

## Preface

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The Indian Society of Agricultural Statistics was founded on January 03, 1947 to provide a platform for disseminating research in Agricultural Statistics and also to establish its importance in research in agricultural sciences. The Society has had the proud privilege of having late Hon'ble Dr. Rajendra Prasad, the then Union Minister of Agriculture as the founder President of the Society. He continued to preside over the activities of the Society for 16 years even after becoming the, President of Republic of India. The Society benefited immensely by his wisdom and guidance and kept gaining strength and growing in size and stature. The Society had notable personalities and high dignitaries as its Presidents in the past and Dr. Mangala Rai, President, National Academy of Agricultural Sciences; New Delhi is its present President.

The Society was nurtured to cover new horizons in time by the legendary Indian Statisticians, like Late Dr. P.V. Sukhatme, Late Dr. V.G. Panse, Late Dr. G.R. Seth, Late Dr. Daroga Singh, and Dr. Prem Narain. The Society brings out the Journal of the Indian Society of Agricultural Statistics which holds the unique distinction of publishing research articles both in basic as well as innovative research in Agricultural Statistics with applications in agricultural sciences so as to meet challenges in emerging areas. Of late, the society also initiated publications of research articles in computer applications. The present issue is the first special issue exclusively for computer applications in agricultural research. We would like to dedicate the issue to John McCarthy (September 4, 1927 – October 24, 2011), an American cognitive scientist who is being referred as Father of Artificial Intelligence. The Journal is being reviewed by the American Mathematical Society under the Mathematical Reviews and Zentralblatt MATH, Germany. It is available online at [www.isas.org.in/jisas/](http://www.isas.org.in/jisas/) and full papers are downloadable free of cost.

For this special issue on Artificial Intelligence (AI) in agriculture active researchers working in NARS or outside were requested to share their research findings and submit their articles for publication. The response was over whelming. The papers received for possible publication were thoroughly reviewed. After the review process, thirteen papers were accepted for publication and are being published in this special volume. Five papers report applications of Artificial Neural Networks, Four papers in linguistic approaches, one each in clustering, genetic algorithm, decision tree and expert system. Over all, it is a good showcase of present state of AI based research and its applications in agriculture. However, it is a beginning of AI in Indian NARS. There is still a long and challenging road ahead.

We would like to express our sincere thanks to all the authors for responding to our request. The reviewers contributed significantly in the review process by reviewing the manuscripts. We express our deep sense of gratitude to all the contributors and reviewers for their unflinching support in bringing out this Special Issue in time.

We would like to sincerely thank Prof. P.K. Malhotra, Division of Computer Applications, IASRI for his expert guidance throughout the journey of this special issue. We would like to place on record our appreciation towards Dr. V.K. Gupta, ICAR National Professor and Chair Editor, Journal of the Indian Society of Agricultural Statistics for his unbounded interest and support which made this Special Issue a reality. The help received from Dr. V.K. Bhatia, Secretary, ISAS, is gratefully acknowledged. We are also indebted to the Secretariat of the Society for their dedicated and devoted efforts in bringing out the Special Issue.

### **Guest Editors**

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