



***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.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

Vol XLII  
No. 2

APRIL-  
JUNE  
1987

ISSN 0019-5014

# INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF  
AGRICULTURAL ECONOMICS,  
BOMBAY

## Some day, all Indian farmers will have it this good.

“We have our own pasteurisation plant...  
Our own baby food unit...  
Our own butter factory...  
Our own milk powder plant...  
Our own cattlefeed factory...  
Our own veterinary service...  
Our own marketing arrangements...”



REELS/SCMFE/SP/1-64

The 10 lakh farmers who constitute the Gujarat Co-operative Milk Marketing Federation have shown the way.

Their co-operative way of life has paid them rich dividends. They not only own the most modern plants but are also able to recruit the finest managerial and technical talent to ensure their efficient operation.

The dairy co-operative revolution that started in Gujarat is now spreading to the rest of the country.



Gujarat Co-operative Milk Marketing Federation Ltd. Anand 388 001.

# ARTHA VIJNANA

Journal of the Gokhale Institute of Politics  
and Economics, Pune 411 004

---

Vol. 29

No. 1

March 1987

---

## CONTENTS

Family Welfare and MCH Programme: Rural Nasik District 1984-85 .. .. ..	<i>Vaijayanti Bhate and K. Sivaswamy Srikantan</i>
Part I : Survey Design .. .. ..	
,, II : Contraceptive Prevalence .. ..	
,, III : Motivation and Satisfaction Among Contraceptors and Comparison of Contraceptors with Non-contracep- tors .. .. ..	
,, IV : The Impact of Family Planning on Fertility .. .. ..	
,, V : Maternal and Child Health Care ..	
,, VI : Summary of Findings and Implications .. .. ..	
Family Planning Behaviour in Maharashtra ..	<i>Vaijayanti Bhate and K. Sivaswamy Srikantan</i>

---

BOOK REVIEWS

BOOKS RECEIVED

---

Revised Subscription Rates (inclusive of ordinary postage):

Annual : Rs. 120, \$ 40, £ 25.

Single issue : Rs. 40, \$ 15, £ 10.

Please address all correspondence relating to academic matters (e.g. articles, book reviews, etc.) to Dr. B. G. Bapat, Managing Editor, *Artha Vijnana* and other correspondence (e.g. subscription, etc.) to the Editorial Assistant, *Artha Vijnana*, Gokhale Institute of Politics and Economics, Pune 411 004. (India).

## A NEW STAR APPEARS IN THE HORIZON

**KRIBHCO**, a new star in the horizon, has emerged in the industrial skyline of India. The Rs. 958 crores fertiliser project has started production of urea. With full capacity utilisation the plant is designed to produce 14.5 lakh tonnes of urea annually providing direct employment to 2,000 people and with a potential of indirect employment to many. **KRIBHCO** promises plenty and prosperity to Indian farmers and aims at raising their living standard through integrated rural development.



### **KRISHAK BHARATI COOPERATIVE LIMITED**

<i>Head Office</i>	: Red Rose House, 49-50, Nehru Place New Delhi-110 019.
<i>Phone Nos.</i>	: 6414198, 6414500 6414646, 6414747
<i>Telex No.</i>	: 31-62526 KRIB IN
<i>Grams</i>	: KRIBHCO, New Delhi.
<i>Hazira Project Site Office</i>	: P. O. KRIBHCONAGAR-394 515 Distt. Surat, Gujarat.
<i>State Marketing Offices</i>	: Lucknow, Ahmedabad, Chandigarh, Jaipur, Bhopal, Bombay.

## PAKISTAN JOURNAL OF APPLIED ECONOMICS

Volume IV

No. 2

Winter 1985

**Nuzhat Ahmad**, Biases in tax assessment of residential properties in Karachi

**Hafiz A. Pasha**, Welfare consequences of building height controls.

**Richard Grabowski and David Sivan**, The price of food, labour scarcity and the real wage: Egypt, 1950 to 1974.

**R. S. Tiwari**, Constant-Market-Share analysis of export growth : The Indian case

### Book Reviews

Published biannually in Summer and Winter by the Applied Economics Research Centre, University of Karachi, P. O. Box 8403, Karachi 32, Pakistan.

<i>Annual Subscription</i>	Surface Mail	Air Mail
Institutions	US \$ 25.00	US \$ 30.00
Individuals	US \$ 17.00	US \$ 22.00

## BANGLADESH DEVELOPMENT STUDIES

Volume XIV

June 1986

Number 2

### Articles

*Md. Abul Quasem* : The Impact of Privatisation on Entrepreneurial Development in Bangladesh Agriculture.

*A. R. Chowdhury* : Vector Autoregression as an Alternative Macro-Modelling Technique.

*K. A. S. Murshid* : Instability in Foodgrain Production in Bangladesh: Nature, Levels, Trends.

*Iyanatul Islam and Habibullah Khan* : Income Inequality, Poverty and Socio-economic Development in Bangladesh: An Empirical Investigation.

### NOTES AND COMMENTS

*Mahabub Hossain* : A Note on the Trend of Landlessness in Bangladesh.

*M. R. Khan* : Prospects and Problems of Integration of Family Planning with Health Services in Bangladesh.

Published four times a year : March, June, September, December. Annual Subscription is Tk. 80.00 or US \$ 25.00 or UK £ 10.00 or equivalent thereof in other currencies.

Reprints of Articles are available in limited quantity at Tk. 5.00 or US \$ 2.00 or equivalent thereof in other currencies.

Books for Review should be sent in duplicate to the Executive Editor. Manuscripts in duplicate and editorial correspondence should be addressed to the Executive Editor, *The Bangladesh Development Studies*, Adamjee Court, Motijheel Commercial Area, Dhaka-2, Bangladesh.

Rejected manuscripts are not returned.

Please note that with effect from January, 1987 the overseas annual subscription is US \$ 40.00 and inland Tk. 100.00.

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

WITH BEST COMPLIMENTS OF

# **Mahyco** **(Seedsmen to the Nation)**

**MAHARASHTRA HYBRID SEEDS COMPANY LIMITED**  
19 Raj Mahal, 84 Veer Nariman Road  
Bombay 400 020.

Phone: 204 9497, 204 3020, Gram: Hybridseed Tlx:011-5671  
Seed-in-

## AGRICULTURAL SITUATION IN INDIA

A Monthly Journal of the Directorate of Economics and Statistics, Ministry of Agriculture.

### Main features :

- \* Articles from experts to enable critical appreciation of current trends and prospects.
- \* Extensive commentary on the agricultural development in India and abroad.
- \* Reviews on important agricultural commodities.
- \* Comprehensive statistical tables—crop production, wages, prices, import and export, rainfall and crop estimates.

Commanding a wide and influential readership in India and abroad, **Agricultural Situation in India** is an invaluable guide to business executives, administrators and students of agricultural economics.

**Subscription** { Single copy : Rs. 5.00 or £ 0.58 or \$ 1.80  
Annual : Rs. 60.00 or £ 7.00 or \$ 21.60

**Available from :**

The Controller of Publications, Civil Lines, Delhi-110 054.

## INDIAN JOURNAL OF INDUSTRIAL RELATIONS

A Quarterly devoted to advancement of knowledge in the field of industrial relations and human resources including relevant aspects of labour relations, personnel management and rural labour. The Journal also welcomes communications from managers and union leaders reflecting their experiences and insights. All manuscripts intended for publication and books for review should be sent in duplicate to the editor.

Editor: J. S. Sodhi

---

Vol. 22

No. 3

January 1987

---

### CONTENTS

#### ARTICLES

Unemployment and Casual Labour in India: An Analysis of Recent NSS Data .. .. ..	<i>B. S. Minhas and Grace Majumdar</i>
Industrial Democracy: The Indian Experience .. .. ..	<i>Baldev R. Sharma</i>
Employment Growth in Indian Industry .. .. ..	<i>Bishwanath Goldar</i>

#### COMMUNICATIONS

Industrial Structure and Pattern of Development in India .. .. .. .. ..	<i>R. V. Dadibhavi</i>
Job Involvement as Related to Employees' Morale and Ambiguity-Tolerance .. .. ..	<i>O. P. Verma</i>
Motivation and Entrepreneurial Behaviour of the Farmers .. .. .. .. ..	<i>Satvir Singh</i>
Supervisory-Style and Situational-Favourableness as Related to Workers' Output .. .. ..	<i>Madan Pal and Promila Vasudeva</i>
Firm Size and Union Density in Singapore .. .. ..	<i>Chew Soon Beng</i>

#### BOOK REVIEWS

##### Index of Articles (Based on the SRS Library)

---

*Subscription Rate:* Rs. 80.00 a year; Rs. 225.00 for three years; Rs. 375.00 for five years; Rs. 20.00 for single copy.

Cheques payable to: Shri Ram Centre for Industrial Relations and Human Resources, 5-Sadhu Vaswani Marg, New Delhi-110 005. (India).

# AGRICULTURAL ECONOMICS

The Journal of the International Association of Agricultural Economists

Elsevier Science Publishers, Amsterdam, announces the publication of the first issue of the new international journal, **AGRICULTURAL ECONOMICS** — The Journal of the International Association of Agricultural Economists.

Editor-in-Chief: **Douglas D. Hedley**, Jakarta, Indonesia.

**AGRICULTURAL ECONOMICS** is a new international journal devoted to serving the interests not only of the members of the International Association of Agricultural Economists (IAAE), but of all agricultural economists, policy makers, and agronomists. The journal will provide a focal point for the publication of work on research, extension, and "out-reach," consulting, advising, entrepreneurship and teaching.

---

Vol. 1

No. 1

DECEMBER 1986

---

## CONTENTS

### Editorial

Market analysis, technical change and income distribution in semi-subsistence agriculture: the case of Bangladesh .. .. .. .. *M. Alauddin and C. Tisdell*

Agricultural policy in tropical Africa: is a turnaround possible? .. .. .. .. *J. M. Due*

Appraising alternatives for allocating and cost recovery for irrigation water in Egypt .. .. *R. L. Bowen and R. A. Young*

Persistent underinvestment in public agricultural research .. .. .. .. *J. F. Oehmke*

Effects of increasing agricultural productivity in a multisectoral model for the Philippines .. .. *R. M. Bautista*

Book Review

News

Announcements

---

One volume (4 issues) is to be published till December 1987. The subscription rate for Volume 1 is 225.00 Dutch Guilders, US \$ 100.00, including postage and handling.

Orders and requests for free sample copies of the journal should be sent to Elsevier Science Publishers, P. O. Box 330, 1000 AH Amsterdam, The Netherlands.

## **DOCUMENTED INDEX OF ARTICLES RELATING TO AGRICULTURAL ECONOMICS**

A documented index of over 23,850 articles relating to Agricultural Economics published in Indian and foreign periodicals covering the period 1951-84, classified according to the Dewey Decimal System and computer-printed is available for sale to Universities and research institutions at cost (Rs. 850 per set) plus forwarding charges.

A similar index of articles covering 800 titles relating to the year 1985 is being computer-printed. It is supplied at a subsidised cost of Rs. 25 per set (excluding forwarding charges) to enable a larger number of research institutions and Universities to avail of this facility. This service is rendered on non-profit basis. Orders for the supply of these indexes may be placed with the Hon. Secretary, The Indian Society of Agricultural Economics 46-48, Esplanade Mansions, Mahatma Gandhi Road, Bombay-400 023.

## **INDIAN JOURNAL OF AGRICULTURAL ECONOMICS—REPRINTS**

Many back issues/volumes of the Indian Journal of Agricultural Economics are currently out of print. Enquiries have been received by the Society for the supply of the back volumes of the Journal. With a view to enabling the interested readers, agricultural universities, colleges and other research institutions to complete their holdings of the back issues/volumes of the Journal, the Society has entered into an agreement with the Researchco Reprints, Delhi whereby the Researchco Reprints has been given full rights of reprinting of all the issues of Volumes 1 to 29 of the Journal which are out of print now. The Researchco Reprints has brought out the reprints of the abovesaid volumes. Kindly direct your orders and enquiries for back issues/volumes of the Journal (including reprints) to the Researchco Reprints, 1865 Trinagar, Delhi-110 035 (India).

## 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 an 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 paper.

**3. Copies :** Two copies of each paper should be submitted along with a processing fee of Rs. 15/- either by M.O. or crossed I.P.O. (\$ 4.00 or £ 2.50) 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 affiliation(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.

**10. Reprints :** Ten free reprints of the paper would be given to the author; additional reprints, if required, are supplied at cost which may be ascertained from the Editor.

---

*Printer :* Shri G.R. Shetty; Type-setting on Postscript laser printer at Indian School of Political Economy, Arthabodh, Pune - 411 016; *Place of printing :* Mudra, 383 Narayan Peth, Pune - 411 030; *Publisher :* Shri G.R. Shetty; *Place of Publication and Owners :* The Indian Society of Agricultural Economics, 46-48, Esplanade Mansions, Mahatma Gandhi Road, Fort, Bombay-400 001.

*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 Prof. 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 Card bound 30.00
4. INDIAN AGRICULTURAL DEVELOPMENT SINCE INDEPENDENCE (1986)	135.00
5. AGRICULTURAL DEVELOPMENT IN INDIA: THE NEXT STAGE (1988)	190.00
6. AGRICULTURAL DEVELOPMENT POLICY: ADJUSTMENTS AND REORIENTATION (1990)	250.00

SEMINAR SERIES

7. No. IV. SEMINAR-CUM-WORKSHOP ON PROBLEMS OF FARM PRODUCTION PLANNING AND PROGRAMMING (1964)	10.00
8. No. VI. SEMINAR ON FARM PRODUCTION PLANNING AND PROGRAMMING (1965)	8.00
9. No. VIII. SEMINAR ON FOODGRAINS BUFFER STOCKS IN INDIA (1969)	12.00
10. No. XII. SEMINAR ON RURAL DEVELOPMENT FOR WEAKER SECTIONS (1974)	25.00
11. No. XIII. SEMINAR ON THE ROLE OF IRRIGATION IN THE DEVELOPMENT OF INDIA'S AGRICULTURE (1976)	30.00
12. No. XV. SEMINAR ON CROP INSURANCE (1983)	60.00
13. TECHNOLOGY OPTIONS AND ECONOMIC POLICY FOR DRYLAND AGRICULTURE: POTENTIAL AND CHALLENGE Edited by Dr. N.S. Jodha (1989)	250.00
14. LIVESTOCK ECONOMY OF INDIA (1989)	95.00

Nos. 4, 6 and 14 can be had from:  
OXFORD & IBH PUBLISHING CO. PVT. LTD.,  
66, JANPATH, NEW DELHI-110001.

No. 5 from:  
HIMALAYA PUBLISHING HOUSE,  
Ramdoot, Dr. Bhalerao Marg, Girgaon, Bombay-400 004.

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

The rest can be had from:  
THE INDIAN SOCIETY OF AGRICULTURAL ECONOMICS,  
46-48, Esplanade Mansions,  
Mahatma Gandhi Road, Fort, Bombay-400 001.