# DR KRISHAN LAL CHADHA The Man Behind The Horticultural **Renaissance** Of India

name synonymous with Indian Horticulture, Dr K L Chadha spearheaded it towards "Golden Revolution". An icon and doven. Dr Chadha has steered policy, planning, research and development of horticulture in India for almost five decades. For his yeomen's service for bringing Horticulture Revolution in India, Dr Chadha was conferred the prestigious Padma Shri on March 22, 2012.

## **Early Life**

Krishan Lal Chadha was born on November 15, 1936 into a family of four brothers and five sisters, at Bhopalwala in Sialkot district, now in Pakistan. He did his primary education in Arva High School. Following Partition, he and his family made a harrowing journey from Sialkot to India. He remembers that uncertain journey vividly. "I had put on a pair of trousers and three shirts, one over the other, pocket of each one filled with peanuts, which served as my food for the journey."

Later in India, the family settled in Jalandhar, Punjab where he continued his education. His career choice as agriculture was his family's decision. "There was an engineering college situated 100 km from my hometown. But my family rejected the idea of me going to such a faraway place for education. Instead we chose an agriculture college located in Ludhiana, hardly 10 km from my home."

# **Agriculture Education**

Krishan Lal soon ended up with a job after completing his bachelor's degree in agriculture. He was appointed as a Fruit Research Assistant at the Regional Fruit



Research Station, Mashobra, Shimla. He was quick to realize that a Bachelor's degree alone was not enough for a productive career in the field of agriculture. His brief stint in the field of horticulture had set his heart on pursuing the same at post graduate level. However, the subject was not offered at M.Sc. level.

Fortunately, the Indian Council of Agricultural Research, in that very year offered a fellowship for a Master's degree in Horticulture for the first time. "Since the required infrastructure for M.Sc. course in Horticulture was not available at the college, I was obliged to approach Dr. K. Kirpal Singh, Fruit Specialist based in Patiala, who could provide necessary facilities and guide me towards this degree." Mr Chadha completed the M.Sc. programme in 1959, from Punjab University, Chandigarh. He was later selected in IARI for a Ph.D. degree in Horticulture under the Chairmanship of Dr. G.S. Randhawa. "This time, my family was not ready for my higher studies. It was my Professor who decided to take things under his control and told me "Banda ban ja" (Be a man). I was certainly amused by the sense of ownership of the Professor on me and I eventually enrolled in my Doctoral programme".



tête-à-tête with Anjana

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# **RESEARCH CONTRIBUTIONS**

tip and fruit drop in mango

Mango rootstocks for dwarfing and other economic traits Pineapple high density production, techniques, leaf/tissue

sampling Optimization and quantifying critical limits of nutrients for various fruit crops, resulting in a record three-fold increase in yield and reduction in the use of inorganic fertilizers



## **An Illustrious Career Path**

After his brieft stint at Shimla, he worked as Technical Assistant in ICAR Headquarters followed by Assistant Horticulturist at IARI. A year later, he was selected as Fruit Specialist in Punjab Agricultural University, an important position which encompassed today's Haryana and Himachal Pradesh states as well as covering six regional research centres.

He went on to serve on key national positions in ICAR - Senior Horticulturist

Establishment of the National Germplasm Repository on Mango Causes and management of citrus decline, malformation, black and Head, Division of Fruit Crops at Indian Institute of Horticultural Research (IIHR), Bengaluru; Project Co-ordinator (Fruits) and Head, Central Mango Research Station, Lucknow (now Central Institute for Subtropical Horticulture) and Director, IIHR. During the same time, he joined GOI as the first Horticulture Commissioner and concurrently, as Executive Director, National Horticulture Board, to lead the national research and horticultural development programmes in India.

In 1987, he was appointed as the first Deputy Director General (Horticulture) in the ICAR. His last official assignments were the positions of National Professorship 1997-2001, and Adjunct Professor in Horticulture at IARI 2011-2017, which provided him an opportunity to give guidance to 15 postgraduate students in horticulture in different universities.

He also had the opportunities for short term consultancies in several countries of Asia and the Middle East, namely, Afghanistan, Bangladesh, Bhutan, Egypt, Indonesia, Iran, Malaysia, Nepal, Philippines and Thailand. Dr Chadha was elected as Member and Vice Chairman, Board of Trustees of International Potato Centre (CIP), Lima, Peru, for seven years.

He has been President of 9 and Vice-President of 5 national agri-horti societies, besides chairing several important national committees. He has also served as Chairman, Indian Society of Agri-business Professionals and Chief Agriculture Advisor (EUREPGAP), FICCI.

#### **Stellar Contributions to** Horticulture

Dr KL Chadha's tenure as Member Secretary of VIII Five Year Plans, Chairman of Working group on Horticulture and Plantation Crops for X and XI Five Year Plans of the Planning Commission, Government of India (now NITI Aayog) was the turning point in the history of horticultural research and development programmes.

He obtained higher funding, built new institutions, and launched several hi-tech programmes. The annual grant for national horticultural development used to be a meagre Rs. 25 crores in VII Five Year



Plan. He managed to raise it to a level of Rs. 20,000 crores by XI Five Year Plan. For the first time the horticultural sector witnessed a glaring impact on nutritional security, employment generation, foreign exchange earnings, improving incomes of small farmers and so on. Micro-irrigation, high-density planting, rootstocks, micropropagation, and hybrid vegetable seeds

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became the hi-tech face of horticulture across the country.

He contributed substantially to the formulation of the flagship development programme - National Horticulture Mission. The Mango Research Station that he had established is now upgraded as the Central Institute for Subtropical Horticulture. Another significant contribution of Dr Chadha was the development of IIHR into a world class horticultural facility for research and education.

As a Coordinator, he set up a Centre of Excellence in tropical horticulture at the institute, which provided an opportunity to upgrade research infrastructure and manpower to undertake research and teaching at postgraduate level through exchange of eminent scientists from USA, Italy and Australia with corresponding research workers from the IIHR. The first National Curriculum for Postgraduate education in horticulture was also designed by him. He was also instrumental in setting up





# AWARDS AND RECOGNITION

- Four fellowships, including those from the International Society for Horticulture Science (ISHS) (2014) and NAAS, New Delhi (1992)
- Three D.Sc. (Agri) Honoris Causa degrees by the State Agricultural Universities, at Kanpur, Uttar Pradesh, Samastipur, Pusa, Bihar and Bhubaneswar, Odisha during 1995, 2008, 2009, respectively
- Krishi Shiromani Samman (Mahindra & Mahindra Pvt. Ltd., 2014)
- National Agriculture Leadership Award (Agri Today, 2008)
- HSI-Sivashakthi Lifetime Achievement Award (2007)
- Dr B.P. Pal Memorial Award (apex award of NAAS for the best agricultural scientist)
- S.K. Mitra Memorial Award (AIFPA, 1998)
- M.H. Marigowda Award (1996)
- Om Prakash Bhasin Award in Life Sciences (1992)
- Borlaugh Award (1984)









nine National Research Centers (NRCs) on specific crops. He is also credited for the nationwide introduction and promotion of oilpalm plantation. In the capacity of Executive Director, National Horticulture Board, GOI, Dr Chadha launched the first national market information scheme (MIS) on perishable commodities.

## **A Prolific Writer**

Dr K L Chadha has authored/edited 40 books and bulletins, contributed 40 chapters in books, published 135 research papers, and about 200 popular articles. He has compiled and published Advances in Horticulture, the milestone compilation of research work in Indian horticulture covering more than 9,410 pages in 13 volumes that continues to be a source of reference to researchers and postgraduate students. His other book Handbook of Horticulture is a signature publication that is the unequivocal source for horticulture information in the country for students, young researchers and farmers. 'Agriculture and Environment, authored by Dr Chadha and Dr. M.S. Swaminathan, is another important book.

Now settled in New Delhi, Dr Chadha had a long and fruitful marriage of 50 years. His wife, Mrs. Sunita Chadha, passed away in 2015. His son, Mr. Mohit Chadha is working as the Chief Manager, ICICI Bank and his daughter, Mrs. Mona Chadha is settled in New York, USA.

Dr Chadha has aptly utilized the resources and positions to shape policies, build institutions, launch national R&D programmes, disseminate knowledge and energize the system, opening up employment and entrepreneurship avenues in horticulture sector, which has benefited millions of farmer in the country.