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GLIMPSE OF GENETICS & PLANT BREEDING

Dr. Sujit Kumar - Dr. Divya Srivastava - Dr. Nilofer
Dr. Mayank Srivastava



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Chapter - 21

Green Revolution

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Chapter - 21

Green Revolution

Nilofer, Divya Srivastava, Mayank Srivastava, Sujit Kumar and N. A. Khan

Green revolution

Green Revolution refers to a series of research, development, and technology transfer initiatives, occurring between the 1940s and the late 1970s, that increased agriculture production around the world, beginning most markedly in the late 1960s. The initiatives, led by Norman Borlaug, the "Father of the Green Revolution" credited with saving over a billion people from starvation, involved the development of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, modernization of management techniques, distribution of hybridized seeds, synthetic fertilizers, and pesticides to farmers.

The term "Green Revolution" was first used in 1968 by former United States Agency for International Development (USAID) director William Gaud, who noted the spread of the new technologies and said, "These and other developments in the field of agriculture contain the makings of a new revolution. It is not a violent Red Revolution like that of the Soviets, nor is it a White Revolution like that of the Shah of Iran. I call it the Green Revolution."

The agricultural development that began in Mexico by Norman Borlaug in 1943 (based on Nazareno Strampelli's studies) had been judged as a success and the Rockefeller Foundation sought to spread it to other nations. The Office of Special Studies in Mexico became an informal international research institution in 1959, and in 1963 it formally became CIMMYT, The International Maize and Wheat Improvement Center.

In 1961 India was on the brink of mass famine. Borlaug was invited to India by the adviser to the Indian minister of agriculture M. S. Swaminathan. Despite bureaucratic hurdles imposed by India's grain monopolies, the Ford Foundation and Indian government collaborated to import wheat seed from CIMMYT. Punjab was selected by the Indian government to be the first site to try the new crops because of its reliable water supply and a history of agricultural success. India began its own Green Revolution program of plant