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The detailed proposal for International Year of Millets along with background, nutrition, multiple uses, resilience to climate change, sustainable production systems, harvest and postharvest operations with broad objectives was developed by Dr Malhotra



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BIG Breakthroughs in Agriculture R&D

Dr. Suresh Kumar Malhotra is a competent R&D manager with more than 33 years' experience in Research and Development in agriculture. Presently, he is working as Director, ICAR-Directorate of Knowledge Management in Agriculture, New Delhi. He has served in top leadership positions in last 10 years, as Agriculture Commissioner, Horticulture Commissioner, Assistant Director General (Horticulture) in the Ministry of Agriculture and Farmers Welfare, with responsibilities for policy planning, administration of R&D activities in Agriculture. He has performed at management & operational level with governing bodies, Center & State Governments, Agriculture Universities & partner organizations for furtherance of agriculture. Few of prominent breakthroughs made by him are depicted here.

Evolved new varieties of seed spices crops

As a researcher, spices breeder, developed first nascent varieties of India such as Anise (NRCSS Ani 1), Celery (NRCSS A Cel 1), Nigella (NRCSS AN 1), Ajowan (AA 1 and 2) and Dill (NRCSS AD1 and AD 2) were developed & identified for release. First ever, Stem gall resistant variety of coriander ACr-1 is unique and has been widely accepted and proved with high degree of resistance across the country, now it is base for cultivation in the stem gall hot spot areas. Out of 15 varieties developed by him, the other prominent Six varieties varieties with specialty characters are ACr-1 Coriander, Ajmer Fgr3 and Fgr4 (high diosgenin), dill NRCSS AD 2 (high dillapiole, drought tolerant) and ajowan variety NRCSS AA 73 (high thymol 82%), Ajmer Nigella 1 have been notified in CVRC Gazette of India notification No. 2878 dated 6.12.2016 and the

Gazette of India Notification No. 1369 dated 7.4.21 for large scale cultivation in semi-arid regions of country. The large scale adoption of these varieties have led to increased production and productivity and income of the farmers in Rajasthan, Gujarat, Madhya Pradesh, Uttar Pradesh and Haryana.

Developed International CODEX standards of Okra, Brinjal, Potato & Datepalm: Provided leadership to four international projects as project leader and Chairman Shadow committee of India – FAO Codex Committee on Fresh Fruits and Vegetables (CCFFV) for developed harmonized quality standards for Okra, Brinjal, Potato, Datepalm. Dr. Malhotra, led the international electronic working group. The standards developed by him included information on minimum provisions concerning quality & maturity requirements; provisions concerning sizing and quality tolerance limits for defects; provisions concerning presentations such as uniformity and packaging; provisions concerning marking or labelling, consumer packaging, non-retail containers, food additives, contaminants and hygiene for international trade. These standards were discussed under his chairmanship at FAO-WHO 18th CCFFV (Phuket Thailand 24-28 Feb 2014) for okra, 19th CCFFV (Ixtapa, Mexico 5-9 Oct 2015) for aubergin, 20th CCFFV (Kampala, Uganda 2-6 Oct 2017) for Potato and CCFFV (Monterrey, Mexico 7-11 Oct 2019 & 25 April to 4 May 2022 virtual) for Datepalm. All standards evolved by Dr. Malhotra have been accepted and approved by the Intergovernmental body jointly established by FAO and WHO i.e. Codex Alimentarius Commission to protect the health of the consumers and ensure fair practices in the international food trade. His leadership role brought India pride.

Initiator for International Year of Millets 2023

Dr. Malhotra is the key person who took the idea of initiation of proposal for International Year of Millet when he was nominated by GOI to attend Committee on Agriculture (COAG) meeting of FAO at Rome. He got the agenda approved for consideration for discussion in COAG. The detailed proposal on background, nutrition, multiple uses, resilience to climate change, sustainable production systems, harvest and postharvest operations with broad objectives set for International Year of Millets were developed by Dr. SK Malhotra, He took the lead role in presentation of IYOM proposal at FAO COAG (4 Oct 2018) and FAO Council (3 December 2018). He succeeded in convincing the house and finally UNGA declared the year 2023 as IYOM. He has succeeded in bringing prestige to nation for taking lead role globally for observance of this year. An ICAR tableaux on International Year of Millets 2023- Powerhouse of nutrients prepared in his guidance was showcased on 26th January 2023 at Kartavya Path was applauded. As a member of core committee, he is involved in discussions for planning and implementation of action plan for observance of IYOM.

Introduced Biostimulants regulatory system in the country

Dr. Malhotra introduced a new regulatory system for plant biostimulants a new category of crop inputs. As Agriculture Commissioner, he chaired the in-depth discussions after analysis of all facts, the recommendations were submitted that FCO provisions would be more appropriate to regulate biostimulants. Accordingly, gazette notification S.O. 882 (E) on 23 February was brought out to amend the Fertilizer (Control) Order, 1985. It was also established through this notification that “biostimulant” means a substance or microorganism or a combination of both whose primary function when applied to plants, seeds or rhizosphere is to stimulate physiological processes in plant and to enhance its nutrient uptake, growth, yield, nutrition efficiency, crop quality and tolerance to stress.

As per the proposed guidelines set under his guidance, biostimulants will have to be registered with FCO 1985 and should also be notified under “Schedule VI” before introducing the market. It was decided that proposal from manufacturers or importers, distributors will be evaluated by the assessment body, i.e. Central Biostimulant Committee (CBC) under the Chairmanship of Dr. Malhotra. With this landmark decision, India has proven to be a pioneer country in developing biostimulant regulation in an agile manner with well-defined criteria/definition, data requirement/ guidelines, and enforcement measures. This decision has spurred the Indian biostimulant market is assessed a CAGR of 16.49% to reach a total market size of US \$180.95 million by 2023, increasing from US \$71.23 million in 2017.

Making & Launching of New National Bee and Honey Mission

The call of the Hon’ble prime Minister to double farmers’ income in a farmers gathering on 17 September, 2017 at Amreli in Gujarat to take up honey farming for bringing Sweet Revolution in the country on the lines of White and green Revolution. The recommendations of a taskforce chaired by Dr. S.K. Malhotra, then Agriculture Commissioner, launched National Beekeeping and Honey Mission (NBHM) for overall promotion and development of scientific beekeeping to achieve the goal of ‘Sweet Revolution’. This mission promotes holistic growth of beekeeping industry for income and employment generation.

Concerted efforts through this mission, increased honey production (77000 MT, 2018-19 to 1,30,000 MT, 2022-23), whereas export of honey has also increased from 43000 MTs to 60000 MTs (2021-22), taking the revenue earned through export to more than 700 crores. Now India is among the world’s top five honey producers. Madhukranti portal was developed for online registration/traceability system for source of honey launched under his guidance. He has contributed for formation of 100 FPOs, 14 NAFED Honey Corners to provide market support. Credit goes to Dr. Malhotra for establishment of Integrated Beekeeping Development Centers (IBDCs) and three Regional Honey Testing Labs (IARI, New Delhi; IIHR, Bengaluru and IIVR, Varanasi) and 28 mini labs in the different agro-ecological regions.

New initiatives as Chairman Registration Committee of CIBRC

As Chairman brought speed in according registration to new efficient safe chemistry of pesticides for use in agriculture. Conducted 54 pesticide registration committee meetings and registered 32 new molecules of fungicides, nematicides, weedicides and pesticides. During his tenure bio pesticides and biocontrol agents got the boost and more than 20 such isolates got registration. Biopesticides led the market accounting for the largest share of over 56% in last few years and likely to expand further.

Banning of pesticides

There is process of evaluation of risk of the pesticides when used in long run to human health or to the environment time to time for banning or phasing out on the basis of level of risk and feedback. Accordingly, GOI constituted a high power expert committee under the Chairmanship of Dr. S.K. Malhotra, Agriculture Commissioner in the year 2017 for evaluation of 66 pesticides. Considering the recommendation of this committee, Govt. Gazette Notification published and implemented for banning and phasing out 18 pesticides. This was a landmark decision in the endeavor of protecting health of people, animals and environment.

As Chairman CFC

As Chairperson of Central Fertilizer Committee in last 6 years under Fertilizer Control Order 1985, took several decisions which were helpful in improving operative efficiency for fertilizer industry for introduction of new customized fertilizers, renewal of existing grades, addressing the problems of fertilizer industry both at regulatory and import level and specifications. Introduced 24 new grades of site specific customized fertilizers for chilli, maize, rice, sugarcane, cotton, oil palm, FCV tobacco for Karnataka, Tamil Nadu, Maharashtra, Andhra Pradesh. It was his landmark decision as Chair where Nano urea product – first nano input of country deliberated & cleared for registration based on the facts proving biosafety.

As Chairman Central Seed Certification Board

Guided for setting the seed certification system of country. Two big policy decisions were taken under his Chairmanship and were published as Indian Minimum Seed Certification Standards- Part II. (ISBN 9788171642694) and Indian seed certification working manual (ISBN-9789354450433) for setting the common harmonized seed certification procedure for whole countries. Both decisions have been accepted GOI and implemented uniformly in all 28 states. The committee under his chairmanship analysed the impact of BG cotton on soil microorganisms in India and after thorough examination report was submitted that BG cotton does not have adverse impact on soil microorganisms.

Real time information system for agriculture

Niti Ayog constituted a sub-committee under Chairmanship of Dr. S.K. Malhotra to work out Real Time Information System for assessment of energy requirement in Agriculture (2018-19). Report submitted to NitiAyog and system is in practice to work out energy requirement such as petrol, diesel, solar for irrigation and agriculture machinery in India. Accordingly, as Chair of another committee, a Real Time Information System for assessment of production of food grains, pulses and oil seeds (2018-19) was developed.

IndGap certification standards

As Chairman of the Technical Committee of Quality Council of India, drafted common minimum standards for IndGAP and bench marking has been successful with Global gap to set a control and compliance system of certification of crop production for traceability and environmental protection. It will help in enhancement of export, reputation in the international market and removal of Technical Barriers to Trade (TBTs). His efforts led the country to have our own certification system now called as IndGap.



The credit goes to Dr Malhotra for establishment of Integrated Beekeeping Development Centers (IBDCs); three Regional Honey Testing Labs (IARI, New Delhi; IIHR, Bengaluru and IIVR, Varanasi) and 28 mini labs in different agro-ecological regions

Record production of food grains

While serving at important leadership positions, he took many new initiatives, formulated and implemented new programs, policy and regulation proved as his land mark decisions. He revamped the National Food Security Mission Program which ensures the food security of the country. He successfully implemented Mission programs (with 8 sub-missions on rice, wheat, pulses, nutri-cereals, coarse cereals, oilseeds and commercial crops), in 28 states. The weekly weather committee regularly chaired by him make the country to take necessary steps of adoption of interventions to resolve the technical issues and prepositioning of inputs such as seeds, machinery, fertilizers, pesticides, biofertilizers, biopesticides, postharvest handling, storages. Therefore, country succeeded in achieving the ever highest record food grains increased from 252 to 323 million ton in 7 years. His concerted efforts made India self-sufficient in pulses production (27 million ton). As Agriculture Commissioner he worked out roadmap for brining self-sufficiency in pulses. He established 150 seed hubs for increasing availability of quality seeds and introduced seed minikit distribution, cluster frontline demonstrations, integrated nutrient management and pest management, targeting rice fallow areas for pulses. With concerted efforts pulses production has increased from 16 million ton (2016-17) to 27 million ton (2021-22) and country has reached to almost self-sufficiency.