yielding basmati rice varieties, and also his efforts in agriculture has increased the productivity of foods like rice, wheat, gram, maize etc. He wanted to develop new and improved varieties of seeds, better farming methods, better soil and water management, and wanted to take the best of science and technology to the mostly illiterate rural masses that depended on agriculture not only for food but also for employment and income. During his tenure as Director General of the International Rice Research Institute (IRRI) in the Philippines, he developed IR-64, a rice variety that yielded up to 24% more grain than an earlier strain, IR-36. IR-64 has been grown on more than 10 million hectares worldwide and fed millions of people. This contribution made him awarded the first World Food Prize in 1987, often considered to be an agricultural Nobel Prize. Awards recognizing Swaminathan's work include 85 honorary doctorates, the Mendel Memorial Medal in 1965, the Ramon Magsaysay Award in 1971, and the prestigious Padma Shri in 1967, Padma Bhushan in 1972, and Padma Vibhushan in 1989 and the Albert Einstein World Award of Science in 1986.

His inventions and efforts changed the agricultural system and taught us how to increase production in the same area of land. He championed technology development strategies that embodied empathy and an unwavering commitment to comprehensive progress, particularly for impoverished and food-insecure people, especially women. He recognized that genuine advancement encompassed not only science and technology but also the well-being of all, marginalized communities included. Considering his immense contributions, it is appropriate that Dr. MS Swaminathan is called the "Father of India's Green Revolution".

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