AGRICULTURAL ECONOMICS RESEARCH REVIEW

In this issue......

- Computable General Equilibrium Modelling - A Case Study of Philippines
- Marketing of Aromatic Rice
- Marketing Losses: A Case Study of Banana in Karnataka
- Declining Profitability of Black Pepper in India
- Pest Management Technologies for Sustainable Cotton Production
- Impact of Changes in Management Regime on Fisheries
- Performance of Contract Farming of Cottonseed in Haryana
- Post-harvest Losses in Food Grains in India
- Technical Efficiency of Wheat Cultivation in Haryana
- Economic Viability of Henna in Semi-arid Rajasthan
- Optimising Farm Plans in Different Farming Systems
- Sugar Industry in Uttar Pradesh
- Price-Quality Relationship of Cashew Nut in Goa
WITH BEST COMPLIMENTS FROM

NATIONAL BANK FOR AGRICULTURAL AND RURAL DEVELOPMENT

MISSION: To Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives

Major Activities
- **Credit Functions**: Refinance for production credit (short-term) and investment credit (medium- and long-term) to eligible Banks and financing institutions
- **Development Functions**: To reinforce the credit functions and make credit more productive, development activities are being undertaken through
  - Research and Development Fund
  - Soft Loan Assistance Fund
  - Agricultural and Rural Enterprises Incubation Fund
  - Rural Promotion Corpus Fund
  - Credit and Financial Services Fund
  - Watershed Development Fund
  - Kisan Credit Cards & Linking SHGs to credit institutions
  - Rural Infrastructure Development Fund
- **Supervisory Functions**: NABARD shares with RBI certain regulatory and supervisory functions in respect of Cooperative Banks and RRBs.
- We also provide comprehensive consultancy services relating to Agriculture & Rural Development (nabcons@vsnl.net)

NABARD
Head Office - Plot No. C-24, G-Block
Bandra-Kurla Complex
Post Box No. 8121
Bandra (E), Mumbai - 400 051
visit us at : www.nabard.org

Two decades of committed service to rural prosperity
## AGRICULTURAL ECONOMICS RESEARCH REVIEW

### EDITORIAL BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Address/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. K.C. Hiremath</td>
<td>Chief Editor</td>
<td>Former Professor, UAS, Dharwad XI Cross Road, Nirmal Nagar Dharwad - 580 003 (Karnataka)</td>
</tr>
<tr>
<td>Dr. P. Kumar</td>
<td>Managing Editor</td>
<td>Former Professor Division of Agricultural Economics Indian Agricultural Research Institute New Delhi - 110 012</td>
</tr>
<tr>
<td>Dr. (Mrs.) Anuva Saikia</td>
<td>Member</td>
<td>Professor Department of Agricultural Economics Assam Agricultural University Jorhat - 785 013 (Assam)</td>
</tr>
<tr>
<td>Dr. U.K. Pandey</td>
<td>Member</td>
<td>Professor CCS Haryana Agricultural University Hisar - 125 004 (Haryana)</td>
</tr>
<tr>
<td>Dr. D.K. Marothia</td>
<td>Member</td>
<td>Professor KIIT School of Rural Management Bhubaneswar - 751 024 (Orissa)</td>
</tr>
<tr>
<td>Dr. P.G. Chengappa</td>
<td>Member</td>
<td>Vice Chancellor University of Agricultural Sciences Bangalore - 560 024 (Karnataka)</td>
</tr>
<tr>
<td>Dr. R.L. Shiyani</td>
<td>Member</td>
<td>Professor Gujarat Agricultural University Junagadh - 362 001 (Gujarat)</td>
</tr>
<tr>
<td>Dr. Suresh Pal</td>
<td>Member</td>
<td>Principal Scientist National Centre for Agricultural Economics and Policy Research (NCAP) Pusa Campus, New Delhi - 110 012</td>
</tr>
<tr>
<td>Dr. R.C. Agrawal</td>
<td>Member</td>
<td>Former Professor Weisswasserweg 47 D-12205 Berlin (Germany)</td>
</tr>
<tr>
<td>Dr. Manik Bose</td>
<td>Member</td>
<td>Scientist WorldFish Centre Penang (Malaysia)</td>
</tr>
</tbody>
</table>


# AGRICULTURAL ECONOMICS RESEARCH ASSOCIATION (INDIA)

## OFFICE BEARERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. S.S. Acharya</td>
<td>Former Director</td>
<td>Institute of Development Studies (IDS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 B, Jhalana Institutional Area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jaipur – 302 004</td>
</tr>
<tr>
<td>Dr. Mruthyunjaya</td>
<td>National Director, NAIP</td>
<td>Krishi Anusandhan Bhawan II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pusa Campus, New Delhi – 110 012</td>
</tr>
<tr>
<td>Dr. V.P.S. Arora</td>
<td>Dean, CABM, G.B. Pant University of</td>
<td>Agriculture and Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pantnagar – 263 145 (Uttaranchal)</td>
</tr>
<tr>
<td>Dr. Karam Singh</td>
<td>Former Director, AERC, PAU</td>
<td>42-G, BRS Nagar, Ludhiana-141 004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Punjab)</td>
</tr>
<tr>
<td>Dr. P.K. Joshi</td>
<td>Director</td>
<td>National Centre for Agricultural Economics and Policy Research (NCAP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pusa Campus, New Delhi – 110 012</td>
</tr>
<tr>
<td>Dr. P. Kumar</td>
<td>Former Professor</td>
<td>Division of Agricultural Economics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARI, New Delhi – 110 012</td>
</tr>
<tr>
<td>Dr. B.C. Barah</td>
<td>Principal Scientist</td>
<td>National Centre for Agricultural Economics and Policy Research (NCAP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pusa Campus, New Delhi – 110 012</td>
</tr>
<tr>
<td>Dr. N.P. Singh</td>
<td>Scientist, Division of Agricultural Economics</td>
<td>IARI, New Delhi – 110 012</td>
</tr>
<tr>
<td>Dr. C.A. Rama Rao</td>
<td>Central Research Institute for Dryland</td>
<td>Agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santosh Nagar, Hyderabad – 500 059</td>
</tr>
<tr>
<td>Dr. Mundinamani</td>
<td>University of Agricultural Sciences</td>
<td>Dharwad – 580 005 (Karnataka)</td>
</tr>
<tr>
<td>Dr. R.S. Tripathi</td>
<td>Central Soil Salinity Research Institute</td>
<td>Karnal – 132 001 (Haryana)</td>
</tr>
<tr>
<td>Dr. Raka Saxena</td>
<td>College of Agri-Business Management</td>
<td>G.B. Pant University of Agriculture &amp; Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pantnagar – 263 145 (Uttaranchal)</td>
</tr>
<tr>
<td>Dr. A. Suresh</td>
<td>Central Sheep and Wool Research Institute</td>
<td>Avikanagar – 304 501 (Rajasthan)</td>
</tr>
<tr>
<td>Dr. S.N. Tilekar</td>
<td>Department of Agricultural Economics</td>
<td>M.P.K.V., Rahuri – 413 722 (Maharashtra)</td>
</tr>
<tr>
<td>Dr. R.K.P. Singh</td>
<td>Department of Agricultural Economics</td>
<td>Rajendra Agricultural University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Samastipur – 848 125 (Bihar)</td>
</tr>
<tr>
<td>Dr. S. Mandal</td>
<td>ICAR Research Complex for NEH Region</td>
<td>Umroi Road, Umiam, Barapani – 793 103 (Meghalaya)</td>
</tr>
</tbody>
</table>

Member - South: Dr. Mundinamani (University of Agricultural Sciences, Dharwad – 580 005 (Karnataka))

Member - North: Dr. Raka Saxena (College of Agri-Business Management, G.B. Pant University of Agriculture & Technology, Pantnagar – 263 145 (Uttaranchal))

Member - West: Dr. A. Suresh (Central Sheep and Wool Research Institute, Avikanagar – 304 501 (Rajasthan))

Member - East: Dr. S. Mandal (ICAR Research Complex for NEH Region, Umroi Road, Umiam, Barapani – 793 103 (Meghalaya))
CONTENTS

Research Articles

State-of-the-Art in Regional Computable General Equilibrium Modelling with a Case Study of the Philippines
U-Primo E. Rodriguez

Economics and Marketing of Aromatic Rice: A Case Study of Chhattisgarh

Marketing Losses and Their Impact on Marketing Margins: A Case Study of Banana in Karnataka
D. Sreenivasa Murthy, T.M. Gajanana, M. Sudha and V. Dakshinamoorthy

Volatile Price and Declining Profitability of Black Pepper in India: Disquieting Future
M. Hema, Ranjit Kumar and N.P. Singh

Economic Evaluation of Pest Management Technologies for Sustainable Cotton Production in Punjab
Sukhpal Singh and Satwinder Singh

Impact of Changes in Management Regime on Fisheries: A Temporal Case Study of Dhir Beel in Assam
N. K. Barik, B. K. Gorai and M. Choudhury

Mode of Operation and Performance of Contract Farming of Cottonseed in Haryana
Shiv Kumar, Devender, Kavita Chakrvarty, Puran Chand and J.P.S. Dabas

Contd....
Contents contd…. 

Economic Analysis of Post-harvest Losses in Food Grains in India: A Case Study of Karnataka
H. Basavaraja, S.B. Mahajanashetti and Naveen C. Udagatti

A Study on Technical Efficiency of Wheat Cultivation in Haryana
Surender Singh

Research Notes
Economic Viability of Henna in Semi-arid Rajasthan
Khem Chand and B.L. Jangid

Optimising Farm Plans in Different Farming Systems
P. Nedunchezhiyan and M. Thirunavukkarasu

Sugar Industry in Uttar Pradesh: Efficiency Still Holds the Key
N.P. Singh, Paramatma Singh and R.P. Singh

Grade Development and Study of Price-Quality Relationship of Cashew Nut in North District of Goa
Naik Amita Namdeo, K. Koulagi and L.K. Wader

Erratum

Guidelines for Submission of Papers/Abstracts
Statement of Ownership and other Particulars
AGRICULTURAL ECONOMICS RESEARCH REVIEW
Form IV (See Rule 8)

Place of Publication : New Delhi

Periodicity of Publication : Half Yearly

Printer’s Name : Venus Printers & Publishers
B62/8, Naraina Industrial Area
Phase II, New Delhi - 110028

Publisher’s Name : Dr. P.K. Joshi
Nationality : Indian
Address : National Centre for Agricultural Economics and Policy Research
New Delhi - 110012

Editor’s Name : Prof. K.C. Hiremath
Nationality : Indian
Address : XI Cross Road, Nirmal Nagar
Dharwad – 580 003 (Karnataka)

Name and Address of Individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital : Agricultural Economics Research Association (India)
Division of Agricultural Economics IARI, New Delhi - 110012
Email: aeraindia@gmail.com

I, Dr. P.K. Joshi, hereby declare that the particulars given above are true to the best of my knowledge and belief.

(Sd/- P.K. Joshi)
Signature of Publisher
Agricultural Economics Research Review

Guidelines for Submission of Papers/Abstracts

1. The journal publishes research articles, review articles, research notes and communications in basic and applied research on economic aspects of agriculture and rural development. To encourage the young researchers, abstracts of M.Sc. and Ph.D. theses in agricultural economics are also published.

2. The journal is managed by the Agricultural Economics Research Association (India). The authors submitting papers to Agricultural Economics Research Review should generally be members of this Association.

3. Three copies of manuscript typed in double space should be sent to the Editor, Agricultural Economics Research Review, Division of Agricultural Economics, IARI, New Delhi 110012 and a soft copy to aeraindia@gmail.com simultaneously. All articles must include an abstract in about 100-150 words.

4. Authors should include the complete source of research article, like project, along with sponsor, M.Sc./Ph.D. thesis, etc. They should mention the title of the Project/Thesis also.

5. The length of papers should not be more than 20 (double space) typed pages, including tables, diagrams and appendices. Abstracts of recent M.Sc. theses should not exceed one typed page and those of Ph.D. theses, two typed pages. The authors must mention at the top of the abstracts the degree for which the thesis was submitted and the year of award, like M.Sc. (2006), Ph.D. (2006). The name of ‘major advisor’ should also be included.

6. Name(s) and affiliation(s) of the author(s) with e-mail address(es) should be provided on a separate page along with the title of the article.

7. Only essential mathematical notations may be used. All statistical formulae should be neatly typed. Footnotes should be numbered consecutively in plain arabic superscripts.

8. Only cited works should be included in reference list. The citation of references should be in the following order: author(s) name(s); year; title of article; name of journal; volume; number; and pages. Please follow the style of citations as in the latest issue of this journal. Papers not submitted in the standard format, as suggested above will not be considered for publication.
9. Papers submitted for publication should be exclusively written for this journal and should not have been published or sent for publication elsewhere.

10. Membership Tariffs/Subscription to AERR* (*Effective from January, 2007*)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Print copy</th>
<th>E-publication</th>
<th>Print + Online (E-publication)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Membership</td>
<td>Rs 1000/-</td>
<td>Rs 1000/-</td>
<td>Rs 1500/-</td>
</tr>
<tr>
<td>Individual Membership</td>
<td>Rs 300/-</td>
<td>Rs 300/-</td>
<td>Rs 450/-</td>
</tr>
<tr>
<td>Student Membership</td>
<td>Rs 250/-</td>
<td>Rs 250/-</td>
<td>Rs 375/-</td>
</tr>
<tr>
<td>Life Membership</td>
<td>Rs 3000/-</td>
<td>Rs 3000/-</td>
<td>Rs 4500/-</td>
</tr>
<tr>
<td><strong>Overseas</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Membership</td>
<td>US $ 100</td>
<td>US $ 100</td>
<td>US $ 200</td>
</tr>
<tr>
<td>Individual Membership</td>
<td>US $ 50</td>
<td>US $ 50</td>
<td>US $ 100</td>
</tr>
<tr>
<td>Life Membership</td>
<td>US $ 500</td>
<td>US $ 500</td>
<td>US $ 1000</td>
</tr>
</tbody>
</table>

* Payment should be made through Demand Draft payable to Treasurer, Agricultural Economics Research Association at New Delhi.

The annual subscription includes two regular issues of the journal and a Conference Number.

The journal Agricultural Economics Research Review is available online, please contact at the following addresses for on-line services:

(i) EBSCO Publishing
   Editorial Department
   10 Estes St., Ipswich, MA 01938-0590, USA
   E-mail: information@epnet.com
   Web: www.epnet.com

(ii) Divan Enterprises
    B-9, Basement, Block-A
    Naraina Vihar, New Delhi 110 028, India
    http://www.indianjournals.com

Address for Correspondence:

Secretary/Joint Secretary
Agricultural Economics Research Association
National Centre for Agricultural Economics and Policy Research (NCAP)
Pusa Campus, New Delhi - 110 012
Email: aeraindia@gmail.com
Webpage: www.geocities.com/aeraindia