Four Decades... Accomplishment of AICRP (Vegetable Crops)



All India Coordinated Research Project on Vegetable Crops ICAR - Indian Institute of Vegetable Research Varanasi -221 305



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FOREWORD

I am happy to learn that the Book on *"Four Decades... Accomplishment of AICRP (Vegetable Crops)*" is to be published wherein information of four decades on research journey of All India Coordinated Research Project (AICRP) on vegetable crops (VC) is embedded with vital recommendations.

If there is a high commodity that can exponentially grow in production through productivity (which in turn is largely technology-driven) the credit goes to vegetables. Today if the nation is celebrating an yield surpassing grain production (~260 million tons), 60-70% of that horticulture production can easily be attributed to vegetables. No other segment has effectively utilized the hybrid technology, water management, fertigation and other agronomic practices as effectively as olericulture.

The success in vegetable production, productivity and marketing is not basically farmer-driven as often vegetable cultivation is a sort of precision farming. The hardwork of scientists in ICAR institutes and SAUs could exploit the potential but the credit for translation of this potential goes to AICRP. This coordinated group is one of the largest AICRP in ICAR system encompassing nearly 70-80 vegetables whether it is high yield, quality, fertigation, pest and disease management and values addition, the, contribution of multilocation testing and evaluation has been invaluable. Unlike many of the AICRP, vegetable scientists have effectively interacted and introgressed the private sector in their day-to-day research through coordinated trials. It is often said that in the present scenario of the private sector emerging as major players in vegetables are focussed by the public sector is limited. Nothing can be further from the truth. While 8-10 vegetables are focussed by the private sector essentially through their hybrids, a vast array of less known, open pollinated vegetables, the foundation of nutritional security amongst the poor has to be addressed by the public sector. If this has to become a reality, multilocation testing and evaluation timportance.

I am confident that this publication shall be useful to all the stakeholders of the vegetables. I compliment Dr. B. Singh, Project Coordinator, AICRP (VC) for his work to bring out this publication.

N-K. Ulaw (N.K. Krishna Kumar)



डा. बिजेन्द्र सिंह परियोजना समन्वयक

Dr. B. Singh Project Coordinator अखिल भारतीय समन्वित अनुसंधान परियोजना (सब्जी फसल) भारतीय सब्जी अनुसंधान संस्थान पो. बैग नं.-01, पोस्ट आफिस- जक्खिनी शाहंशाहपुर, वाराणसी-221 305 (यू.पी.) All India Coordinated Research Project on Vegetable Crops

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PREFACE

Vegetable is considered one of the most important commodities in agriculture, which occupies about 9.2 million hectare area with total production of 162 million tons, having a productivity of 17.6 tons per hectare. An impressive growth has been recorded in vegetable production since independence, which was merely 5.8 tons per hectare. However, there is a need to increase the vegetable productivity to meet the increasing demand of the growing population. Challenges of shrinking land and water resources with a threat of climate change need an effective support in terms of human resources *vis-à-vis* financial support for the development of technologies. Development of vegetable hybrids embedded with gene for higher yield and resistance to biotic/abiotic stresses; production and protection technologies for mitigating the problematic soil, use of less water and nutrient and safe management of pests and diseases, reduction in post harvest losses and value addition are need of the hour.

The All India Coordinated Research Project on Vegetable Crops (AICRP-VC) was started during the fourth fiveyear plan in 1970-71, to provide a national network for multi-location testing of the vegetable technologies developed by various institutes and universities. Presently, the AICRP (VC) is running at 29 centres, 25 voluntary centres and more than 30 private seed companies across the country. In past four decades, AICRP (VC) has made significant contribution in terms of high yielding varieties and hybrids identified for cultivation in various agro-climatic zones of the country. Apart from varieties and hybrids, a number of production and protection technologies have also been identified. These efforts have contributed a lot in enhancing the country's vegetable production.

The All India Coordinated Research Project on Vegetable Crops (AICRP-VC) is considered one of the most unique research systems in the country which provides a platform for the vegetable scientists to discuss the emerging issues of vegetable research across the country. To address the various issues, AICRP (VC) since its inception in 1971 has organized 32 group meetings/ workshops of vegetable workers. This effort has proved very much impressive in streamlining the country's vegetable research programme.

Keeping above facts in view, it was decided to bring a publication on "Four Decades... Accomplishment of AICRP (Vegetable Crops)". This document is embedded with important recommendations made in every workshop mentioning the varieties and hybrids, production and protection technologies etc. In its introductory part, information about vegetable agro climatic zones, AICRP Centres, germplasm resources has also been given.

I express my deep sense of gratitude and reverence to Dr. S. Ayyappan, Secretary DARE & DG, ICAR for providing critical inputs, suggestions and support to compile this document. I owe my indebtedness to Dr. N.K. Krishna Kumar, D.D.G. (Horticulture) ICAR, who gave all possible supports and guidelines. I am also thankful to Dr. S. K. Malhotra, ADG (Hort.), ICAR, New Delhi for his critical remarks and guidance. I am thankful to all previous Project Directors/ Coordinators of AICRP (VC) and dedicated scientists for their significant contribution towards strengthening this programme. I place on record my appreciation to Dr. P.S. Naik, Director, IIVR, Varanasi for his constant help and support rendered during preparation of this valuable document. I express my thanks to AICRP team for compiling the information and achievements in present form.

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