



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

---

## **Index to Indian Journal of Agricultural Economics, Vol. 69, 2014**

### **ARTICLES**

	No.	Page
Aggarwal, Shaily, Birthal, P.S., Negi, D.S., Kumar, S., Suresh A., Khan, Md. Tajuddin, How Sensitive is Indian Agriculture to Climate Change?	4	474
Alli, P., Bhattarai, M., Suresh, R. and Narayanamoorthy, A., Farm Mechanisation, MGNREGS and Labour Supply Nexus: A State-Wise Panel Data Analysis on Paddy and Wheat Crop	3	320
Baba, S.H., Wani, S.A., Shaheen, F.A., Naqash, Farheen and Manzoor, Muzaffer, Value Chains for Livestock Products in Himalayan Mountains: Studies from Jammu and Kashmir	3	280
Balasubramanian, R., Conference Keynote Paper on Agricultural Research and Extension in India: Reflection on the Reality and a Roadmap for Renaissance	1	14
Basu, Dipika and Nandi, Arun Kr., Farm Mechanisation and Rationality of Labour Use in Indian Agriculture: A Frontier Analysis of Cost of Cultivation Data	3	336
Bhattarai, M., Narayanamoorthy, A., Suresh, R. and Alli, P., Farm Mechanisation, MGNREGS and Labour Supply Nexus: A State-Wise Panel Data Analysis on Paddy and Wheat Crop	3	320
Bhaumik, Sankar Kumar and Dasgupta, Suranjana, Crop Diversification and Agricultural Growth in West Bengal	1	107
Bhogal, Shruti, Singh, Randeep and Singh, Sukhpal, Magnitude and Determinants of Indebtedness among Farmers in Punjab	2	243
Birthal, Pratap S., Rapporteur's Report on Livestock Marketing and Supply Chain Management of Livestock Products	3	432
Birthal, P.S., Negi, Digvijay S., Kumar, Shiv, Aggarwal, Shaily, Suresh A., Khan, Md. Tajuddin, How Sensitive is Indian Agriculture to Climate Change?	4	474
Chakrabarti, Saumya, Agriculture-Industry Relation and the Question of 'Home Market': Towards Closing a Century's Old Debate	2	183
Chaudhary, Khyali Ram, Kamble, Ankush Lala and Kumar, Shiv, Agricultural Growth and Economic Convergence in Indian Agriculture	2	211

Dadhich, C.L., Revisiting Rural Infrastructure Development Fund (RIDF) Scheme	1	142
Das, Goutam, Jain, D.K. and Pandit, Arun, Performance of Organised Animal Fairs of Rajasthan	3	290
Dasgupta, Suranjana and Bhaumik, Sankar Kumar, Crop Diversification and Agricultural Growth in West Bengal	1	107
Devi, P. Indira, Solomon, Sebin Sara and Jayasree, M.G., Green Technologies for Sustainable Agriculture: Policy Options Towards Farmer Adoption	3	414
Gandhi, Vasant P., Conference keynote paper on Growth and Transformation of the Agribusiness Sector: Drivers, Models and Challenges	1	44
Goyari, Phanindra, Irrigation Difference and Productivity Variations in Paddy Cultivation: Field Evidences from Udalguri District of Assam	1	89
Grover, D.K., Rapporteur's Report on Labour Scarcity in Agriculture and Mechanisation	3	438
Jain, D.K., Das, Goutam and Pandit, Arun, Performance of Organised Animal Fairs of Rajasthan	3	290
Jayasree, M.G., Solomon, Sebin Sara and Devi, P. Indira, Green Technologies for Sustainable Agriculture: Policy Options Towards Farmer Adoption	3	414
Kajale, Jayanti and Shroff, Sangeeta, Sugar Sector: Is it Sustained by Subsidies?	3	375
Kamble, Ankush Lala, Chaudhary, Khyali Ram and Kumar, Shiv, Agricultural Growth and Economic Convergence in Indian Agriculture	2	211
Khan, Md. Tajuddin, Birthal, P.S., Negi, Digvijay S., Kumar, Shiv, Aggarwal, Shaily, Suresh A., How Sensitive is Indian Agriculture to Climate Change?	4	474
Kumar, A. Ganesh, Rapporteur's Report on Subsidies in Agriculture and Their Implications on Trade and Environment	3	450
Kumar, Kamlesh, Nath, Tribhuvan, Singh, P.K. and Singh, Rakesh, Functioning of Livestock Markets and Buyers Perspectives on Voluntary versus Mandatory Disclosure of Information: Evidence from Cattle Markets in Uttar Pradesh	3	271
Kumar, S., Birthal, P.S., Negi, D.S., Aggarwal, Shaily, Suresh A., Khan, Md. Tajuddin, How Sensitive is Indian Agriculture to Climate Change?	4	474
Kumar, Shiv, Kamble, Ankush Lala and Chaudhary, Khyali Ram, Agricultural Growth and Economic Convergence in Indian Agriculture	2	211
Manzoor, Muzaffer, Shaheen, F.A., Baba, S.H., Naqash, Farheen and Wani, S.A., Value Chains for Livestock Products in Himalayan Mountains: Studies from Jammu and Kashmir	3	280

Nagaraj, N., Summaries of Group Discussion on Development of Dryland Agriculture: Technological, Institutional, Infrastructural and Policy Imperatives	1	75
Nandi, Arun Kr. and Basu, Dipika, Farm Mechanisation and Rationality of Labour Use in Indian Agriculture: A Frontier Analysis of Cost of Cultivation Data	3	336
Naqash, Farheen, Wani, S.A., Shaheen, F.A., Baba, S.H. and Manzoor, Muzaffer, Value Chains for Livestock Products in Himalayan Mountains: Studies from Jammu and Kashmir	3	280
Narayana, M.R., Economic Analysis of Leaf Rust Management by Chemical Controls: Evidence and Implications for Household Coffee Farmers in India	4	459
Narayanamoorthy, A., Bhattarai, M., Suresh, R. and Alli, P., Farm Mechanisation, MGNREGS and Labour Supply Nexus: A State-Wise Panel Data Analysis on Paddy and Wheat Crop	3	320
Nath, Tribhuvan, Kumar, Kamlesh, Singh, P.K. and Singh, Rakesh, Functioning of Livestock Markets and Buyers Perspectives on Voluntary versus Mandatory Disclosure of Information: Evidence from Cattle Markets in Uttar Pradesh	3	271
Negi, Digvijay S., Birthal, P.S., Kumar, Shiv, Aggarwal, Shaily, Suresh A., Khan, Md. Tajuddin, How Sensitive is Indian Agriculture to Climate Change?	4	474
Pandit, Arun, Jain, D.K. and Das, Goutam, Performance of Organised Animal Fairs of Rajasthan	3	290
Prasad, Y.E., Reddy, G.P., Reddy, A. Amarender and Rani, Usha, Competitiveness of Major Crops in Post-WTO Period in Andhra Pradesh	1	125
Rani, Usha, Reddy, G.P., Prasad, Y.E. and Reddy, A. Amarender, Competitiveness of Major Crops in Post-WTO Period in Andhra Pradesh	1	125
Reddy, A Amarender, Rani, Ch. Radhika and Reddy, G.P., Labour Scarcity and Farm Mechanisation: A Cross State Comparison	3	347
Reddy, A. Amarender, Reddy, G.P., Prasad, Y.E. and Rani, Usha, Competitiveness of Major Crops in Post-WTO Period in Andhra Pradesh	1	125
Reddy, G.P., Rani, Ch. Radhika and Reddy, A Amarender, Labour Scarcity and Farm Mechanisation: A Cross State Comparison	3	347
Reddy, G.P., Reddy, A. Amarender, Prasad, Y.E. and Rani, Usha, Competitiveness of Major Crops in Post-WTO Period in Andhra Pradesh	1	125
Sasmal, Joydeb, Foodgrains Production in India – How Serious is the Shortage of Water Supply for Future Growth	2	229

Shaheen, F.A., Wani, S.A., Baba, S.H., Naqash, Farheen and Manzoor, Muzaffer, Value Chains for Livestock Products in Himalayan Mountains: Studies from Jammu and Kashmir	3	280
Shroff, Sangeeta and Kajale, Jayanti, Sugar Sector: Is it Sustained by Subsidies?	3	375
Sidhu, R.S., Summaries of Group Discussion on Agribusiness/Exports Opportunities for Inclusive Growth	1	85
Singh, Karam., Presidential Address on Challenges of Food Security in India: Role of Food Policy and Technology delivered posthumously at the 73rd Annual Conference of ISAE held on December 18, 2013	1	5
Singh, O.P., Singh, Rakesh and <i>Singh, Manish Kumar</i> , Impact of Farm Sector Electricity Subsidy on Water Use Efficiency and Water Productivity in India	3	404
Singh, Rakesh, Nath, Tribhuvan, <i>Singh, P.K.</i> and Kumar, Kamlesh, Functioning of Livestock Markets and Buyers Perspectives on Voluntary versus Mandatory Disclosure of Information: Evidence from Cattle Markets in Uttar Pradesh	3	271
Singh, Rakesh, Singh, O.P. and Singh, Manish Kumar, Impact of Farm Sector Electricity Subsidy on Water Use Efficiency and Water Productivity in India	3	404
Singh, Sukhpal, Bhogal, Shruti and <i>Singh, Randeep</i> , Magnitude and Determinants of Indebtedness among Farmers in Punjab	2	243
Solomon, Sebin Sara, Devi, P. Indira and Jayasree, M.G., Green Technologies for Sustainable Agriculture: Policy Options Towards Farmer Adoption	3	414
Summaries of Papers on Livestock Marketing and Supply Management of Livestock Products	3	300
Summaries of Papers on Labour Scarcity in Agriculture and Mechanisation	3	359
Summaries of Papers on Subsidies in Agriculture and Their Implications on Trade and Environment	3	426
Suresh, A., Birthal, P.S., Negi, Digvijay S., Kumar, Shiv, Aggarwal, Shaily, Khan, Md. Tajuddin, How Sensitive is Indian Agriculture to Climate Change?	4	474
Suresh, R., Narayanamoorthy, A., Bhattarai, M. and Alli, P., Farm Mechanisation, MGNREGS and Labour Supply Nexus: A State-Wise Panel Data Analysis on Paddy and Wheat Crop	3	320
Tarapore, S.S., Dr. N.A. Mujumdar: In Memoriam	1	1
Wani, M.H., Summaries of Group Discussion on Agricultural Research and Extension in India: Achievements and Failures and Direction for the Future	1	81

Wani, S.A., Shaheen, F.A., Baba, S.H., Naqash, Farheen and Manzoor, Muzaffer, Value Chains for Livestock Products in Himalayan Mountains: Studies from Jammu and Kashmir 3 280

**RESEARCH NOTE**

Grover, D.K. and Upadhyay, Deepak, Changing Climate Pattern and Its Impact on Paddy Productivity in Ludhiana District in Punjab 1 150

## Journal of Educational Planning and Administration

*Editor: Jandhyala B.G. Tilak*

Volume XXVIII

Number 4

October 2014

### CONTENTS

Articles	Page
Simon Marginson: The New Empires of Knowledge in East Asia	325
Prasanta Basak and Sanchari Roy Mukherjee: Differential Literacy Attainment of the Blocks of Uttar Dinajpur District	345
Sam Hill and Thomas Chalaux: Improving Access and Quality in the Indian Education System	367
<b>Research Notes/Communications/Commentary</b>	
Bommaraju Sarangapani: Right to Education or Right to Graduation?	407
<b>Research Abstract</b>	
Sanjeev Kumar Jha: Deemed to be Universities and Private Universities as Private Institutions for Quality in Higher Education — A Comparative Study	415
<b>BOOK REVIEWS</b>	
Rachana Chakraborty: New Perspectives in the History of Indian Education (Parimala V. Rao); J.P. Dubey and P. Adinaraiyana Reddy: Literacy and Adult Education (A. Mathew and Jandhyala B.G. Tilak eds.); Gaurav Sinha: Measuring Innovations in Education (S. Vincent-Lancrin, K. Karkkainen et.al.); V. Sucharita: Ethnographies of Schooling in Contemporary India (Meenakshi Thapan ed.); Jandhyala B.G. Tilak: Higher Education and the State: Changing Relationships in Europe and East Asia (R. Goodman, K. Takehiko and J.Taylor, eds.)	423

#### Annual Subscription Rates

Individuals: ₹150/US \$ 60

Institutions: ₹350/US \$ 85

#### Advertisement Tariff

Full Page: ₹2000/US \$ 100

Half Page: ₹1100/US \$ 55



**National University of Educational Planning and Administration**

**17-B, Sri Aurobindo Marg, New Delhi 110016 (India)**

Phone: 91-11-26544819, 26544800; Fax: 91-11-26853041, 26865180

E-mail: Editorial: [jepa@nuepa.org](mailto:jepa@nuepa.org); Others: [publications@nuepa.org](mailto:publications@nuepa.org)

Website: <http://www.nuepa.org>

**Journal of Rural Development**  
**Editor and Chairman: Dr. M.V. Rao, Director General**

Vol. 33

October-December 2014

No. 4

**ARTICLES**

- |   |     |
|---|-----|
| 1. Determinants of Changes in Cropping Pattern in Kerala<br>- <i>N. Karunakaran</i>   | 367 |
| 2. Trends in Consumer Expenditure and Consumption Pattern of Milk –<br>Insights from NSS Data<br>- <i>T.N. Datta, Jignesh Shah, Ayush Kumar and G. Chokkalingam</i> | 377 |
| 3. Assessment of MGNREGA in Enhancing Quality of Life of Tribals in<br>Karamadai Block in Coimbatore District<br>- <i>M. Shanti and K.T. Geetha</i>                 | 399 |
| 4. Wildlife Based Land Reform and its Impact on Household Food Security –<br>A Case from Zimbabwe<br>- <i>Alimos Mushuku and Tawana Amon Ngwenya</i>                | 417 |
| 5. Promoting Micro-Enterprise Through SHG: A Case Study in MAVIM<br>- <i>Nisha Bharti</i>   | 437 |
| 6. Economic Viability of Dairying Farming in Cold Desert of Ladakh:<br>A Comparative Study of Different Species of Milch Animals<br>- <i>Harmeet Singh</i>          | 459 |
| 7. Food Security Act, 2013: Opportunities and Challenges for the Backward States in India<br>- <i>Biplab Dhak</i>   | 475 |
| 8. Commercial Bank Finance to Agriculture in India – The Recent Trends and Issues<br>- <i>Sukanya N. and Vishwanatha</i>  | 493 |

**BOOK REVIEWS**

**Subscription Rates**

Indian Annual Subscription

Individuals: ` 200/- + 160/- (Regd. Post Charges)

Institutions: ` 500/- + 160/- (Regd. Post Charges)

Life Membership: ` 3,500/-

Annual Institutional Membership: ` 1200/-

Foreign : Annual for JRD: US \$ 50/UK £ 40

Foreign Institutional: \$250 (50% discount to developing countries). Orders may be sent through Demand Draft drawn in favour of

National Institute of Rural Development to the address given below



Professor and Head (CMRD)

National Institute of Rural Development

Rajendranagar, Hyderabad – 500 030, India

Telefax: 91-040-24008473, E-mail: [ciiec@nird.gov.in](mailto:ciiec@nird.gov.in)

Website: <http://www.nird.org.in>



## **JOURNAL OF FINANCIAL MANAGEMENT AND ANALYSIS**

International Review of Finance  
(Half Yearly)

### **Aims:**

It is an established fact that economic development of natural-resource endowed developing countries (especially in the early stages) hinges on transfer of technology, management and capital from developed (industrial) countries through Multinational Corporation (MNCs) parented in developed countries on one hand; and, on the other hand, that there is a big question mark about the appropriateness or inappropriateness of transplantation of the economics of such capital-intensive technologies operating on the transfer pricing and allied techniques to suit host country's factor endowments, combined with the fact, that the financial statements of MNCs operating in hyper-inflationary and hyper-profit making conditions are misleading if not adjusted for changes in purchasing power.

The Journal – a refereed journal – offers techniques and new concepts backed up by case studies and provides a bridge between financial management theory and practice. The Journal is a useful decision kit for finance practitioners, policy makers and scholars from throughout the world and offers a unique opportunity to contribute your own expertise to develop the financial management science.

**Recent issues:** Each issue contains unique financial management issues like:

- Focus on 'Bottom-up' rural Development vis-à-vis Agricultural Loan Administration: Case Studies
- Nature of Distortions Caused by Inflation
- Forecasting of Australian Short-Term Interest Rates Generated by Time Series Models
- Symptoms of Commercial Banks Insolvency / Failure
- A Financial Management Appraisal of a Sick Agricultural Project
- Forecasting Volatility with Encompassing and Regime Dependent GARCH Models
- Does VaR Estimate have a Unit Root? Application of the Phillips-Perron Test
- Impact of Ownership Structure and Regulation on the Risk-Taking Behaviour of Depository Institutions
- Empirical Survey of Corporate Liquidity Management Practices of Nigerian-Quoted Manufacturing Enterprises
- Misuse of Letters of Credit (LCs) Banker Receipts(BRs) and Cheque (Check) Fraud Leads to Financial Distress: Formulation of a New Approach to Ethic Based Financial Statement Analysis

### **MANUSCRIPTS FOR SUBMISSION**

Typed articles, in triplicate (including summary of the paper in 300 words with floppy disk) are invited on submission fees of US\$ 40 (for outside India authors) are invited on any aspect bearing on financial management from scholars and practicing financial managers, planners, analysts, consultants and other professionals for consideration for publication in JFMA.

### **Editorial Board**

Consists of eminent financial management experts from different countries of the world.

Manuscript and submission may be sent to:

**Managing Editor**

**Journal of Financial Management and Analysis**

Om Sai Ram Centre for Financial Management Research

15, Prakash Cooperative Housing Society, Relief Road,

Santacruz (West), **Mumbai-400 054, INDIA**

# The Asian Economic Review

ISSN 0004-4555



Journal of the Indian Institute of Economics

Volume 56

December 2014

No. 4

## CONTENTS

\* **Syed Zia Abbas Rizvi and Mohammad Nishat** : Substitution and Complementary Effect of FDI on Domestic Investment: Empirical Evidence from Sectoral Data in Pakistan, \***Supran Kumar Sharma and Shravani**: Measurement and Elucidation of Resource Competence: An Economic Analysis for the Selected States of India, \* **Pravin Kumar and Priti Verma** : India's Intra-Industry Trade for Determinants of Aggregate and Flows of Firms Decision to Export and Import : Growth of Global and Regional Trade, \* **V. Bhaskar**: Leveraging the FRBM to Promote Fiscal Rectitude,\***Mudit Gupta and M. Mallikarjun**: Commodity Bubbles: Evidence from the Indian Market, \***T.V. Rao**: Role of Capital in Securing A Strong Banking System – The Imperatives of Basel III Accord ,\* **R. N. Agarwal**: Real Exchange Rate Disequilibrium, Trade and Economic Growth in India,\***Priyabrata Sahoo** : Trends in Consumption Pattern; A Comparative Study of Odisha and India,\***Venkatraja. B and M. Indira**: Do NGOs Impact Rural Development? An Empirical Assessment.

The Revised Subscription Rates and Membership Fees are as shown below:

Category	Subscription Rates			Membership	
	1yr	2 yr	3 yr	Life Member Individual	Life Member Institutional
Indian (in Rs.)	500	950	1400	5,000	15,000
Foreign (in \$ US) by Air Mail	100	175	-	\$ 500	\$ 5000

Please send the amount by DD/Cheque favouring **Indian Institute of Economics** for timely receipt of the journal. For outstation cheque please add bank charges at Rs. 35 for amount between Rs. 500 to 1000

**The Indian Institute of Economics, FEDERATION HOUSE, FAPCCI Marg, 11-6-841, Red Hills, Hyderabad – 500 004 (India). Phone: (O) 23393512, Fax: 91-40-23395525. Email: iieaer@yahoo.com, website:http://www.iieasia.in**



**CENTRE ON INTEGRATED RURAL DEVELOPMENT FOR ASIA AND THE PACIFIC**

Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) is a regional, intergovernmental and autonomous institution, established in July 1979. Member countries include Afghanistan, Bangladesh (host state), Fiji, India, Indonesia, Iran, Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam.

**ASIA-PACIFIC JOURNAL OF RURAL DEVELOPMENT (APJORD)**

APJORD, a half-yearly interdisciplinary Journal of CIRDAP, is devoted to the issues and discussions on rural development primarily in the Asia-Pacific region.

The Editorial Advisory Board consists of internationally recognised academicians, researchers, and development practitioners.

**Invitation for Articles**

APJORD focuses on poverty issues and rural transformation, keeping in view the programme priorities of the Centre, e.g. Agrarian development, institutional/infrastructural development, resource development including human resources, and employment.

Articles are invited for publication in APJORD. All articles are subject to peer review. Articles between 5000-10000 words are preferred. They might sent by e-mail to [apjord@cirdap.org](mailto:apjord@cirdap.org). Notes to Contributors is available on CIRDAP website.

**Subscription**

**Annual Subscription Rates** for one volume of two issues (including postage) published in July and December: US\$20 for Asia-Pacific countries. For Bangladesh Tk.300 (Cheque/DD in favour of CIRDAP). US\$35 for all other countries. Subscription may be paid also through money transfer to CIRDAP account which is as follows:

US Dollar A/C No. : 01512869201  
Account Name : CIRDAP  
SWIFT Code : SCBLBDDX  
Standard Chartered Bank  
SCB House (Level 4)  
67 Gulshan Avenue  
Gulshan, Dhaka, Bangladesh

After the transfer please send the advice slip to e-mail: [apjord@cirdap.org](mailto:apjord@cirdap.org)

**Advertisements**

Advertisements are invited from professional bodies/institutions. Please send in your order and remittance in favour of CIRDAP. The following tariff charges will apply:

- a) Inner back cover : US\$200
- b) Full page text : US\$100
- c) Half page text: US\$50

**For details contact:**

Director (ICD)/The Editor, APJORD  
CIRDAP, Chameli House, 17 Topkhana Road  
GPO Box 2883, Dhaka-1000, Bangladesh  
Tel: 880-2-9556131 (Direct) 7169824-5/9558751 (PABX) Ext. 213  
Fax: 880-2-9562035; E-mail: [apjord@cirdap.org](mailto:apjord@cirdap.org)  
Website: [www.cirdap.org](http://www.cirdap.org)

List of Referees for the Papers considered during 2014 for publication in the Journal

S.S. Acharya	K.N. Ninan
V.P.S. Arora	R.K. Panda
M.P. Bezbaruah	V. Puhazendhi
P.S. Birthal	C. Ramasamy
B.S. Chandel	S.S. Raju
C.L. Dadhich	V.M. Rao
T.N. Datta	D.C. Sah
B.M. Desai	J.C. Sandesara
Madhusudhan Ghosh	P. Satish
(Ms.) Nilabja Ghosh	U. Sankar
P.K. Joshi	H.R. Sharma
V.B. Jugale	S.S.P. Sharma
K.G. Karmakar	A.K. Singh
M. Krishnan	Sukhpal Singh
Anjani Kumar	M.H. Suryanarayana
Praduman Kumar	N.K. Thingalaya
Dinesh Marothia	(Ms.) Usha Tuteja
Mruthyunjaya	S.A. Wani
M.V. Nadkarni	

**ISAE Fellows**

**2014**

- **Dr. Uma Lele**
- **Dr. N. Nagaraj**
- **Dr. Rajinder S. Sidhu**



**Dr. Uma Lele**



**Dr. N. Nagaraj**



**Dr. Rajinder S. Sidhu**

## INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

### PAST OFFICE-BEARERS OF THE SOCIETY

#### PRESIDENTS OF THE SOCIETY

Sir Malcolm Lyall Darling (1939-40)  
Sir T. Vijayaraghavacharya (1941-42)  
Sir Manilal B. Nanavati (1943-59)  
Professor D.G. Karve (1960-62, 1964-66)  
Professor M.L. Dantwala (1963-64, 1966-85)  
Professor V.M. Dandekar (1985-1994)  
Dr. A. Vaidyanathan (1995-2003)  
Dr. S.S. Johl (2004-2009)  
Dr. C. Ramasamy (-2010 onwards)

#### PRESIDENTS OF THE CONFERENCE

Sir Malcolm Lyall Darling (1940)  
Diwan Bahadur Sir T. Vijayaraghavacharya (1941)  
Diwan Bahadur Sir T. Vijayaraghavacharya (1941)  
Sir Manilal B. Nanavati (1943)  
Sir Manilal B. Nanavati (1944)  
Sir Manilal B. Nanavati (1945)  
Sir Manilal B. Nanavati (1946)

Shri V.L. Mehta (1947)  
Sir S.V. Ramamurthy (1948)  
Dr. Rajendra Prasad (1950)  
Shri R.K. Patil (1951)  
Professor C.N. Vakil (1952)  
Shri V.T. Krishnamachari (1953)

Professor D.R. Gadgil (1954)  
Shri J.J. Anjaria (1955)  
Professor D.G. Karve (1956)  
Dr. B.K. Madan (1957)  
Dr. S.R. Sen (1959)  
Professor M.L. Dantwala (1960)  
Dr. V.K.R.V. Rao (1961)  
Shri Tarlok Singh (1962)  
Dr. B.N. Ganguli (1963)  
Shri Asoka Mehta (1964)  
Dr. J.P. Bhattacharjee (1965)  
Professor V.M. Dandekar (1967)  
Shri S.C. Chaudhari (1967)  
Dr. A.M. Khusro (1968)  
Shri V.M. Jakhade (1969)  
Dr. A.S. Kahlon (1970)  
Dr. P.V. Sukhatme (1972)  
Dr. Raj Krishna (1972)  
Shri J.S. Sarma (1973)  
Dr. K.N. Raj (1974)  
Dr. D.T. Lakdawala (1975)  
Dr. B.S. Minhas (1976)  
Dr. M.S. Swaminathan (1977)  
Dr. V.S. Vyas (1978)  
Dr. C.H. Shah (1979)  
Dr. Daroga Singh (1980)  
Dr. S.L. Shah (1981)  
Dr. D.K. Desai (1982)  
Dr. S.S. Johl (1983)  
Dr. A.S. Sirohi (1985)  
Dr. N. Rath (1985)  
Dr. G. Parthasarathy (1986)  
Dr. A. Vaidyanathan (1987)  
Dr. I.J. Singh (1988)  
Dr. C.H. Hanumantha Rao (1989)

Dr. D.S. Sidhu (1990)  
Dr. V.M. Rao (1991)  
Dr. R.K. Patel (1992)  
Dr. V. Rajagopalan (1993)  
Dr. G.S. Bhalla (1994)  
Dr. M.V. Nadkarni (1995)  
Dr. S.S. Acharya (1997)  
Dr. B.D. Dhawan (1997)  
Dr. Katar Singh (1998)  
Dr. P.S. George (1999)  
Dr. Dayanatha Jha (2001)  
Dr. Bhupat M. Desai (2001)  
Dr. G.K. Chadha (2002)  
Dr. C. Ramasamy (2003)  
Dr. (Mrs.) Kanchan Chopra (2004)  
Shri Y.S.P. Thorat (2005)  
Dr. Abhijit Sen (2006)  
Dr. (Mrs.) Isher Judge Ahluwalia (2007)  
Dr. N.S. Jodha (2008)  
Dr. Dinesh K. Marothia (2009)  
Dr. Sukhadeo Thorat (2010)  
Dr. N.A. Mujumdar (2011)  
Dr. P.G. Chengappa (2012)  
Dr. Karam Singh (2013)  
Dr. P.K. Joshi (2014)

#### CHAIRMAN OF THE EDITORIAL BOARD

Professor J.J. Anjaria (1949-53)  
Professor M.L. Dantwala (1954-57, 1963-1990)  
Dr. Nilakantha Rath (1991-1999)  
Professor V.M. Rao (2000-2004)  
Professor M.V. Nadkarni (2005-2007)  
Professor C. Ramasamy (2008-09)  
Dr. Dinesh K. Marothia (-2010 onwards)

#### EDITOR

Professor M.L. Dantwala (1956-57)  
Shri V.M. Jakhade (1967-86)  
Dr. C.H. Shah (1987)  
Dr. N.A. Mujumdar (1987-2014)

#### HON. SECRETARIES

Dr. T.G. Shirmane (January-June 1939)  
Shri S.K. Bedekar (June 1939-41)  
Professor J.J. Anjaria (1942-46)  
Professor M.L. Dantwala (1947-54)  
Dr. M.B. Desai (1955, 1958-60)  
Dr. K.N. Naik (1956-57)  
Shri V.M. Jakhade (1963-67)  
Professor G.B. Kulkarni (1968-71)  
Dr. C.H. Shah (1968-71)  
Dr. V.M. Rao (1972-75)  
Dr. (Mrs.) Tara Shukla (1975-79, 1993-98)  
Dr. J.N. Barmeda (1979-92)  
Shri T.R. Sundaram (1999-2002)  
Dr. V.G. Mutalik-Desai (2003-2006)  
Dr. C.L. Dadhich (-2007 onwards)

#### HON. JT. SECRETARIES

Shri Sardar Katar Singh (1940-41)  
Dr. M.B. Desai (1948-52)  
Dr. K.N. Naik (1953-55)  
Dr. N.A. Mujumdar (1958-60)  
Dr. C.H. Shah (1961-66)  
Dr. W.C. Shrishrimal (1967)  
Dr. Jai Krishna (1968)  
Dr. V.M. Rao (1969-71)  
Dr. (Mrs.) Tara Shukla (1972-75)  
Dr. (Ms.) S.D. Sawant (1979-1993)  
Shri T.R. Sundaram (1994-1998)  
Dr. V.G. Mutalik Desai (1999-2002)  
Dr. C.L. Dadhich (2003-2006)  
Mrs. Vijaya Venkatesh (-2007 onwards)

#### ISAE FELLOWS

Dr. Yoginder K. Alagh (2011)  
Dr. R.S. Deshpande (2011)  
Dr. P.K. Joshi (2012)  
Dr. Ramesh Chand (2012)  
Dr. Mruthyunjaya (2012)  
Dr. Praduman Kumar (2013)  
Dr. M.G. Chandrakanth (2013)  
Dr. R.P. Singh (2013)

## GUIDELINES FOR SUBMISSION OF PAPERS BY AUTHORS

**1. Subjects:** The objective of the Journal is to provide a forum for dissemination and exchange of findings of research on agricultural economics. Purely descriptive material is not appropriate for such a journal. Papers dealing with (i) new developments in research and methods of analysis, or (ii) which apply existing empirical research methods and techniques to new problems or situations, or (iii) which attempt to test new hypotheses/theoretical formulations or modifications of existing theories or policies to explain economic phenomena especially in the Indian context, or (iv) papers based on research done by the authors bringing out new facts or data presented in any analytical frame will be preferred. Younger economists are advised to seek guidance from their seniors in the preparation of the paper for the Journal. A one-page statement indicating the author's own assessment of the importance and relevance of the findings reported in his paper in the context of recent researches would be welcome.

**2. Size of Paper:** In view of the exorbitant increase in the cost of printing, it has become necessary to restrict the length of the papers accepted for publication to 20 (double space) typed pages (of the size 8½ -by-11 inches) including tables and appendices (with margins on all sides of at least 1½ inches). Papers exceeding this size limit will be returned to the authors. The authors may however send along with their papers such "supporting material" as may be of help to the referees in evaluating them. Abstracts not exceeding 100 words should be submitted in duplicate along with the papers. The authors may send their papers in electronic form at the following email address: [isae@bom7.vsnl.net.in](mailto:isae@bom7.vsnl.net.in)

**3. Copies:** Two copies of each paper should be submitted along with a processing fee of Rs. 500/- either by M.O. or Demand Draft (US \$ 25.00 or £ 15.00) drawn in the name of the Indian Society of Agricultural Economics, to meet partly the postage and other incidental charges.

**4. Author's identification:** To protect the anonymity of authors while referring the Papers for expert opinion on their merits, authors are advised to avoid disclosing their identity in the text and to attach a separate page showing the name(s) and affiliations(s) of the author(s) along with any footnotes containing bibliographical information or acknowledgements.

**5. Mathematical notations:** Only essential mathematical notations may be used; it is prohibitively costly to typeset such notations. All statistical formulae should be neatly typed.

**6. Figures-Charts and Tables:** Professional assistance should be availed of while presenting figures and charts. They should be drawn in black ink which can be easily reproduced by photographic process. Typescript is not suitable for reproduction. Roman numerals may be used for tables.

**7. Footnotes:** Footnotes should be numbered consecutively in plain arabic superscripts.

**8. References and citations:** Only cited works should be included in the reference list. Please follow the style of citations as in previous issues of this Journal.

**9. General:** While sending papers the authors should state that the material has not been published elsewhere or is not being published or being considered for publication elsewhere. It is editorial policy not to consider for publication more than one paper from the same author during a year.

**Papers which are not found suitable for publication will not be returned unless accompanied by a self-addressed and stamped envelope. No correspondence will be entertained on the papers rejected by the Editorial Board.**

**10. Reprints:** No free reprints of the paper would be given to the author. However an author can obtain a soft copy of the paper in PDF format at Rs.500/- per article.

---

Printer: Mrs.Vijaya Venkatesh; Type-setting on Postscript laser printer at the Indian Society of Agricultural Economics, Mumbai- 400 001; Place of printing: Mudra, 383 Narayan Peth, Pune-411 030; Publisher: Mrs. Vijaya Venkatesh; Place of Publication and Owners: Registered Office: Indian Society of Agricultural Economics, 46-48, Esplanade Mansions, Mahatma Gandhi Road, Fort, Mumbai-400 001, Present address: to which papers need to be sent: Indian Society of Agricultural Economics, C-104, First Floor, Sadguru Complex I, Near Vagheshwari, Gen. A.K. Vaidya Marg, Goregaon (East), Mumbai - 400 063 (India).

**Registered with the Registrar of Newspapers under No.R.N. 9004/57**

**SOME OF THE PUBLICATIONS OF THE  
INDIAN SOCIETY OF AGRICULTURAL ECONOMICS**

1. INDIAN JOURNAL OF AGRICULTURAL ECONOMICS 1940-1964 - SELECTED READINGS (1966)	25.00
2. EVALUATION OF LAND REFORMS (with special reference to the Western Region of India) by Professor M.L. Dantwala and Dr. C.H. Shah (1971)	15.00
3. COMPARATIVE EXPERIENCE OF AGRICULTURAL DEVELOPMENT IN DEVELOPING COUNTRIES OF ASIA AND THE SOUTH-EAST SINCE WORLD WAR II (1972)	
Cloth bound \$ 9.00. £ 3.60	45.00
Card bound	30.00
4. AGRICULTURAL DEVELOPMENT IN INDIA: THE NEXT STAGE (1988)	190.00
5. AGRICULTURAL DEVELOPMENT POLICY: ADJUSTMENTS AND REORIENTATION (1990)	250.00
6. INDIAN AGRICULTURAL DEVELOPMENT SINCE INDEPENDENCE Edited by Professor M.L. Dantwala (Second Revised Edition, 1991)	295.00
7. INDIAN AGRICULTURE IN THE NEW MILLENNIUM: CHANGING PERCEPTIONS AND DEVELOPMENT POLICY (VOLS.I &II) Edited by N.A. Mujumdar and Uma Kapila (2006)	
Vol.I \$69.95	795.00
Vol.II \$65.95	695.00

**SEMINAR SERIES**

8. No. IV. SEMINAR-CUM-WORKSHOP ON PROBLEMS OF FARM PRODUCTION PLANNING AND PROGRAMMING (1964)	10.00
9. No. VI. SEMINAR ON FARM PRODUCTION PLANNING AND PROGRAMMING (1965)	8.00
10. No. VIII. SEMINAR ON FOODGRAINS BUFFER STOCKS IN INDIA (1969)	12.00
11. No. XII. SEMINAR ON RURAL DEVELOPMENT FOR WEAKER SECTIONS (1974)	25.00
12. No. XIII. SEMINAR ON THE ROLE OF IRRIGATION IN THE DEVELOPMENT OF INDIA'S AGRICULTURE (1976)	30.00
13. No. XV. SEMINAR ON CROP INSURANCE (1983)	60.00
14. TECHNOLOGY OPTIONS AND ECONOMIC POLICY FOR DRYLAND AGRICULTURE: POTENTIAL AND CHALLENGES Edited by Dr. N.S. Jodha (1989)	250.00
15. LIVESTOCK ECONOMY OF INDIA (1989)	95.00
16. NON-AGRICULTURAL EMPLOYMENT IN INDIA: TRENDS AND PROSPECTS Edited by Dr. Pravin Visaria and Dr. Rakesh Basant (1994)	360.00
17. AGRICULTURAL DEVELOPMENT IN HILLY AREAS: CONSTRAINTS AND POTENTIAL Edited by Dr. S. L. Shah (1996)	250.00
18. MECHANISATION OF PUNJAB AGRICULTURE AND ITS IMPACT Edited by T.S. Chahal (1999)	400.00
19. RETHINKING ON MICROFINANCE Edited by N.A. Mujumdar and M.G. Shirahatti (2011)	-----

No. 4 and 19 can be had from:  
HIMALAYA PUBLISHING HOUSE,  
Ramdoot, Dr. Bhalerao Marg, Girgaon, Mumbai-400 004.

Nos. 5, 6 and 14 from:  
OXFORD & IBH PUBLISHING CO. PVT. LTD.,  
66, JANPATH, New Delhi-110 001.

No.7 can be had from:  
ACADEMIC FOUNDATION,  
4772-73/23, Bharat Ram Road, (23 Ansari Road),  
Darya Ganj, New Delhi-110 002

No. 13 from:  
CONCEPT PUBLISHING COMPANY,  
A-15-16, Commercial Block, Mohan Garden, New Delhi-110 059.

No.15 from:  
SAGE PUBLICATIONS INDIA PVT. LTD.,  
M-32, Greater Kailash Market, New Delhi-110 048.

No. 16 from:  
NEW AGE INTERNATIONAL PUBLISHERS,  
4835/24, Ansari Road, Daryaganj, New Delhi-110 002.

No.17 from:  
Khalsa College, Amritsar-143 002.

The rest can be had from:  
THE INDIAN SOCIETY OF AGRICULTURAL ECONOMICS,  
C-104, First Floor, Sadguru Complex I,  
Near Vagheshwari, Gen. A.K. Vaidya Marg,  
Goregaon (East), Mumbai - 400 063.