

# MS Swaminathan Evergreen Hero Who Saved 'Ship-To-Mouth' Nation

### Why In News

- Renowned agricultural scientist and the architect of India's Green Revolution
  MS Swaminathan passed away on Thursday at the age of 98 in Chennai.
- He breathed his last at his residence. Swaminathan brought a social revolution through his policies to rescue India from famine-like circumstances in the 1960s.



# **Dr MS Swaminathan**

- Mankombu Sambasivan Swaminathan, fondly known as M.S. Swaminathan, was a legendary figure in the field of agriculture and a true humanitarian.
- Born on August 7, 1925, in Tamil Nadu's Thanjavur district.
- The person who was expected to become a police officer chose, instead, to become an agricultural scientist and, **inspired by Mahatma Gandhi** and the freedom struggle, went on to deliver the country freedom from hunger.



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- He dedicated his life to improving the lives of India's **low-income farmers** and revolutionizing the **Nation's agricultural landscape**. who
- He played a crucial role in developing high-yielding varieties of paddy that helped ensure India's low-income farmers produce more yield.



## Before Green Revolution

- In1960s, India depended on wheat imports from the US under the latter's
  Public Law 480 or PL 480 to meet domestic demand.
- India had a ship-to mouth existence and was dependent on the charity of the US, vulnerable to the superpower's arm-twisting, particularly during the Bangladesh crisis when it suspended economic aid to India.
- In **1971, India snapped its PL480** deal with the US, determined to be self-dependent in food grain production.
- Dr MS Swaminathan played an instrumental role in developing high yielding wheat and paddy, and along with Nobel laureate Norman Borlaug, involved farmers in a mass movement to get better yields. Swaminathan and Borlaugh are credited with staving off famine-like situation in India.



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### **Early Career**

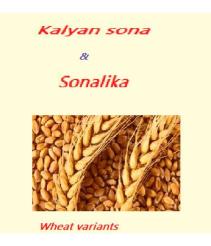
• Swaminathan started his career in 1949 researching on the **genetics of potato**, **wheat**, **rice and jute**. When India was on the verge of a mass famine leading to scarcity of food grains, Swaminathan along with Norman Borlaug and other scientists developed the high yield variety seeds of wheat.



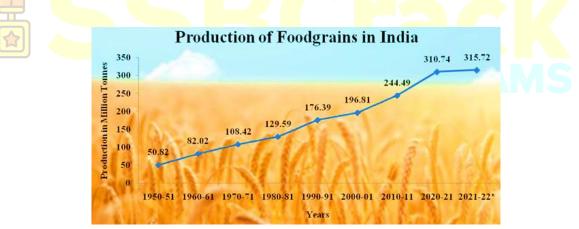
# Green Revolution

- Swaminathan recognised the value of high-yielding varieties of grains, researched on them, made efforts to import them, adapted them to Indian conditions, and introduced them to Indian farms.
- Swaminathan worked hard to convince political leadership to import 18,000 tonnes of seeds of high-yielding dwarf wheat varieties, Lerma Rojo and Sonora-64, from Mexico. This was the biggest seed shipment in history at that time. The seeds had to be indigenised to local conditions.
- With Kalyan Sona and Sonalika, the new indigenised wheat varieties, India changed its agriculture paradigm under Swaminathan's leadership. It was so inspiring that many people in the country, including me, named their children after these wheat varieties.





- When he introduced them in Indian Agricultural Research Institute (IARI) trial fields in 1963 and later sowed two varieties, Sonora and Lerma Rojo, in Jaunti village near Delhi, he seeded a revolution.
- India's food grain production rose from 95 metric tonnes in 1967-68 to 108.4 metric tonnes by1970-71. It has grown further since, to an estimated 330 million tonnes in 2022-23. That made the difference between starvation and food security for a nation.



 Worked with agriculture ministers including C Subramaniam and Jagjivan Ram during 1960s and 70s for the success of the 'Green Revolution,' an initiative that paved the way for exponential rise in productivity of wheat and rice through adaptation of chemical-biological technology.

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### **Honors & Awards**

- Swaminathan, is known as the "Father of Economic Ecology" by the United Nations Environment Programme.
- He was named one of the **20 most influential Asians of the 20th century** by Time magazine.
- For developing and spearheading the introduction of high-yielding wheat and rice varieties into India, he was awarded the first World Food Prize in 1987 following which he set up the **MS Swaminathan Research Foundation in Chennai.**



- Swaminathan was also awarded with Ramon Magsaysay Award in 1971 and the Albert Einstein World Science Award in 1986.
- He had also been conferred with the Padma Shri, Padma Bhushan and the Padma Vibhushan. He is also the recipient of the H K Firodia award, the Lal Bahadur Shastri National Award and the Indira Gandhi Prize.

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# **Administrative Positions**

- The Indian agriculturalist had also held administrative positions in various agricultural research laboratories.
- He served as the **Director General** of Indian Council of Agricultural Research and later International Rice Research Institute.
- He also served as the **Principal** ecretary of the ministry of agriculture in 1979.
- In 1988, Swaminathan became the president of the International Union of the Conservation of Nature and Natural resources.
- In 2004, he was appointed as chair of the National Commission on Farmers.

### Conclusion

• M S Swaminathan Is No More. But His Legacy Remains With Every Student And Scientist Of Agriculture.

