Editorial

It gives me unbounded pleasure to release the special issue entitled "Agricultural Environmental Health: Epidemiology, Toxicology and Related Topics" of the Journal of the Indian Society of Agricultural Statistics. The Guest Editors for the purpose were Dr. Shyamal D Peddada, Dr. David M Umbach, Dr. Saumyadipta Pyne, Dr. VK Bhatia and Dr. Rajender Parsad. I am extremely happy to mention that the Guest Editors have done a brilliant work in bringing out this special issue. This special issue has opened new horizons for the Journal to enter into newer areas of agricultural research, particularly focussing on the health of the farming community. I am convinced that this issue will attract many more researchers to contribute to this newer area of research through their regular publications. I am also confident that the National Agricultural Research System would benefit immensely with this special issue.

The contributions made by the Guest Editors in getting the research papers from authors, getting these reviewed and finally accepted for publication have been monumental. The idea of getting a discussion paper written by Professor PK Sen has been a brilliant one.

The idea of bringing out this special issue was conceptualised in a small meeting held at IASRI, New Delhi, with Dr. Saumyadipta Pyne at the behest of Dr. Shyamal D Peddada. Dr. Pyne, who is passionate about this important area of public health in developed as well as developing countries, showed keen interest in this issue as he strongly believes in the timely need for a concerted effort cutting across multiple disciplines of statistics, economics, agriculture, environment, health and epidemiology to jointly address the various inter-connected challenges covered in the articles.

Having said all this, I do not intend to undermine the efforts of the other Guest Editors who were equally enthusiastic about this important research area. All the Guest Editors need to be complimented for their luminous efforts. I would also like to take this opportunity to thank profusely all the authors who have contributed to this special issue. The anonymous reviewers need special thanks for devoting their time in reviewing the papers and giving some very useful suggestions that helped in improving the contents and the presentation of the papers. This special issue has been possible because of their support and help. The efforts made by the Secretarial staff of the Society are also commendable.

Since this special issue of the Journal is focussed on environmental health, there are likely to be some critical comments from the authors. The Indian Society of Agricultural Statistics, the Journal of the Indian Society of Agricultural Statistics and the Editorial Board including the Guest Editors are in no way responsible for these critical comments, if any. The views expressed are solely those of the authors, and the authors themselves will be responsible for the views expressed.

I expect the scientific community to benefit immensely with this special issue. Any suggestions for future work in this direction would be welcome.

VK Gupta Chair Editor

Preface

The Indian Society of Agricultural Statistics was founded on 03 January 1947 to provide a platform for disseminating research in Agricultural Statistics and also to promote research in agricultural sciences by intertwining statistical sciences with agricultural sciences. The Society has had the privilege of having the Hon'ble Dr. Rajendra Prasad, the then Union Minister of Agriculture, as its founding President. Hon'ble Dr. Rajendra Prasad presided over the activities of the Society for its first 16 years, even after becoming the President of Republic of India. The Society benefitted immensely from his wisdom and guidance and ever since then has continued to grow in size and stature. Dr. S Ayyappan, Secretary, Department of Agricultural Research and Education and Director General, Indian Council of Agricultural Research, is the current President of the Society. Notable members of the Society have included eminent Indian Statisticians Dr. PV Sukhatme, Dr. VG Panse, Dr. GR Seth, Dr. Daroga Singh and Dr. Prem Narain. The Society publishes a Journal called "Journal of the Indian Society of Agricultural Statistics", which contains articles dedicated to fundamental research in Agricultural Statistics as well as articles with innovative applications in agricultural sciences, aimed at meeting research challenges in emerging areas. Papers published in the Journal are reviewed by the American Mathematical Society under the Mathematical Reviews and by Zentralblatt MATH, Germany, Current Index to Statistics and CAB Abstracts. The Journal is available online at www.isas.org.in/jisas/ and all papers can be downloaded in full free of cost.

This special issue on Agricultural Environmental Health: Epidemiology, Toxicology and Related Issues contains a discussion paper by a distinguished statistician Professor Pranab K Sen, University of North Carolina at Chapel Hill, with discussions from Dr. Prem Narain, Dr. Shyamal D Peddada, Dr. Saumyadipta Pyne, Dr. Bikas Sinha, Dr. Ratan Dasgupta and Dr. GVS Murthy. The discussions are followed by a rejoinder from Dr. Pranab K Sen. The issue also contains invited research papers contributed by several experts in Epoidemiology, Toxicology and related fields with reference to Environmental health. We are thankful to all the authors who kindly accepted our invitation and contributed their research to this special issue. We hope that this issue would stimulate further research and discussions on this very important area of public health. As noted in various papers published in this special issue there are several challenges to overcome including public awareness of the impact of environment on human health. As new technologies are developed to assess the effects of environment on public health (including those resulting from modern agricultural practices), new statistical designs and methods of analyses are needed. This presents several challenges as well as opportunities for statisticians to work on.

We thank profusely all the contributors and reviewers for their unflinching support in meeting the deadlines that were necessary in order to bring out this special issue in time. We would like to express our highest appreciation to Professor VK Gupta, ICAR National Professor and Chair Editor, JISAS, for his undaunted support in making this special issue a reality. He has been involved in this project from its conception to its completion. His contributions towards this project have been monumental and it would not have been possible to finish this project without his indulgence at every step. The support received from Dr. Sat Gupta, Professor of Statistics, University of North Carolina at Greensboro has been enormous and we would like to express our gratitude and thankfulness to him for his guidance and help in identifying authors for the special issue. We gratefully acknowledge the dedicated efforts of the Secretariat of the Society in helping the publication of this issue on schedule. We would also like to thank our respective organizations/Institutes/Universities for allowing to work on this important project.

Guest Editors
Shyamal D Peddada
Saumyadipta Pyne
David M Umbach
VK Bhatia
Rajender Parsad