



1960-2010  
*50 Years*

## Fifty Years of Research and Education in Agricultural Economics



**Division of Agricultural Economics**  
Indian Agricultural Research Institute  
New Delhi - 110 012

# Fifty Years of Research and Education in Agricultural Economics (1960-2010)



**Division of Agricultural Economics**  
**Indian Agricultural Research Institute**  
**New Delhi - 110 012**

**November 2010**

# 1. Introduction

The Indian Agricultural Research Institute, a premier Institute for agricultural research, education and extension, was established in 1905. It has been the harbinger of the Green Revolution, a model for the state agricultural universities and a think tank on agricultural policy and innovation. IARI was granted the status of “Deemed University” in 1958 by the University Grants Commission.

The Division of Agricultural Economics, a constituent of the School of Social Sciences, was established in 1960 with major responsibilities of research, and post-graduate education. Since its inception the Division has made significant contributions in basic and applied research with policy implications. The Division achieved excellence in post-graduate education and research under the ICAR-UNDP Advanced Centre during 1971-1982. The Division is functioning as an ICAR Centre of Advanced Studies (now Centre of Advanced Faculty Training) in Agricultural Economics since 1995 with the objective of strengthening agricultural economics and policy research in the national agricultural research system.

Keeping pace with agricultural development and policy thrusts in the country, research programmes of the Division have been modified from time to time. During the sixties, focus of the research was on farm business analysis, resource allocation, and adoption of improved technology. During the seventies, the emphasis shifted to resource productivity, labour employment, farm mechanization, risk management and marketing efficiency. In the eighties, greater attention was paid to the issues of technological change, yield gap and constraint analysis, input and output marketing, price policy and subsidy, capital requirements, agricultural development and regional imbalances, and management of natural resources. In the nineties, perspective of the research programmes was broadened to incorporate research on total agricultural factor productivity, agricultural research investment, technology evaluation and impact assessment, food and nutrition policy, environment and natural resource policy, input-output markets, seed industry, post-harvest losses and international trade. Currently, policy research on technology assessment, demand-supply scenarios, environmental accounting, development of indicators for measurement of sustainability, inclusive growth, investment in agriculture, valuation of agro-biodiversity and access to global markets are the priority areas for research.

## **Vision**

“Enabling Knowledge-Intensive Agriculture through Strategic Policy Research and Human Resource Development”

The Division strongly believes that its activities, programmes and priorities need to be continuously reoriented and monitored to meet the emerging challenges and to suggest the pathways to harness the new growth opportunities.

## **Present Research Thrusts**

The Division’s research agenda has been centered around the issues of national and global importance. It has successfully generated evidence-based and policy-relevant knowledge. Currently, the thrust is on policy research in the following areas:

### **Knowledge, Science and Technology for Agriculture**

This programme focuses on research impact assessment and foresight analysis with an objective to improve targeting and effectiveness of agricultural research. The issues of R&D investment, science and technology policy, intellectual property rights, and biodiversity are also accorded high priority. The programme is also supported by compilation of information on the latest developments in markets, trade, technology and related areas.

### **Agricultural Production, Natural Resources and Environment**

This programme aims to examine research issues related to agricultural production, natural resources and environment in the context of climate change. Specific research areas are input use efficiency, sustainability of natural resources, especially land and water, commodity modelling and adaptations to climate change.

### **Policy, Investment and Inclusive Agricultural Growth**

Public policy, investment and technology are the main sources of agricultural growth. However, their relationship and influence are changing rapidly. Research work under this programme analyzes ways and means to enhance their effectiveness in terms of promoting inclusive growth. Efficiency of public investment, public-private partnership and business investment in the context of liberalization are other important research areas.

## **Agricultural Markets and Value Chains**

Development and efficient functioning of agricultural markets is essential to provide quality inputs and remunerative prices to farmers. This programme supports research on reforms in input and output markets, direction of trade and its impact on growth and welfare, impact of regional trade agreements, development of value chains and future outlook of agricultural commodity markets.

## **Local Governance and Delivery of Farm Services**

The roles of state and society in agricultural development are changing rapidly. There is emphasis on participation of stakeholders, increasing role of village-level institutions, and participation of business sector in delivery of improved technology and services to farmers. Studies under this theme analyze these issues. Efforts are also made to explore the mechanisms and innovations to improve effectiveness of local organizations in delivery of services to farmers, targeting of agricultural programmes and promote sustainable use of resources.

## **Livelihood Security, Poverty and Gender**

Inclusive growth has been one of the main development objectives. Agricultural growth involving disadvantaged regions and sections of the society is essential to meet this objective. Research work under this programme explores ways to promote livelihood options for rural poor, and empowerment of rural women.

## **Human Resource Development**

Development of human resources to undertake and manage agricultural economics research and education functions in the country has been the second major responsibility of the Division. Towards this goal the Division has been continuously upgrading its post-graduate programmes.

## **Inter-Institutional Linkages**

The Division has forged linkages for research and education with several national and international institutions. Some of the prominent international institutions with which the Division has collaborated are UNDP, IFPRI, IRRI, CIMMYT, UNESCAP, CAPSA, World Fish Centre and FAO.

## 2. Executives of the Division

### Head

Dr. Suresh Pal  
(2009 – to date)

Dr. V.C. Mathur\*  
(2007 –2009)

Dr. R.P. Singh  
(2000 –2007)

Dr. Parmatma Singh\*  
(2000)

Dr. Praduman Kumar  
(1994 –2000)

Dr. Parmatma Singh\*  
(1993 –1994)

Sh. S. K. Goel\*  
(1992 – 1993)

Dr. Praduman Kumar  
(1989 – 1992)

Dr. (Mrs.) D.H. Srivastava  
(1986 – 1989)

Dr. A. S. Sirohi  
(1974 – 1986)

Dr. L. S. Venkataraman  
(1968 – 1974)

Dr. K. Kanungo  
(1964 – 1968)

Dr. S.M. Aijaz Husain  
(1961 – 1964)

\*Acting Head

### Professor

Dr. V.C. Mathur  
(2009 – to date)

Dr. Puran Chand  
(2007 –2009)

Dr. V.C. Mathur  
(2005 –2007)

Dr. Praduman Kumar  
(2001-2005)

Dr. R.P. Singh  
(2000 –2001)

Dr. Parmatma Singh  
(1994 –2000)

Dr. Mruthyunjaya  
(1989 –1994)

Sh. M. A. Muralidharan  
(1987 –1989)

Dr. (Mrs.) D.H. Srivastava  
(1982 – 1987)

Sh. M. A. Muralidharan  
( 1978 – 1982)

Dr. D. Jha  
(1974 – 1978)

Dr. A.S. Sirohi  
(1964 – 1974)

Dr. T.P.S. Chawdhari  
(1961 – 1964)

### 3. Faculty Members in the Division

|                          |                                  |                             |
|--------------------------|----------------------------------|-----------------------------|
| 1. Dr. Suresh Pal        | Ph.D. (IARI, New Delhi)          | Head                        |
| 2. Dr. V.C. Mathur       | Ph.D. (IARI, New Delhi)          | Professor                   |
| 3. Dr. B. R. Atteri      | Ph.D. (IARI, New Delhi)          | Principal Scientist         |
| 4. Dr. V. P. Tyagi       | Ph.D. (BHU, Varanasi)            | Principal Scientist         |
| 5. Dr. Amit Kar          | Ph.D. (IIT, Kharagpur)           | Principal Scientist         |
| 6. Dr. (Mrs.) Alka Singh | Ph.D. (GBPUAT, Pantnagar)        | Principal Scientist         |
| 7. Dr. G. K. Jha         | Ph.D. (IARI, New Delhi)          | Senior Scientist            |
| 8. Ms. Geeta Bisaria     | M.A. (Meerut Univ.)              | Scientist (Selection Grade) |
| 9. Dr. Pramod Kumar      | Ph.D. (IARI, New Delhi)          | Senior Scientist            |
| 10. Dr. I. Sekar         | Ph.D. (UMASS, USA)               | Senior Scientist            |
| 11. Dr. N. P. Singh      | Ph.D. (IARI, New Delhi)          | Scientist (Senior Scale)    |
| 12. Dr. P. Anbukkani     | Ph.D. (NDRI, Karnal)             | Scientist                   |
| 13. Mrs. Shaloo Punia    | M.C.A. (M.D. University, Rohtak) | Scientist                   |

## Former Faculty Members

|    |                        |   |
|----|------------------------|---|
| 1  | Dr. T.P.S. Chawdhari   | Ph.D.(Wisconsin University, USA)        |
| 2  | Dr. S.M. Aijaz Husain  | Ph.D.(Wisconsin University ,USA)        |
| 3  | Dr. K. Kanungo         | Ph.D. (Iowa State University, USA)      |
| 4  | Dr. L. S. Venkataraman | Ph.D. (Chicago University, USA)         |
| 5  | Dr. A. S. Sirohi       | Ph.D. (Kansas State University, USA)    |
| 6  | Dr. Mruthyunjaya       | Ph.D. (IARI, New Delhi)                 |
| 7  | Dr. R.K. Patel         | Ph.D. (Ohio State University, USA)      |
| 8  | Mr. M. A. Muralidharan | M.A. (Economics) University of Madras   |
| 9  | Dr. D.H. Srivastava    | Ph.D. (IARI, New Delhi)                 |
| 10 | Dr. M. P. Gupta        | Ph.D. (Missouri State University, USA)  |
| 11 | Dr. C.C. Maji          | Ph.D. (Iowa State University, USA)      |
| 12 | Dr. D. Jha             | Ph.D. (IARI, New Delhi)                 |
| 13 | Mr. S.K. Goel          | M.A. (Maths, Meerut University)         |
| 14 | Dr. N.S. Jodha         | Ph.D. (Sardar Patel University Gujarat) |
| 15 | Dr. T. A. Ramasubban   | Ph.D. (                                 |
| 16 | Sh. P.S. Rao           | MS (University of Hawaii, USA)          |
| 17 | Sh. D.K. Bahl          | M.A. (Stat., Delhi University)          |
| 18 | Dr. Y.P. Gupta         | Ph.D. (Delhi School of Economics)       |
| 19 | Dr. Praduman Kumar     | Ph.D. (IARI, New Delhi)                 |
| 20 | Dr. Parmatma Singh     | Ph.D. (IARI, New Delhi)                 |
| 21 | Dr. R. P. Singh        | Ph.D. (OUAT, Bhubaneswar)               |
| 22 | Dr. G. S. Ram          | Ph.D. (IARI, New Delhi)                 |
| 23 | Dr. T. Haque           | Ph.D. (Patna University)                |
| 24 | Dr. P.K. Joshi         | Ph.D. (GBPUAT, Pantnagar)               |
| 25 | Dr. A. K. Vasisht      | Ph.D. (IARI, New Delhi)                 |
| 26 | Dr. P.L.Guglani        | Ph.D. (IARI, New Delhi)                 |
| 27 | Dr. B.M. Sharma        | Ph.D. (IARI, New Delhi)                 |
| 28 | Dr. Chhotan Singh      | Ph.D. (IARI, New Delhi)                 |
| 29 | Dr. Ikbal Singh        | Ph.D. (IARI, New Delhi)                 |



|    |                      |                                    |
|----|----------------------|------------------------------------|
| 30 | Dr. Shiv Ram Dass    | Ph.D. (IARI, New Delhi)            |
| 31 | Sh. A.K. Gautam      | M.A. (Ag.) IASRI, New Delhi        |
| 32 | Dr. Shiv Kumar       | Ph. D.(CCSHAU, Hissar)             |
| 33 | Dr. Ranjeet Kumar    | Ph.D. (IARI, New Delhi)            |
| 34 | Dr. P. S. Badal      | Ph.D. (IARI, New Delhi)            |
| 35 | Dr. R. Swarup        | Ph.D. (Agra University)            |
| 36 | Dr. A.K. Ray         | Ph.D. (IARI, New Delhi)            |
| 37 | Dr. M.I. Krishanan   | Ph.D. (IARI, New Delhi)            |
| 38 | Dr. M. Satyanarayana | Ph.D (IARI, New Delhi)             |
| 39 | Dr. V. K. Sharma     | Ph.D. (IARI, New Delhi)            |
| 40 | Dr. U.N. Dixit       | Ph.D. (IARI, New Delhi)            |
| 41 | Dr. M.V. George      | Ph.D. (Wisconsin University, USA)  |
| 42 | Dr. S. L. Chawdhary  | Ph.D. (IARI, New Delhi)            |
| 43 | Dr. B. L. Agarwal    | Ph.D. (Cornell University, USA)    |
| 45 | Mr. R. B. P. Sinha   | M.A.                               |
| 46 | Dr. R. G. Nambiar    | Ph.D. (University of Baroda)       |
| 47 | Dr. Puran Chand      | Ph.D. (IARI, New Delhi)            |
| 48 | Dr. P.R. Rao         | Ph.D. (Iowa State University, USA) |

## International Visiting Faculty during UNDP Programme

| S.No. | Name                | Country                                  | Year    |
|-------|---------------------|--|---------|
| 1.    | Dr. J. L. Joy       | Univ. of Sussex, U.K.                    | 1971    |
| 2.    | Dr. K. E. Hunt      | Oxford Univ., U.K.                       | 1971-72 |
| 3.    | Dr. W .F. Musgrave  | New England Univ.,<br>Australia          | 1972    |
| 4     | Dr. J. R. Anderson  | New England Univ.,<br>Australia          | 1972-73 |
| 5.    | Dr. Carl F. Kossack | Univ. of Georgia, U.S.A.                 | 1977-78 |
| 6.    | Dr. Frank Orazem    | Kansas State Univ.,<br>U.S.A.            | 1978    |
| 7.    | Dr. W. H. Pine      | Kansas State Univ.,<br>U.S.A.            | 1980    |
| 8.    | Dr. W. E. Gustafson | Univ. of California, Davis,<br>U.S.A.    | 1979-80 |
| 9.    | Dr. H. K. Kaneda    | Univ. of California, Davis,<br>U.S.A.    | 1980    |
| 10.   | Dr. Alain de Janvry | Univ. of California, Berkeley,<br>U.S.A. | 1981    |
| 11.   | Dr. E. O. Heady     | Iowa State Univ., U.S.A.                 | 1981    |
| 12.   | Dr. Saburo Yamada   | Univ. of Tokyo, Japan                    | 1981    |
| 13.   | Dr. John. L. Dillon | Univ. of New England,<br>Australia       | 1982    |
| 14.   | Dr. Walter Fisher   | North Western Univ.,<br>Illinois, U.S.A. | 1982    |

## Technical Staff

|     |                          |                     |
|-----|--------------------------|---------------------|
| 1.  | Sh. Promod Kumar         | Technical Officer   |
| 2.  | Dr. Mahendra Singh       | Technical Officer   |
| 3.  | Sh. Kamlesh Kumar Singh  | Technical Officer   |
| 4.  | Mrs. Vinita Mittal       | Technical Officer   |
| 5.  | Dr. Roshan Lal           | Technical Officer   |
| 6.  | Sh. Sahendra Pal         | Technical Officer   |
| 7.  | Sh. Narendra Singh Tomar | Technical Assistant |
| 8.  | Sh. Praveen Prakash      | Technical Assistant |
| 9.  | Sh. Ram Ganesh Poddar    | Technical Assistant |
| 10. | Mrs. Sushila Ahluwalia   | Technical Assistant |
| 11. | Sh. Kamal Rajora         | Technical Assistant |
| 12. | Sh. Dwarka Nath          | Technical Assistant |

## Former Technical Staff

|     |                     |                     |
|-----|---------------------|---------------------|
| 1.  | Sh. Kirpal Singh    | Technical Officer   |
| 2.  | Sh. C.B. Singh      | Technical Officer   |
| 3.  | Sh. Bishamber Singh | Technical Officer   |
| 4.  | Sh. R.S. Rai        | Technical Officer   |
| 5.  | Sh. Khan Chand      | Technical Officer   |
| 6.  | Sh. Daroga Singh    | Technical Officer   |
| 7.  | Sh. Rameshwar Dayal | Technical Officer   |
| 8.  | Sh. Vinod Kumar     | Technical Officer   |
| 9.  | Mrs. Sushila Dubey  | Technical Officer   |
| 10. | Sh. R.S. Meena      | Technical Assistant |
| 11. | Sh. Jai Singh       | Technical Assistant |

## Administrative Staff

|    |                      |                    |
|----|----------------------|--------------------|
| 1. | Mrs. Amarjeet Kaur   | A. A. O.           |
| 2. | Mrs. Veena Gandhi    | Personal Assistant |
| 3. | Sh. Harpal Singh     | Personal Assistant |
| 4. | Sh. Ram Babu Yadav   | UDC                |
| 5. | Sh. Krishan Mohan    | UDC                |
| 6. | Mrs. C. Uma Srinivas | UDC                |

## 4. Awards and Recognitions

|                       |  |      |
|-----------------------|--|------|
| Dr. A. S. Sirohi      | President Elect, Indian Society of Agricultural Economics, 1984                              |      |
| Dr. Suresh Pal        | Fellow, National Academy of Agricultural Sciences<br>Dr. Norman E Borlaug Fellowship of USDA |      |
| Dr. N. P. Singh       | Associate Fellow, NAAS   |      |
| Dr. (Ms.) Ranjitha P. | ICAR Jawaharlal Nehru Award for Outstanding doctoral work in Agricultural economics          | 1998 |
| Dr. Ramesh Chand      | ICAR Jawaharlal Nehru Award for Outstanding doctoral work in Agricultural Economics          | 1986 |
| Dr. Mruthyunjaya      | ICAR Jawaharlal Nehru Award for Outstanding doctoral work in Agricultural Economics          | 1978 |

### Society Award

|  |   |      |
|--|---|------|
| Dr. P. S. BIRTHAL<br>and Dr. R. P. Singh | Dr. D.K. Desai Prize for the best article published in the Indian Journal of Agricultural Economics | 1994 |
| Dr. Suresh Pal                           | Dr. D.K. Desai Prize for the best article published in the Indian Journal of Agricultural Economics | 1992 |
| Dr. Ranjit Kumar                         | Dr. R. T. Doshi Award, for best article published in Agricultural Economics Research Review         | 2005 |
| Dr. N. P. Singh                          | Dr. R. T. Doshi Award, for best article published in Agricultural Economics Research Review         | 2005 |
| Dr. Mahendra Singh                       | Dr. R. T. Doshi Award, for best article published in Agricultural Economics Research Review         | 2002 |

### IARI Best Teacher Award

|                    |                            |      |
|--------------------|----------------------------|------|
| Dr. Praduman Kumar | Best Teacher Award of IARI | 1997 |
| Dr. B. M. Sharma   | Best Teacher Award of IARI | 1996 |

### Other Awards

|                    |  |      |
|--------------------|--|------|
| Dr. Iqbal Singh    | Rural Energy Award, FAO  | 1986 |
| Dr. P. S. Badal    | Young Scientist Award for the paper presented in a national symposium on "Social Transformation in Rural Sector" Held on 3rd February, 2000 at Vishwa Bharti, West Bengal. | 2000 |
| Dr. Parmatma Singh | Kheti Puraskar award for an article published in 'Kheti' journal   | 1991 |

## Award received by the students

### Ph.D. Students

| Name of the students          | Name of the Award | Year |
|-------------------------------|-------------------|------|
| 1. Dr. B. C. Roy              | IARI Gold Medal   | 2002 |
| 2. Dr. Sathees Babu K.        | IARI Gold Medal   | 2000 |
| 3. Dr. V. Kiresur             | IARI Gold Medal   | 1993 |
| 4. Dr. V. C. Mathur           | IARI Gold Medal   | 1992 |
| 5. Dr. T. M. Gajanana         | IARI Gold Medal   | 1991 |
| 6. Dr. Jiten Kumar            | IARI Gold Medal   | 1989 |
| 7. Dr. Jaswant Singh Dhaliwal | IARI Gold Medal   | 1972 |
| 8. Dr. P. L. Sankhayan        | IARI Gold Medal   | 1971 |
| 9. Dr. D.S. Sidhu             | IARI Gold Medal   | 1970 |
| 10. Dr. D. Jha                | IARI Gold Medal   | 1969 |
| 11. Dr. D.H. Srivastava       | IARI Gold Medal   | 1968 |

### M. Sc. Students

|                           |                 |      |
|---------------------------|-----------------|------|
| 1. Mr. Jayakumara Varadan | IARI Gold Medal | 2009 |
| 2. Mr. S. K. Srivastava   | IARI Gold Medal | 2008 |
| 3. Mr. K. Mahendran       | IARI Gold Medal | 1996 |
| 4. Mr. Alvaris David      | IARI Gold Medal | 1994 |
| 5. Mrs. Ranjitha, P.      | IARI Gold Medal | 1991 |
| 6. Mr. Pradeep Dogra      | IARI Gold Medal | 1987 |
| 7. Mr. Virendra Kumar     | IARI Gold Medal | 1986 |
| 8. Mr. A. A. Rane         | IARI Gold Medal | 1973 |
| 9. Mr. Jai Chand Saini    | IARI Gold Medal | 1972 |
| 10. Mr. K. Satyanarayan   | IARI Gold Medal | 1970 |
| 11. Mr. P. Antiporta      | IARI Gold Medal | 1969 |
| 12. Mr. P.L. Sankhayan    | IARI Gold Medal | 1968 |

## 5. Significant Research Achievements

The Division has made significant research contributions in the area of farm business analysis, resource allocation, supply response, input demand analysis and marketing efficiency during early phase of the green revolution. To address the challenges and opportunities of post-green revolution period, research was reoriented towards issues like farm mechanization, rural credit needs, yield gap analysis, price policy and subsidy issues, natural resource management, etc. Besides continuing emphasis on these issues, significant research contributions were made towards contemporary issues like food and nutritional security, efficiency and sustainability of agricultural production systems, impact assessment and research priority setting, food demand and supply projections, total factor productivity growth, etc. Some of the salient research achievements of the Division are:

- Mechanisms for improving farm production and incomes identified through reallocation and optimal use of resources in different farming systems
- Allocation of irrigation water resources for higher economic and environmental benefits
- Estimation of impact of prices on acreage and supply of agricultural commodities
- Estimation of demand for credit and the magnitude of increase in production on account of enhanced credit availability
- Integrated food supply-demand model developed for projecting supply, demand and trade of agricultural commodities
- Prioritization for agricultural research resource allocation across crops and regions for effective targeting
- Total factor productivity (TFP) indices of crop sector in the Indo-Gangetic Plains and factors responsible for deceleration in TFP growth
- Economic and environmental impact of new generation technologies like IPM and RCT in Indo-Gangetic Plains
- Impact of rural labour migration on farm economy and family welfare in Indo-Gangetic Plains
- Risk in agriculture and its management strategies

- Marketing efficiency in important commodities
- Farm mechanization, energy use and employment in agriculture

## **List of Externally-Funded Projects**

### **Policy and Institutional Options for Inclusive Agricultural Growth**

(NAIP Funded Project, 2009-2012)

Suresh Pal, Amit Kar, Alka Singh, I.Sekar, G.K. Jha

### **Oilseeds and Edible Oils Scenario in India (Funded by Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India)**

(CNFPD, Govt. of India, 2010-2011)

G.K. Jha, V.C. Mathur, Geeta Bisaria, P. Anbukkani

### **Environmental Impact Assessment of Resource Conservation Technology: Zero Tillage in Rice-Wheat System (FAO)**

(NAIP Funded Project, 2009-2010)

Suresh Pal, I.Sekar, Amit Kar

### **Developing a Decision Support System for Agricultural Commodity Market Outlook**

(NAIP Funded Project, 2008-2012)

V.C. Mathur, I Sekar

### **Economic Analysis and Prospects of Non-edible Oil-seeds in India**

(Funded by Ministry of New and Renewable Energy, Government of India)

V.C. Mathur, Alka Singh and G.K. Jha, 2007–2008

## **List of Institute Projects (2009–2014)**

### **Impact of Domestic Market and Trade Reforms in Agriculture**

V.C. Mathur, B.R. Atteri, V.P. Tyagi and Vinita Mittal

### **Energy Use in Indian Agriculture in the Context of Climate Change**

Girish K. Jha, Alka Singh, Shaloo, Suresh Pal and Roshan Lal

### **Agricultural Investment in the Post-Liberalization Period: An Institutional Perspective**

Alka Singh, G.K. Jha, P. Anbukkani and Pramod Kumar

### **Agrarian Change, Resource Use and Productivity in the RWS**

I. Sekar, G. Bisaria, Suresh Pal, P. Anbukkani and Mahendra Singh

### **Rural Non-farm Sector: Impact on Income and Employment Generation**

Amit Kar, G. Biseria, Suresh Pal, Shaloo and K.K. Singh

### **Innovations in Credit Delivery and Farmers' Access to Institutional Credit**

Pramod Kumar, V.P. Tyagi, Alka Singh and N.S. Tomar

## **Projects completed**

### **Market Intelligence Cell**

V.C. Mathur, G.K. Jha and Mahendra Singh

### **Impact Assessment of Selected IARI Technologies**

I. Sekar, N. P. Singh, G. K. Jha and Sushila Dubey, 2005-2009

### **Study on Peri-Urban Agriculture and its Management in Delhi**

Puran Chand, Geeta Bisaria, Balraj Singh and Mahendra Singh, 2005-2009

### **Co-integration of Horticultural Markets in India**

Amit Kar, V.P. Tyagi, Shiv Kumar and Pramod Kumar, 2005-2009

### **Labour Migration and its Implications on Rural Economy of Indo-Gangetic Plains of India (A.P. Cess funded project)**

Alka Singh, Ranjit Kumar, Pramod Kumar and R.N. Padaria, 2005-2009

### **Impact of Trade Liberalization on Indian Agriculture**

B.R. Atteri, Pramod Kumar, V.C. Mathur, Geeta Bisaria and Daroga Singh, 2004-2009

### **Food Safety Measures and their Implications on India's Exports**

Pramod Kumar, Alka Singh, N. P. Singh and K. K. Singh, 2004-2009

### **Pesticide Use and Sustainability of Agriculture: Emerging Issues and Policy Options (A.P. Cess funded project)**

Alka Singh, Ranjeet Kumar and B.R. Atteri

### **A Socio-economic Study on Soil and Water Conservation Practices for Watershed Management in Rajasthan: Policy Implication**

P.S. Badal, Geeta Bisaria and I.Sekar

### **Rural Farm Employment: Status and Possibilities in Production Environments of Minor Irrigation System in Tamil Nadu**

I. Sekar and P. S. Badal

### **Marketing Information Systems for Horticultural Commodities in India: Status, Constraints and Prospects**

V.C. Mathur, R. P. Singh, A.K.Vasisht, Alka Singh and Amit Kar, 2001-2004

### **Technological Change and Production Performance in Irrigated Maize-based Agro-ecosystem (NATP Project)**

R.P. Singh, Ranjeet Kumar, V.C. Mathur and A.K. Vasisht, 2001-2003

### **Diversification and Sustainability of Agriculture in Haryana**



Puran Chand and Parmatma Singh, 2000-2003

**Contact Farming in Haryana State: An Economic Investigation**

Shiv Kumar, Puran Chand and Parmatma Singh, 2000-2003

**Impact of Liberation on India's Agricultural Trade**

V.C. Mathur, A. K. Vasisht and Chhotan Singh, 2000-2002

**Adoption of Hybrid Varieties of Tomato and Gender Related Impact in Haryana**

Geeta Bisaria, 2000-2002

**Participatory Action Research for Improved Vegetable Production Technology for Rural Development**

V.P. Tyagi, 1992-2002

**Socio Economic Analysis of Mungbean in India (ICAR-AVRDC)**

I.Sekar and P.C. Badal, 1999-2001

**Economic Analysis of Total Factor Productivity of Irrigated Agriculture (NATP Project)**

P. Kumar, Alka Singh and P.S. Badal, 1999-2001

**Quantitative Assessment of Economic Losses of Degraded Land in India (ICAR AP Cess Funded Project)**

R.P. Singh, A.K. Vasisht and V.C. Mathur, 1999-2001

**Equity Driven Trade and Marketing Policies and Strategies for Indian Agriculture: (ICAR/ACIAR Project)**

P. Kumar, IARI, 1999-2000

**India Maize Demand and Supply Analysis – from Food to Feed (ICAR- CIMMYT Collaborative Research)**

R.P. Singh, 1998

**Socio-economic Impact of Soybean Cultivation in MP (IARI-NRC) (Collaborative Project)**

Badal and Praduman Kumar, 1998-2000

**Simulation Analysis of Options for Sustaining Agricultural Production and Environment**

A.K. Vasisht, 1997-2000

**Organizational Strategy for Commercialisation of Products and Services of IARI (IARI-NISTADS Collaborative Project)**

V.C. Mathur and B.R. Atteri, 1997-1999

**Study on Export Potential of Agricultural Commodities of India**

V.C. Mathur, A.K. Vasisht and Chhotan Singh, 1994-1997

**A Study of the Impact of Institutional Credit on Weaker Sections in Rural Areas of U.P**

V.P. Tyagi and Gita Bisaria, 1994

**Constraints to High Yields of Rice in Eastern India**

D. H. Srivastava, R.P.Singh, T.Haque, A.K. Vasisht and N.P.Singh, 1990

**Methodology for Simultaneous Determination of Factor Product Prices of Crops**

P.Kumar and Mruthyunjaya, 1989

**Conjunctive Use of Groundwater and Surface Water for Optimal Irrigation Management and Cropping Pattern in a River Basin Project**

A.S. Sirohi and Iqbal Singh, 1985

**Economics of Farm Mechanisation and Inputs in Agriculture**

A.S. Sirohi and B.M. Sharma, 1985

**Impact of Agricultural Subsidies on Agricultural Production and National Income in India, A General Equilibrium Analysis**

A.S. Sirohi, Mruthyunjaya, V.K. Sharma and A.K.Vasisht, 1984

**Marketing Problems of Small and Marginal Farmers in India**

M.A. Muralidharan, P. Kumar, D.K.Bahal, V.C. Mathur and P.K. Joshi, 1980-85

## 6. List of Publications

### Research Publications

#### 2001-2010

#### A. Published in professional journals

Chand, Puran and M.Singh (2010), Growth and development of agriculture: India planning experience, *Kautilya/ Haryana Economic Journal*, annual conference issue.

Singh, Mahendera (2010) Projection of potato export from India: A Markov chain approach, *Indian Potato Journal*, **37**: 48-55.

Srivastava, S.K., N. Sivaramane and V.C. Mathur (2010), Diagnosis of pulses performance of India, *Agriculture Economics Research Review*, **23**(1): 137-148.

Tanveer, H., P.R. Choudhary, G P. Dixit and G.K. Jha (2010), Detection of molecular divergence and development of DNA fingerprints in field pea cultivars using polymorphic DNA markets, *Indian Journal of Genetics and Plant Breeding*, **70**(2): 132-139.

Kumari, Jyoti, R. Ahmed, S. Chandra and G.K. Jha (2009), Determination of morphological attributes imparting resistance against aphid (*Aphis craccivora* Koch) in lentil (*Lens culinaris* Medik), *Archives of Phytopathology and Plant Protection*, **42**: 52-57.

Mahantesh, N and Alka Singh (2009), A study on farmers' knowledge, perception and intensity of pesticide use in vegetable cultivation in western Uttar Pradesh, *Pusa Agri. Science*, **32**: 63-69.

Pal, Suresh and Harbir Singh (2009), Delivering seeds of potato and groundnut in India, *Outlook in Agriculture*, **38**(4): 375-382.

Sarkar, S.K., Krishan Lal and G.K. Jha (2009), Non-linear growth models for pigs, *Indian Veterinary Journal*, **86**: 769-799.

Sekar, I. (2009), Conjunctive water productivity and water transaction in tank irrigation rice cropping system, *Agricultural Situation in India*, **65**(6): 429-436.

Sekar, I., K. McGarigal, J.T. Finn, R. Ryan, T.O., Randhir (2009), Water quality response to economic development: Quantifying environmental kuznets curve, *Indian Journal of Agricultural Economics*, **64** (91): 73-88.

Sekar, I., T.O. Randhir (2009), Arsenic contamination in water resources: Mitigation and policy options, *Water policy*, **11**: 67-78.

- Shinoj, P. and V.C. Mathur (2009), India's potential for agriculture trade in Asia: A gravity model approach, *The Asian Economic Review*, **51**(3): 475-486.
- Siddaya, S. and Alka Singh (2009), Adoption pattern of improved pigeonpea varieties in Gulbarga district, Karnatka, *Agricultural Economics Research Review*, **22**:495.
- Singh, M. and Puran Chand (2009), Synergy and trade-off between urbanization and agricultural development in Delhi: A policy perspective, *Indian Journal of Agricultural Economics*, **64**(3): 473-474.
- Singh, R. P., C.K. Beura, A. S. Mahapatra, H.V.L. Bathla, G. K. Jha, P. K. Singh and D. Kumar (2009), Assessment of quantitative losses of eggs between farm and household consumer, *Indian Journal of Poultry Science*, **44**(2): 239-24
- Thavaneswaran, A. and G. K. Jha (2009), A Black-Scholes model with fuzzy volatility, *Journal of Statistically Theory and Applications*, **8**(4): 448-463.
- Gaur, H.S. and B.R. Atteri (2008), Research and development for sustainable food security, view point sustainability, *Tomorrow*: 35-42.
- Kumar, Pramod, P.S. Mandal, N.P. Singh and R.P. Singh (2008), Tea industry in India: Problems and prospects, *Indian Journal of Agricultural Economics*, **63**(1): 84-96.
- Reddy, Vishwanatha and Pramod Kumar (2008), An economic appraisal of mango processing plants in Chittor district of Andhra Pradesh, *Indian Journal of Agricultural Economics*.
- Sekar, I., Ramasamy C (2008), Econometric analysis of farmers' participation in tank modernization: Evidence from south India, *Agricultural Situation in India*, **15**(11): 555-562.
- Shinoj, P and V. C. Mathur (2008), Comparative advantage of India in agricultural exports with respect to Asia: A post-reforms analysis, *Agricultural Economics Research Review*, **21**(1): 60-66.
- Singh, Alka, A. K. Vasisht, Ranjit Kumar and D.K. Das (2008), Adoption of integrated pest management practices in paddy and cotton – A case study of Haryana and Punjab, *Agricultural Economics Research Review*, **21**(2): 221-226.
- Singh, Mahendra and V. C. Mathur (2008), Structural changes in the horticultural sector in India: Retrospect and prospects for 11<sup>th</sup> Five year plan, *Indian Journal of Agricultural Economics*, **63**(1):332-348.
- Bhakar, R., K. N. S. Banafar, N. P. Singh and A. K. Gauraha (2007), Income and employment pattern in rural areas of Chattisgarh: A micro view, *Agricultural Economics Research Review*, **20**(2): 395-406.

- Kumar, Anjani, Steven J. Staal, N.P. Singh and Dhiraj K. Singh (2007), Livestock sector trade of India: Surging momentum in the new liberalised regime, *Indian Journal of Agricultural Economics*, **62**(2): 395-410.
- Kumar, Shiv, Devender, Kavita Chakravarty, Puran Chand and J. P. S. Dabas (2007), Mode of operation and performance of contract farming of cottonseed in Haryana, *Agricultural Economics Research Review*, **20**(1): 9-16.
- Kumari, Jyoti, R. N. Gadag and G. K. Jha (2007), Genetic analysis and correlation in sweet corn (*Zea mays*) for quality traits, field emergence and grain yield, *Indian Journal of Agricultural Science*, **77**(9): 613-615.
- Patil, S. A. and V. C. Mathur (2007), Food security: Linking farmers to markets, *Sustainability Tomorrow*, **2** (4): 32-37.
- Patil, S. A. and V. C. Mathur (2007), Biotechnology – Promising benefits of small farmers, *Hindu Survey of Indian Agriculture*: 25-28.
- Singh, Alka, Ranjit Kumar, P. K. Jain and A. K. Mangal (2007), An economic evaluation of environmental risk of pesticides use: A case study of paddy, vegetables and cotton in irrigated ecosystem, *Indian Journal of Agricultural Economics*, **62**(3): 492-502.
- Singh, Alka, V.C. Mathur and G. K. Jha (2007), Potential of *Jatropha* biofuel: An emerging agri-business opportunity, *Agricultural Economics Research Review* **20**: 607.
- Singh, N.P., Parmatma Singh and R.P. Singh (2007), Sugar industry in Uttar Pradesh: Efficiency still holds the key, *Agricultural Economics Research Review*, **20**(1): 157-170
- Singh, N. P., Parmatma Singh and Suresh Pal (2007), Estimation of economic efficiency of sugar industry in Uttar Pradesh: A frontier production approach, *Indian Journal of Agricultural Economics*, **62**(2): 232-243.
- Chand Puran, Shiv Kumaar, Amit Kar and Geeta Bisaria (2006), Extent and magnitude of agricultural diversification in Haryana, *Agricultural Economics Research Review*, India, **19**: 174.
- Hema, M., Ranjit Kumar and N.P. Singh (2006), Volatile price and declining profitability of black pepper in India: Disquieting future, *Agricultural Economics Research Review*, **20**(1): 61-76.
- Kumar, Praduman, N.P. Singh and V. C. Mathur (2006), Sustainable agriculture and rural livelihoods: A synthesis, *Agricultural Economics Research Review*, **19**: 1-22.
- Kumar, Ranjit, N. P. Singh, R.P. Singh and A. K. Vasisht (2006), Rural infrastructure and agricultural growth: Interdependence and variability in Indo-Gangetic plains of India, *Indian Journal of Agricultural Economics*, **61**(3): 469-480.

- Shinoj P. and V.C. Mathur (2006), Analysis of demand for major spices in India, *Agricultural Economics Research Review*, **19**: 367-376.
- Shinoj P. and V.C. Mathur (2006), An analysis of India's agricultural trade in the Asian region, *Pusa Agri. Science* 29: 50-60.
- Singh, N.P., Ranjit Kumar and R.P. Singh (2006), Diversification of Indian agriculture: Composition, determinants and trade implications, *Agricultural Economics Research Review*, **19**:23-36.
- Braham, P., D. K. Sharma and V.P. Tyagi (2006), Improving food consumption and nutrition through efficient food security system, published in *Indian Journal of Agricultural Economics*, 434.
- Braham, P. and V.P. Tyagi (2006), Impact of infrastructural development provided by U P Rajya Krishi Utpadan Mandi Parishad on agricultural growth of the state, published in *Indian Journal of Agricultural Economics*, 522.
- Mandal, Subhasis and R.P. Singh (2005), Shallow tube wells installation and its impact on farm economy of lower Gangetic plain in West Bengal, *Agricultural Economic Research Review*, **17**(2): 261-272.
- Mathur, V.C. and N. P.Singh (2005), Management of risks in agriculture: A synthesis, *Agricultural Economics Research Review* **18**: 145-155.
- Singh, N. P., Ranjit Kumar, R.P. Singh and P.K. Jain (2005), Is futures market mitigating price risk: An exploration of wheat and maize market, *Agricultural Economics Research Review*, **19** (1): 57-69.
- Singh, N.P., Ranjit Kumar and R. P. Singh (2005), Dynamics of Bovine economy in Indo-Gangetic plains of India: Issues of growth, equity and sustainability, *Agricultural Economy Research*, **18**(1): 51-70.
- Arya, P. Vidhyasagar and Praduman Kumar (2004), Social pricing of patents in Indian agriculture- A case study of hybrids, *Agricultural Economic Research Review*, **17**(1): 43-56.
- Kumar Shiv, Puran Chand, Ramesh Chand and Sonia Rathi (2004), Commercialization of contact farming of wheat seed production in Haryana, *Kautilya- Journal of Haryana Economics Association* **24**(1-2): 96-101.
- Kumar Shiv, U. K. Pandey and K.S. Suhog (2004), Estimates of demand function and short supply function for eggs in Haryana, *Indian Journal of Agricultural Marketing* (Conference Issue) **18**(3): 135-148.
- Kumar, Praduman and Madan Mohan Dey (2004), A study of household demand for fish in India, *Indian Journal of Agricultural Economics*, **59**(3): 465-475.

- Kumar, Praduman and Partap S. Birthal (2004), Changes in consumption pattern and demand for livestock and poultry products in India, *Indian Journal of Agricultural Marketing*, **18**(3): 110-123.
- Kumar, Praduman, Anjani Kumar and C. P. Shiji (2004), Total factor productivity and socio-economic impact of fisheries technology in India, *Agricultural Economic Research Review*, **17**: 131-144.
- Kumar, Praduman, Anjani Kumar and Surabhi Mittal (2004), Total factor productivity of crop sector in the Indo-Gangetic plains of India: Sustainability issues revisited, *Indian Economic Review*, **39** (1): 169-210.
- Kumar, Ranjit, N. P. Singh, R.P. Singh and A.K. Vasisht (2004), Adoption pattern of improved maize technology in northern India: Impact on farm earning and trade, *Agricultural Economics Research Review*, **17**(Conf. No.): 29-42.
- Singh Alka, A.K. Vasisht, B. R. Atteri and Daroga Singh (2004), Assessment of market infrastructure and integration: A case study of Orissa, *Indian Journal of Agricultural Marketing*, **18**(3): 30-39.
- Singh Alka, Ranjit Kumar, D. K. Das and P.K. Jain (2004), Economic and environment impact of integrated pest management in paddy- A case study of Haryana, *Agricultural Economics Research Review*, **17**(conf. no): 69-84.
- Singh, N.P., and R. P. Singh (2004), Market avenues for agriculture under globalisation and liberalization in India, *Indian Journal of Agricultural Marketing*, **18**(1).
- Suresh, A and Puran Chand (2004), Trade related aspects of intellectual property rights-An evaluation, *Kurukshetra- A Journal of Rural Delopment*, **52**(2): 21-26.
- Arya, P. Vidyasagar and Praduman Kumar (2003), Awareness on intellectual property rights, *Agricultural Economics Research Review*, **16**(1): 60-74.
- Atteri, B.R. and Geeta Bisaria (2003), Marketable surplus of rice and wheat and benefits of storage to the farmers in India, *Agricultural Marketing*, **11**(2): 27-31.
- Atteri, B. R., Puran Chand and Roshan Lal (2003), Indian fruits and vegetables export under WTO regime, *Indian Journal of Agricultural Economics*, **58** (3): 633-634.
- Atteri, B. R. and Vinod Kumar (2003), Structural transformation in rural non-farm employment and non-farm labour productivity in India, *Agricultural Economics Research Review*, 164-165.
- Kar, Amit (2003), Recent trends in export of agro-processed products and changes in pre and post liberalization period, *Indian Journal of Agricultural Economics*, **58**(3):620.

- Kar, Amit, V.P. Tyagi and Pramod Kumar (2003), Importance in rural non-farm sector in India, its present status and options for improvement, *Agricultural Economics Research Review*, 163.
- Kazal, M.M.H and Puran Chand (2003), Potential factors of agricultural development in Haryana, *Haryana Economic Journal*, **23** (1-2): 101-106.
- Kumar Anjani and Praduman Kumar (2003), Food safety measures: Implications for fisheries sector in India, *Indian Journal of Agricultural Economics*, **58** (3): 365-374.
- Kumar, Praduman and Pramod Kumar (2003), Demand supply and trade perspective of vegetables and fruits in India, *Indian Journal of Agricultural Marketing* **17**(3): 121-130.
- Kumar, Praduman and Surabhi Mittal (2003), Crop diversification in India: Analysis by state and farm size group, *Agricultural Situation in India*.
- Kumar, Praduman and Surabhi Mittal (2003), Long term changes in dietary pattern and food demand in Uttar Pradesh, *Indian Journal of Agricultural Marketing*, **17**(1): 1-15.
- Kumar, Ranjit and Chhotan Singh (2003), Role of technology mission on oilseeds in Rajasthan: An appraisal, *Bihar Journal of Agricultural Marketing*.
- Kumar, Ranjit, N. P. Singh and R. P.Singh (2003), Non-farm employment in rural India: An analysis of shifting paradigm, *Agricultural Economics Research Review*, Conference issue: 20-30.
- Kumar, Ranjit, N. P. Singh and R.P. Singh (2003), Water resources in India: Need for holistic development and cautious exploitation, *Indian Journal of Agricultural Economics*, **58**(3): 448-466.
- Reddy, Amarender and Praduman Kumar (2003), Women employment in rural Andhra Pradesh. *Agricultural Economics Research Review*, Conference Issue, 146.
- Sekar, I and C. Ramasamy (2003), Decision making in risk ridden tank fed farms in Tamil Nadu- An application of advanced breakeven analysis, *Indian Journal of Agriculture Economics*, **58** (1).
- Singh, Alka (2003), Deteriorating state of finances in Uttar Pradesh: Implications on growth and equit, *Asian Economic Review*, **44**(2): 285-290.
- Singh, Alka and A.K.Vasisht (2003), Impact of liberalization on India in agricultural exports: A behavioral and discriminant approach, abstracted in the *Indian Journal of Agricultural Economics*, **58** (3): 391.
- Singh, Alka, A.K. Vasisht and P.K. Jain (2003), Inter-state variations in non-agricultural employment in rural India: An exploratory analysis, *Agricultural Economics Research Review*, Conference issue, 60-69.



- Singh, D. R. and R.P. Singh (2003), Ground water markets and the issue of equity and reliability to water access: A case of western Uttar Pradesh, *Indian Journal of Agricultural Economics* **58** (1): 115-127.
- Singh, N. P., R.P. Singh and Ranjit Kumar (2003), Feed industry in India: Silent but robust propositions, *Indian Journal of Agricultural Economics*, **58**(3): 554-565.
- Chand, Ramesh and Praduman Kumar (2002), Long-term changes in coarse cereal consumption in India, causes and implication, *Indian Journal of Agricultural Economics*, **57**(3): 316-325.
- Kumar, Ranjeet (2002), Economics reforms poverty and employment pattern in India, *Agriculture Today*.
- Kumar Ranjeet, N. P. Singh and R. P. Singh (2002), Impact of technological development in rice production on rural economy in India, *Agro-Asian Journal of Rural Development*, **35** (2): 71-78.
- Kumar, Ravi, G., Ranjeet Kumar and V. B. Patel (2002), Biotechnology in developing countries: Perspectives, *Yojna*. 33-39.
- Kumar, Shiv, Puran Chand and Kanika (2002), The plant variety protection, farmer's rights act 2001 vs farmer's right to produce and sell seed, *Farmer's forum*, **2**: 19-20.
- Saxena, Raka, N. P. Singh and K. K Dutta (2002), Prioritizing production constraints of dairying in Haryana, *Agricultural Economics Research Review*, Conference Proceedings, 118-125.
- Singh, R. P. and Amit Kar (2002), Co-operative credit system-emerging issues and policy options, *Agriculture Today*.
- Sekar, I and Puran Chand (2002), Pulse performance in India: A special and temporal analysis, *Productivity*, **42** (4): 674-677.
- Singh, Alka (2002), Deteriorating state of finances in Uttar Pradesh: Implications on growth and equity, *Asian Economics Review*, **4**: 360-366.
- Singh, Mahendra and Suresh Pal (2002), Sustainability of rice-wheat system in Uttar Pradesh: An economic analysis, *Agricultural Economic Research Review*, **15**(1): 26-40.
- Singh, R. B. and Praduman Kumar (2002), Acceleration of India's agricultural growth during the tenth five year plan and beyond, *Agricultural Situation in India*, **59**: 259-266.
- Singh, R. P., N. P. Singh and K.V. Prabhu (2002), Human resource development for academic excellence: Redefining human resources, IARI Publication 'Focus', 1-4.

- Singh, R.P, Ranjeet Kumar and N. P. Singh (2002), Transitioning maize seed industry in India: Sectoral dimensions, *Indian Journal of Agricultural Economics*, **57**(3): 430-442.
- Vasisht, A.K. (2002), Multifactor analysis inter and intra variations in productivity of major pulse crops over time and regions and their classification-An application of principal component analysis techniques, **57** (3): 372.
- Vasisht. A. K. (2002), Issues relating to pricing of sugarcane / sugar and cotton: A review, conference issue, *Indian Journal of Agricultural Marketing*.
- Badal, P.S. and H.K. De (2001), Translation farmers constraints into development priorities: Participation rural appraisal of a village in Rajasthan, *Indian Farming*, **50**(11): 11-14.
- Badal, P.S. and R.P. Singh (2001), Adoption of modern cultivars of maize in Bihar, India: Implications for research and extension, *Journal of Rural Development*, **35**(2): 71-79.
- Badal, P.S. and R.P. Singh (2001), Technological change in maize production: A case study of Bihar, *Indian Journal of Agricultural Economics*, **56**(2): 211-219.
- Badal, P.S. and R.P. Singh (2001), Sources of productivity growth in maize in Bihar, *Journal of Agricultural Development and Policy*, **12**(2): 1-10.
- Kumar, Pramod and Puran Chand (2001), Impact of rural infrastructure and human capital on agricultural development in India, *Bihar Journal of Agricultural Marketing*.
- Kumar, Ranjit (2001) Dumping and its protective measures in India, *Employment News*, **26**(17).
- Kumar, Ranjit and Chhotan Singh (2001), Impact assessment of technology mission on rapeseed-mustard production in Rajasthan, *Agricultural Situation in India*, **57**(11): 615-618.
- Kumar, Ranjit and Chhotan Singh (2001), Supply resource of edible oilseed crops in Rajasthan: A district level study, *Agricultural Situation in India*, **58**(4): 139-141.
- Kumar, Ranjit, R.P. Singh and B.K. Dileep (2001), Economic reforms and employment pattern in rural India: An overview, *Afro-Asian Journal of Rural Development*, **34**(1): 87-95.
- Sekar. I (2001), Water at risk in the 21<sup>st</sup> century, *Employment News*, **26**(3): 21-27.
- Sekar, I. and C. Ramasamy (2001), Risk and resource analysis of rainfed tanks in south India, *Journal of Social and Economic Development*, **13**(2): 208-215.
- Sekar, I. and Ramasamy (2001), Resource use efficiency and factor share analysis in mungbean in India, *Agricultural Situation in India*, **58**(9).
- Singh R.P. and Ranjit Kumar (2001), Maize research and development under changing scenario of farming system research: Issues and policy options, *Journal of Agricultural Development and Policy*, **13**(2): 10-22.

Singh R.P., A.K. Vasisht and V.C. Mathur (2001), Quantitative assessment of economic losses of degraded land in India, *Indian Journal of Agricultural Marketing*, **15**(3): 91-102.

### **B. Published proceedings of Conferences /Workshops**

Chand, Puran and Mahendra Singh (2010), Growth and development of agriculture: Indian planning experiences, paper presented in 27<sup>th</sup> Annual conference of Haryana economic association held on March 19-20, 2010 at Chaudhary Devi Lal University, Sirsa, Haryana.

Pal, Suresh., Amit. Kar, I. Sekar, G. Bisaria (2010), Climate change, environment sustainability, agricultural development, *Centre for advanced faculty training*, Division of Agricultural Economics, Indian Agricultural Research Institute, New Delhi.

Agricultural Innovations and Marketing Reforms for food and Nutrition Security (2009), Background paper for ASSOCHEM conference.

Bahal, Ram, B. R. Atteri and J.P.S. Dabas (2009), Paper presented in 22<sup>nd</sup> National conference on agricultural marketing organized by Indian society of agricultural marketing and PAU Ludhiana, Punjab, held at PAU, Ludhiana.

Bahal, Ram, B. R. Atteri and J.P.S. Dabas (2009), Successful rural institution- A case study of a co-operative society in Delhi, *Indian Journal of Agricultural Marketing*, National conference on agricultural marketing.

Jha, Girish K., Sameer Kumar, Hari Prasain, Ruppa K. Thulasiram and Parimala Thulasiraman (2009), Option pricing using particle swarm optimization, *ACMC Conference on computer science and software engineering*, Montreal, Canada, 267-272.

Kar, Amit (2009), Inland fish production, its marketing and constraints in the state of Haryana, for 96<sup>th</sup> Indian science congress held at NEHU, Shillong (in the animal, veterinary and fishery science category).

Shankar Uday, Yashwant, Sameer Kumar, Girish K. Jha, Ruppa K. Thulasiram and Parimala Thulasiraman (2009), an aggregated ant colony optimization approach for pricing options, 23<sup>rd</sup> IEEEACM-International parallel and distributed computing in finance, Rome, Italy

Singh, M. and Puran Chand (2009), Urbanization and agricultural development in Delhi: An environment perspective, paper presented in the 17<sup>th</sup> Annual conference of agricultural economics research association (India) held at TNAU, Coimbatore.

Singh, Mahendra and V.C. Mathur (2009), Horticultural development and sustainable growth of agricultural sector in India: A critical analysis, *International conference on Horticulture* 2009, Bangalore, India.

- Tyagi, V.P., Brahm Prakash and D. K. Sharma (2009), Effects of markets arrivals on prices of pigeonpea in Uttar Pradesh, pages 65-66, abstract, *International conference on grain legumes; quality improvement value addition and trade* held at Indian Institute of Pulses Research Kanpur from 14-16 February 2009 by Indian society of pulses research and development..
- Tyagi, V.P., Brahm Prakash and D. K. Sharma (2008), Concept of food security and facts of agricultural development of India. *Regional conference on food security and sustainable agricultural development* held at Tripura University Agartala from 24-25 Nov.2008 by IGNOU, pages 27-28, Souvenir, IGNOU, New Delhi.
- Tyagi, V.P. Brahm Prakash and D. K. Sharma (2008), Regional variation in the performance of chickpea across the states of India, pages 66-67, abstract, *International conference on grain legumes; quality improvement, value addition and trade*, held at Indian Institute of pulses research of Indian society of pulses research and development.
- Atteri, B. R. and Alka Singh (2008), Empowering small farmers through market led development: A case study of market intelligence for horticultural produce, paper presented in *Regional conference on food security and sustainable agriculture development*, organized by IGNOU at Tripura University, Agartala-Tripura.
- Chand, Puran and Mahendra Singh (2008), Indian agriculture development policy: A critical analysis. *National seminar on current agrarian issues: Response of agricultural information system* organized by International Extension Forum, Tamil Nadu Agricultural University, Coimbatore.
- Mahantesh, N. and Alka Singh (2008), A study on farmers' knowledge, perception and intensity of pesticide use in vegetable cultivation in western Uttar Pradesh, paper presented for *Pusa agri. science, IARI*.
- Randhir, T.O, I. Sekar (2008), Efficiency of small-scale storage networks in India, *American water resource association (AWRA) Annual conference*, New Orleans, USA.
- Sekar, I (2008), Economic performance and promotion of tank modernization program for sustaining rainfed agriculture, *Indian Journal of Agricultural Economics. Conference issue*, **63**(3): 533.
- Sekar, I (2008), Risk and decomposition analysis in agricultural crop production: A case of rice crop in Assam state, *Conference on food security and sustainable agriculture development* in Agartala (Tripura).
- Sekar, I (2008), Risk in rice sector during economic reform period: Need for reaching out, *National seminar on current Agrarian crises: Agricultural information system*, New Delhi.
- Singh, Mahendra and Puran Chand (2008), Sustainability of agricultural system in north-eastern region: Policy perspectives for 11<sup>th</sup> Five Year Plan. *Regional conference on food security*

- and sustainable agriculture development*, IGNOU, Regional Centre, Agartala (Tripura): 50.
- Vardan, Jayakumara, R., V. Lenin and Pramod Kumar (2008), Growth, instability and acreage response of principal crops in Tamil Nadu, *Agricultural Economics Research Review*, (16 Annual conferences).
- Chand Puran and Geeta Bisaria (2007), Ethics in economic development. In *Annual Conference of Haryana Economic Association*, held at NDRI, Karnal, 19-20 November.
- Jha G.K., Anu Susan Sam, N.P. Singh and S.K. Chaturvedi (2007,) Chickpea economy in India: Leveraging for needed push, proceedings of *National symposium on Legumes for Ecological Sustainability: Emerging Challenges and Opportunities*, November 3-5, Kanpur, 319.
- Kar, Amit and Sant Kumar (2007), Agriculture in coastal eco-system: An inventory, *International symposium on Management of Coastal Eco-systems: Technological Advancement and Livelihood Security*, Indian Society of Coastal Agricultural Research, West Bengal.
- Lal S. B. , Ramasubramanian V., Ranjana Agarwal, Syed Moonis Raza and G. K. Jha (2007), Software for imputing missing values using neural networks, proceedings, *3<sup>rd</sup> International conference on Artificial Intelligence*, December 17-19, Pune, India. 1595-1604
- Ramasubramanian V, Ranjana Agarwal, S. B. Lal, Anil Rai, Amrender Kumar, Syed Moonis Raza and G. K. Jha (2007), Evaluation of neural network applications for data editing, proceedings, *3<sup>rd</sup> International Conference on Artificial Intelligence*, December 17-19, Pune, India. 1572-1581
- Sekar, I., V.C.Mathur, N.B. Singh and S. Kumar (2007), Inequitable distribution of water quality determinants in watershed systems: GIS watershed modeling for sustainability, 31<sup>st</sup> Social Science abstracts of *Indian Social Science Congress*, Dec.31.
- Sekar, I., M. Kelty, and T.O. Randhir (2007), GIS and modeling of risk on vernal pool ecosystem at watershed scale, Soil and Water Conservation Society conference on *Conservation Challenges in a Changing Landscape*, July 21-25 in Tampa, Florida, USA.
- Sekar, I.and K .McGarigal (2007), GIS watershed modeling, remote sensing, and optimization tools to evaluate the efficacy of BMPs in reducing herbicide loads in surface water, American Water Resources Association (AWRA) summer conference on *Emerging contaminants of Concern in the Environment: Issues, Investigations and Solutions*, June 25-26, USA.
- Singh R.P, Ranjit Kumar and N.P. Singh (2007), Sustainability of livelihood and food security through secondary crops in India, proceeding, *International conference on the 21<sup>st</sup>*

*Century Challenges to Sustainable Agri-Food System*, March 15-17, UAS, Bangalore, India.

- Dubey V. K, S. B. Lal, Ramasubramanian V., G. K. Jha and Ranjana Agarwal ( 2006), Evaluation of artificial neural network application for data imputation: Development of software for imputation using back propagation neural networks: *International conference on Statistics and Informatics in Agricultural Research*.
- Jha G.K., N. Sivaramane, N.P. Singh and Ranjit Kumar (2006), Identifying the determinants of poverty in rural and urban India: *International conference on 21<sup>st</sup> century challenges to sustainable agri-food systems: Biotechnology, environment, nutrition, trade and policy*.
- Kumar Pramod, P.S. Badal, Alka Singh and R.P. Singh (2006), Food safety measures for trade facilitation in post WTO era- A review of valuation techniques, in proceedings of *National seminar on Ten years of WTO and Indian Agriculture* organized by Nagpur University, on 29-30 January, 2006, 120-128.
- Kumar Pramod and R.P. Singh (2006), Performance of crop insurance schemes in India, published in souvenir of *Agricultural summit 2006- Reforms for Empowering the Farmer*, organized by FICCI and Ministry of Agriculture, 33-44.
- Kumar Pramod and R.P. Singh (2006), Priority sector lending; Problem and prospect proceeding, *National seminar on Rural Finance in India*, October 3-4, 2006, Management and Technical Institute, Jalandhar, Punjab, India
- Vasisht, A.K. and Alka Singh (2006), Trends and structure of employment and earnings of rural women in the changed economic scenario, paper presented in *International conference on Statistics and Bioinformatics* held at IASRI, New Delhi, Dec.26-30.
- Singh R.P. and D.R. Singh (2005), Structure, determinants and efficiency of ground water markets in Western Uttar Pradesh, presentation in the *4<sup>th</sup> meet of IWMI-Tata on Global ground water scenario*, organized by IWMI at Anand, Gujarat, February 24-26, 2005 and subsequent its publication as proceeding of the 4<sup>th</sup> meet.
- Singh R.P. and Ranjit Kumar (2004), Water resource exploitation and its environmental consequences in Indian agriculture, *91st Indian Science Congress*, Chandigarh, Jan 2-6, 2004.
- Singh R.P., Ranjit Kumar and N.P. Singh (2005), Economic growth and sustainability in North East Region (NER) of India: A perspective, in *National seminar on Issues concerning economic growth and sustainability in North Eastern Region of India* January 10-12, 2005. NIRD, North Eastern Region Centre, Guwahati.
- Singh, N.P., Ranjit Kumar, R.P.Singh and P.K.Jain (2005), Diversification of Indian agriculture during post-reform period: Composition and determinants, paper presented in *South Asia*

*Regional Conference on Globalization of Agriculture in South Asia* held on March 23-25, 2005 at Hyderabad.

- G. Anitha, and R.P. Singh (2004), Male out migration, gender roles and rice farming: A study of eastern Uttar Pradesh, paper presented in *International symposium on Rain fed rice eco system: Prospect and potential*.
- Kumar, Pramod, P. S. Badal and R.P. Singh (2004), Yield variability and its determinants in production of cereal crops in India, paper presented during *National seminar on Indian agricultural and Indian economy: Retrospect and prospects- A policy framework for a strong, sustainable and globally competitive Indian agriculture* held at UAS, Dharwad.
- Mathur, V.C. and O. Homenauth (2004), Agricultural diversification among CARICOM countries: A comparative analysis, *25<sup>th</sup> West Indies agricultural economics conference of Caribbean Agro-economic society of agricultural, natural resources and environmental challenges under emerging trading regimes*, Paramaribo, Suriname, August 15-21.
- Kumar Praduman and Mruthyunjaya (2004), Long term changes in food basket in India paper presented in joint Moa, Bhutan-NCAP-IFPRI workshop on *Agricultural Diversification in South Asia* at Paro, Bhutan, November 21-23, 2002.
- Singh, R. P and Ranjit Kumar (2004), Water resource exploitation and its environment consequences in Indian agriculture, *91st Indian Science Congress*, Punjab University, Chandigarh.
- Atteri, B.R. (2003), Temperate fruits production, domestic marketing and international trade issues, book of abstracts of the *7<sup>th</sup> International symposium on Temperate Zone Fruits in the Subtropics*, 301.
- Hiremath, K.C. Mruthyunjaya and Praduman Kumar (2003), Rural non-farm sector and its role in economic development in changing scenario, *Agricultural Economics Research Association (India)*.
- Prakash, Brahm, D. K. Sharma and V.P. Tyagi (2003), Emerging trends in fruits and vegetable processing in India, abstract in conference issue of *63<sup>rd</sup> Annual conference of Indian Society of Agricultural Economics* held at Bhubaneswar.
- Sekar, I and T.S. Kumar (2003), Tank resource management for sustainable agriculture in Tamil Nadu, *26th Congress of the Indian Academy of Social Sciences*, social science abstracts.
- Tyagi, V. P and Brahm Prakash (2003), Suitable price policy-a prerequisite for increasing production for of pulses in the country, paper presented in the *symposium held at I.I.P.R., Kanpur* organized by Indian Society of Pulse Research and Development.
- Vasisht, A.K (2003), Production function approach of valuing environment functions of wetland ecosystems, presentation in the *Beennial conference of Indian Society of Ecological Economics* (INSEE being at IIM, Kolkata).

- Vasisht, A.K., R. P. Singh and V. C. Mathur (2003), Economic implications of land degradations on sustainability and food security in India, proceedings of *International conference on Transition towards sustainable development in south Asia*, organized by TERI, 179-187.
- Birthal, Pratap S. and Praduman Kumar (2002), Emerging trends in consumption of livestock production in India: Implications for the growth of livestock sector, paper presented in the *10<sup>th</sup> International Congress of Asian and Australian association of animal production societies* at New Delhi (India).
- Kar, Amit (2002), Trends in agricultural marketing and food processing sector, *26<sup>th</sup> Indian social science congress*, Indian Academy of Social Sciences, Andhra University, Visakhapatnam.
- Kar, Amit (2002), Variability in productivity in agriculture and its determinant, *National conference on research and development in farm sector with human face*, Bidhan Chandra Krishi Vishwavidyalaya.
- Kar, Amit and R.P. Singh (2002), Empowerment of women through self help group, the paper presented in *National seminar on Women empowerment through micro-finance* organized by Department of agricultural economics, Annamalai University, Tamil Nadu.
- Kar, Amit and B. R. Atteri (2002), Growth and instability in productivity in agriculture, *National symposium on Agriculture in changing global scenario*, IARI.
- Kar, Amit and B.R. Atteri (2002), Agricultural sustainability in West Bengal, *9<sup>th</sup> West Bengal state science and technology congress*.
- Kumar, Praduman (2002), Demand and supply of horticultural products in India, the paper presented in the *National symposium on Re-vitalizing horticulture sector under changing scenario* in the Division of Agricultural Economics, Indian Agricultural Research Institute, New Delhi.
- Kumar, Praduman (2002), Incentives for the development of agricultural marketing, recommendation of the *15<sup>th</sup> National conference on Agricultural marketing*, *Indian Journal Agricultural Marketing*, **16** (1): 68-70.
- Kumar, Praduman, Pramod Kumar and Surabhi Mittal (2002), Vegetable demand and production in India: Long term perspective, the paper presented in the *National workshop on Impact of vegetable research in India* held at Varanasi, Uttar Pradesh.
- Sekar. I (2002), Present status and constraints of mungbean production in India- An economic perspective, paper presented at an *International workshop on Improving income and nutrition by incorporation of mungbean in cereal fallows in the Indo-Gangetic plains of South Asia*, in ICRISAT, Hyderabad.



- Singh, Alka (2002), Regional imbalances in agricultural and its impact on land use dynamics-A comparative study of Punjab and Bihar, paper presented in the *Symposia organized by Indian Society of Agricultural Sciences*, New Delhi.
- Singh, M. and Suresh Pal (2002), Analysis of cropping pattern and prioritising production constraints in the rice-wheat: Evidence from eastern India, in proceedings of *National symposium on Agriculture in changing global scenario* held at IARI, New Delhi.
- Singh, R.P, A. K. Vasisht and V.C. Mathur (2002), Land degradation and its economic implications on Indian agriculture, keynote paper, *National symposium on Agriculture in changing global scenario*, Indian Society of Agricultural Sciences, IARI, New Delhi.
- Singh, Mahendra (2002), Measurement of sustainability of cropping system: A methodological issue, in proceedings of *National conference on Coastal agricultural research* held at ICAR research complex in Goa.
- Singh, Mahendra, Amit kar and R. P. Singh (2002), Dynamics of vegetable production in Uttar Pradesh: A district-wise analysis. *Workshop on Impact of vegetable research in India*.
- Tyagi, V.P. and K. K. Singh (2002), Analysis of price and arrival behaviour of vegetable in Delhi market. *Workshop on Impact of vegetable research in India*.
- Mathur, V.C (2001), Export potential of onion: A case study of India, *UNCTAD Regional workshop on Commodity export diversification and poverty reduction in south and south-east asia*, UNCTAD and ESCAP, Bangkok, 3-5 April.
- Singh, R.P., V. C. Mathur and A. K. Vasisht (2001), Land degradation and economic losses: Implication for agricultural sustainability and food security in India: Presented at the *SPEE International conference on Natural resources management*, University of Agricultural Sciences, Bangalore, 24-28 July.

### **C. Bulletins/Policy Papers**

- Morris Michel, Pramod Kumar (2009), Structure and performance of food processing industry in India, working paper, groupe de recherche en économie et politiques agricoles, université laval, Québec, Canada.
- Morris Michel, Pramod Kumar (2009), Trends and pattern of consumption of value added foods in India, working paper, groupe de recherche en économie et politiques agricoles, université laval, Québec, Canada.
- Morris Michel, Pramod Kumar (2009), Processed food consumption pattern in urban India, Working paper, Groupe de recherche en économie et politiques agricoles, université laval, Québec, Canada.

Mathur, V.C (2006), Lecture notes for the CAS training course on Agricultural development and policy, centre of advanced studies in Agricultural economics, Division of Agricultural Economics, IARI, New Delhi. February 24 – March 16.

Mathur, V.C (2006), Lecture notes for CAS training course on Conceptual and methodological issues in the new regime of international agricultural trade. November 29 – December 19, 2005. Centre of advanced studies in agricultural economics, Division of Agricultural Economics, IARI, New Delhi, Course Coordinator.

Singh, R. P., N. P. Singh and Ranjit Kumar (2004), Enhancing sustainable development of diverse agriculture in India, (Working paper series: No. 78) Bogor: UNESCAP-CAPSA America

Mathur, V.C. and O. Homenauth (2003), Estimation of cost of production of agricultural commodities: A manual, National Agricultural Research Institute, Guyana, South - America.

Mathur, V.C. (2001), Lecture notes for the CAS training on Conceptual and methodological issues in the new regime of international agricultural trade. January 11 – 31. Centre of advanced studies in agricultural economics, Division of Agricultural Economics, IARI, New Delhi.

#### **D. Book Chapters**

Singh, Alka and Suresh Pal (2010), The changing pattern and sources of agriculture growth in India in Julian M. Alston, Bruce A. Babcock and Philip G. Pardey, (eds.). The shifting pattern of agricultural production and productivity worldwide. The Midwest Agribusiness Trade Research and Information Centre, IOWA State University, USA.

Atteri, B. R. and Alka Singh (2009), Empowering small farmers through market led developments- A case study of market intelligence for Horticultural produce, edited ,food security and sustainable agriculture, U-Day publishers, New Delhi.

Sekar, I (2009), Watershed and commercial agriculture linkage for transitioning rural India. Ed. Agrawal, B., Changing Rural India, ABD Publishers. India.

Sekar, I. and B.G. Shivkumar (2009), Community level collective action imperatives for sustainable agriculture. Eds. Agrawal, C.A. and Agrawal, B., Education and Society, ABD Publishers, India.

Sekar, I.and B.G. Shivkumar (2009), Stretching the frontiers in India agriculture in a changing milieu of rural India. Ed. Agrawal, B., Changing Rural India, ABD Publishers. India.

Shivkumar, B.G., I. Sekar and O.V.S Thenna (2009), Role of agricultural education in upliftment of rural society. Eds. Agrawal, C.A. and Agrawal, B., Education and society, ABD publishers, India.

- Singh, M and Puran Chand (2009), Sustainability of agricultural system in north-eastern region, food security and sustainability (Ed.) P. K. Jain and B. S. Hansra. Uday Publishers and Advertisers: 221-236.
- Singh, M and V.C.Mathur (2009) Horticulture development and sustainable growth of agriculture sector in India: A critical analysis, International Conference on Horticulture held at Bangalore
- Chand, Puran (2008), Agriculture economics, Advances in Post-Graduate Research: For Improving agricultural growth and prosperity: 321-335.
- Sekar, I (2008), Agri-business enterprises and pressure on natural resources and environment. Eds. Agrawal, B., and Agrawal, A., Social responsibility of business enterprises. ABD Publishers, India.
- Sekar, I (2008), Urbanization in rural areas: Sustenance of agriculture and natural resources, Ed. Agrawal, B., Urbanisation of rural areas, ABD Publishers, India.
- Reddy, A. A., V.C. Mathur and S.S. Yadav (2007), Commercial cultivation and profitability in Chickpea in S. S. Yadav, R. Redden, W. Chen and B. Sharma (eds. Chickpea breeding and Management CABI, Oxford, U.K.
- Singh R.P., Ranjit Kumar and N.P. Singh (2007), Economic upliftment through watershed development in North Eastern regions of India, in Agricultural Development in Northeast India: Issues and Options (Ed. K.K. Bagchi Delhi.
- Singh R.P., Ranjit Kumar and N.P. Singh (2006), Livelihood security of resource poor maize farmers in India, In Farming a Way Out of Poverty: Forgotten Crops and Marginal Populations in Asia and the Pacific (Eds. R. Bougeois, L. Svensson and M.L. Burrows CAPSA Monograph; No. 48, UNESCAP-CAPSA, Bogor, Indonesia, 49-64.
- Badal, P.S. and R.P. Singh (2004), A chapter on reflections on food and nutrition security in north east India in book entitled Food security and public distribution system today: Failure and success edited by Amlesh Banerjee. New Delhi, Kanishka, 14: 374.
- Kumar, Praduman and Surabhi Mittal (2003), A chapter on productivity and supply of foodgrains in India in edited book entitled Towards a food secure India: Issues & policies, Edited by S. Mahendra Dev, K.P. Kannan and Nira Ramchandran, Institute for human development and centre for economic and social studies. Published by Manohar publishers and distributors: 33-58.
- Kumar, Praduman and Surabhi Mittal (2003), Productivity and supply of foodgrains in India. Edited book, Food security by A. Sharma, IHD.
- Mathur, V.C. (2003), Indian agriculture in the new regime of global trade: Issues and concerns, in WTO and new international trade regime: Implications for Indian agriculture, A. K.

Vasisht and Alka Singh (eds). Division of Agricultural Economics, IARI, and Advance Publishing Concept, New Delhi.

Singh, N. P., A. K. Vasisht and B.K. Dileep (2003), A chapter on production performance of maize in selected states: A synthesis in a published technical bulletin entitled Maize production in India: Golden grain in transition (TB ICA: 4/2003) edited by Ranjit Kumar and N. P. Singh, Division of Agricultural Economics, IARI, New Delhi.

Singh, N.P., A. K. Vasisht, and B.K. Dileep (2003), A chapter on production performance of maize in plains of India in a published technical bulletin entitled Maize production in India: Golden grain in transition (TB ICA: 4/2003) edited by Ranjit Kumar and N.P. Singh, Division of Agricultural Economics, IARI, New Delhi.

Singh, R. P, Ranjit Kumar and N.P. Singh (2003), Transformation of the Indian economy: Different perspectives, a chapter in edited technical bulletin Maize production in India: Golden grain in transition (TB-ICN: 4/2003) Indian Agricultural Research Institute (IARI) 162 pages book published. (1-29).

Kumar, P., M. Hossain and S. Mittal (2002), Medium-and long-term prospects of rice supply and demand in the 21<sup>st</sup> century.” In developments in Asian rice economy. edited by M.Sombilla, M. Hossain, and B. Hardy. International Rice Research Institute, 59-94.

Kumar, Praduman (2002), Facts of Indian poverty, by K.L. Datta and Savita Sharma. Concept publishing company, New Delhi, 175. Ind. Jr. Agril. Econ. (Book Review) **57**(4): 770-771, 2002.

Kumar, Praduman (2001), Agricultural performance and productivity. in Indian agricultural policy at the crossroads edited by S.S. Acharya and D.P. Chaudhri, Rawat publications, 353-476.

## **E. Books**

Kumar Ranjit and N. P. Singh, (2003), Maize production in India, (TB-ICN: 4/2003). Indian Agricultural Research Institute, New Delhi IARI, New Delhi.

Singh, R. P., A.K. Vasisht and V. C. Mathur (2003), Quantitative assessment of economic losses of degraded land in India, Advance publishing concept, New Delhi.

Vasisht, A. K. and Alka Singh (2003), WTO and New international trade regime (Ed.) Advance publishing concept.

Vijaykumar, H.S. and V.C. Mathur (2002), Constraints and opportunities for agricultural and rural development in different agro-ecological regions, conference proceedings, Agricultural Economics Research Association, India.

## Research Publications

1991-2000

### A. Published in professional journals

- Atteri, B.R. and Maneesh Choubey (2000), Project evaluation: An empirical investigation of investment in litchi orchards in Bihar, *Bihar Journal of Agricultural Marketing*.
- Badal P.S. and R.P. Singh (2000), Production marketing and utilization of maize in Bihar: Some micro level evidences, *Bihar journal of agricultural marketing* **8**(1): 247-257.
- Badal, P.S. and Praduman Kumar (2000), Socio-economic impact of soyabean cultivation in Madhya Pradesh, *Agricultural Situation in India*, **57**(7): 373-378.
- Badal, P.S. and R.P. Singh (2000), Dynamics of maize development in Bihar, *Bihar Journal of Agricultural Marketing*, **7**(3): 247-257.
- Badal, P.S. and R.P. Singh (2000), Resource productivity and a locative efficiency in maize production in Bihar, *Agricultural Situation in India*, **56**(10): 593-96.
- Chand Puran, Parmatma Singh and Pramod Kumar (2000), Growth and instability in agricultural crops production in India, *Haryana Economic Journal*, **20**(1-2): 5-12.
- Mittal, Surabhi and Praduman Kumar (2000), Literacy, technology adoption, factor demand and productivity: An econometric analysis, *Indian Journal of Agricultural Economics*, **55**(3): 490-499.
- Molla, Allemayehu, and B.R. Atteri (2000), Price behavior of potato and onion in Delhi wholesale market, *Agricultural Economics Research Review*.
- Paroda, R.S. and Praduman Kumar (2000), Food production and demand situations in south Asia, *Agricultural Economics Research Review*, **13**(1): 1-24.
- Sekar, I. (2000), Loss from a tiny weevil in Coconut, *Indian coconut Journal*, 30(9).
- Singh, Alka (2000), Impact of investment in agricultural research on agricultural development, *Social Science Abstracts*, **24**.
- Singh, R.P. (2000), Maize research and development in India: An assessment and policy perspective, *Indian Journal of Agricultural Economics*, **55**(1): 38-46.
- Chand, Puran and Parmatma Singh (1999), Economics of infrastructure in India, *Haryana Economic Journal*, **19** (1&2): 8-13.
- Jain, Sudhir Kumar and Parmatma Singh (1999), Determinants and resource use efficiency in popular – based agroforestry *Productivity*, **40**(2).

- Kumar, Nalini Ranjan, Parmatma Singh and Suresh Pal (1999), Economic evaluation of watershed development – A case study of aril watershed in Bareilly district of Uttar Pradesh, *Agricultural Economics Research Review* **12**(2).
- Ravishankar, A. and Parmatma Singh (1999), Intellectual property rights in Indian agriculture: Implications for small holders, *Young Indian*.
- Singh, Chhotan and A.K. Vasisht (1999), Production, requirement and import of edible oils in India, *Bihar Journal of Agricultural Marketing*, **7**(3).
- Singh, Parmatma and Alka Singh (1999), An analysis of factors responsible for imbalances in agricultural development: A comparative study of Punjab and Bihar, *Agricultural situation in India* 5278-533.
- Singh, Parmatma and Alka Singh (1999), Dynamics of intra-sectoral imbalances in agriculture: A case study of Punjab and Bihar, *Bihar Journal of Agricultural Marketing*, **7**(1): 1-11.
- Valrasu, P. and Parmatma Singh (1999), Fertilizer use pattern and its impact on crop productivity – A case study of erode district in Tamil Nadu *Fertilizer News*, **44**(10): 29-36.
- Badal, P.S. and J.P. Dhaka (1998), An analysis of feeding pattern and cost of milk production in Gopalganj district of Bihar, *Indian Journal of Dairy Science*, **51**(2): 121-126.
- Chand, Puran and Parmatma Singh (1998), Economics of infrastructure in India, *Kautilya, Haryana Economics Association* **19**(1&2): 8-13.
- Chand, Puran and Parmatma Singh (1998), Economic dynamics of livestock sector in India, *Indian Academic of Social Science Abstract*, **22**: 4-5.
- Kumar, Praduman, V.C. Mathur and Surabhi Mittal (1998), Management of export marketing of horticultural products: Present status, constraints and future strategies, *Bihar Journal of Agricultural Marketing*, **6**(1) 1-16.
- Kumar, Praduman, P.K. Joshi, C. Johansen and M. Asokan (1998), Sustainability of rice-wheat based cropping systems in India: Socio-Economic and Policy Issues, *Economic and Political Weekly*, **33**(39): A152-157.
- Kumar, Praduman, V.C. Mathur and Surabhi Mittal (1998), Market prospects for horticultural products in India, *Agricultural Economics Research Review*, **11**(1): 35-47.
- Michel, Morris, R.P. Singh and Suresh Pal (1998), India's maize seed industry in transition: Changing roles of the public and private sectors, *Food Policy*, **23**(1): 55-71.
- Pal, Suresh and Alka Singh (1998), Strengthening the Indian agricultural research and extension systems: Funding and institutional imperatives, *Indian Journal of Agricultural Economics*, **53**(3): 488-503.

- Singh, Chhotan and P.S. Badal (1998), Growth and potential of India's agricultural exports under new economic and trade policy environment *Indian Journal of Agricultural Marketing*, **12**(2).
- Singh, R.P. and Sathees Babu (1998), Maize Economy in India – poised for breakthrough, *Indian Farming*, Special issue on INDIA-CIMMYT DAY, **48**(1): 76-83.
- Singh, R.P., Suresh Pal and Michael Morris (1998), Government policies and private investment in maize research and development in India, *Yojana*, **42**(4): 19-24.
- Tyagi, V.P., Sant Kumar and Amit Kar (1998), Trends in progress of institutional lending to agriculture in India, *Indian Journal of Agricultural Economics*, **53**(3).
- Atteri, B.R. and Geeta Bisaria (1997), Changes in land distribution and its market structure in India, *Agricultural Marketing*, **39**(4): 45-50.
- Atteri, B.R. and Puran Chand (1997), Production and consumption and processing scenario, *Indian Journal of Agricultural Economics*, **52**(3): 651-652.
- Babu, Sathees K. and R.P. Singh (1997), Crop insurance – Time for reappraisal, *Yojana*, **41**(12): 29-33.
- Chand, Puran (1997), Regional development in India, *Kautilya*, **18**(1&2): 51-56.
- Chand, Puran and Parmatma Singh (1997), Nehru Moholnobis strategy of Indian economic development – A retrospective, *Social Science Abstract*, **21**: 25-27.
- Kumar P. (1997), Food security: Supply and demand perspective *Indian Farming*, 4-9.
- Kumar, P. (1997), Market prospects for upland crops in India *Palawija News*. The CGPRT Centre Newsletter, **14**(2): 10-16.
- Kumar P. and M.V. Rosegrant (1997), Dynamic supply response of rice and other major food crops in India, *Agricultural Economics Research Review*, **10**(1): 1-24..
- Lal, Roshan and R.P. Singh (1997), Production and consumption pattern of maize in India: Some issues, *Kurukshetra*.
- Satyasai K.J.S., P. Kumar and Mruthyunjaya (1997), Terms of transactions in ground water markets: A study in Anantapur district of Andhra Pradesh, *Indian Journal of Agricultural Economics*, **52**(4): 751-760.
- Singh Parmatma and A.K. Vasisht (1997), Dynamics of land use pattern in Bihar, *Agricultural Situation in India*.
- Singh, Chhotan and R. Lal (1997), Acreage response of oilseeds – An interstate analysis in India, *Agricultural Economics Research Review*, **10**(1): 45-55.

- Singh, Chhotan, A.K. Vasisht and V.C. Mathur (1997), Export performance and prospects of horticultural products, *Indian Journal of Agricultural Marketing*, **11**(1&2): 40-41.
- Singh, R.P., M.L. Morris and Suresh Pal (1997), Efficiency and equity consideration in the maize seed marketing system: The role of public and private sector in India, *Indian Journal of Agricultural Marketing*, **2**(1&2): 101-102.
- Singh, R.P., Suresh Pal and M.L. Morris (1997), Strengthening research industry farmers interface: The case of maize seed industries, *Agricultural Economics Research Review*, **10**(2): 194-204.
- Awasthi, M.K., Parmatma Singh and S.P. Singh (1996), An economic investigation into dairy financing under integrated rural development programme (IRDP) in Bareilly district of Uttar Pradesh – A case study, *Indian Journal of Animal Sciences* **66**(8): 815-822.
- Birthal, S. and R.P. Singh (1996), Access rural households to institutional credit: A case study in eastern Uttar Pradesh, *Agricultural Economics Research Review*, **9**(1): 21-35.
- Chand, Puran, B.M. Sharma and A.K. Vasisht (1996), Effect of agricultural diversification on food security and poverty alleviation of marginal farmers, a case study of Rajapur block of Ghaziabad district U.P., *Agricultural Economics Research Review*, **19**(2).
- Chand, Puran and A.K. Gautam (1996), Contribution of livestock in development of Haryana state, *Kautilya* **17**(2): 21-30.
- Kumar, Praduman, and V.C. Mathur (1996), Agricultural in future: Demand-supply perspective for the ninth five-year plan, *Economic and Political Weekly*, **31**(39): September 28: A 131-139.
- Kumar, Praduman, (1996), Long term change in dietary patterns and food demand in Asia: India 1970-1990, Palawija news. *The CGPRT centre newsletter*, **13**(3): 1996: 1-10.
- Kumar, Praduman (1996), Agricultural productivity and food security in India: Implications for policy, *Agricultural Economics Research Review*, **9**(2): 128-141.
- Kumar, Praduman, and V.C. Mathur (1996), Structural changes in demand for food in India, *Indian Journal of Agricultural Economics*, **51**(4): 664-673.
- Sharma, B.M., Puran Chand and A.K. Vasisht (1996), Role of diversification in eradication of farm poverty- a case study of Alwar district of Rajasthan state, *Indian Journal of Agricultural Economics*, **54**(4): 707-708.
- Singh, Alka, Suresh Pal and D. Jha (1996), Public invest in agricultural research and education in India: Agenda for ninth plan, *Agricultural Situation in India*, **52**(5): 313-320.



- Singh, R.P. and K.S. Basu (1996), Performance and prospects of regional rural banks – an appraisal, *Kurukshetra*, 21-25.
- Wader, L.K. and Praduman Kumar (1996), Dominating quality characteristics of cotton in judging the quality standard of different cotton varieties in Karnataka, *Karnataka Journal of Agricultural Science*, **9**(2): 321-324.
- Wader, L. K. and Praduman Kumar (1996), A study on quality and on quality characteristics influencing price of cotton marketing in Karnataka, *Agricultural Economics Research Review*, **9**(1): 128-142.
- Chand, Puran and B.M. Sharma (1995), Optimum cropping pattern under different sources of irrigation for sustainable agricultural production in Karnal district of Haryana state, *Kautilya, The Journal of Haryana Economic Association*, **16**(1&2): 92.
- Chand, Puran, B.R. Atteri and A.K. Ray (1995), Structural changes in draught animal power in Indian agriculture, *Indian Journal of Agricultural Economics*, **50**(3): 384-85.
- Krishnan, M. and B.M. Sharma (1995), Fisheries and seafood market development in the context of new economic policy, *Indian Journal of Agricultural Economics*, **50**(3).
- Kumar, Praduman, and Mrunthyunjaya (1995), Demand for fruits and vegetables in India, *Agricultural Economics Research Review*, **8**(2): 7-17.
- Shah, Deepak and Parmatma Singh (1995), Resource use efficiency of milk production in Bulandshar district of Uttar Pradesh, *Indian Journal of Animal Sciences*, **65**(8): 921-929.
- Singh, Chhotan and A.K. Vasisht (1995), Performance and prospects of exports of agro-processed products, *Agricultural Economics Research Review*, **8**(2).
- Singh, Chhotan and A.K. Vasisht (1995), Resource allocative efficiency on various size of farms in Tamil Nadu, *Agricultural Economics Research review*, **2**: 141-45.
- Singh, Parmatma and Alka Singh (1995), Oilseeds production in India: Changing proportions, *Agricultural Situation in India*, **49**(12): 881-885.
- Singh, Parmatma and C.B. Tiwari (1995), Livestock as a source of income in rural areas, *Indian Journal of Animal Sciences*, **65**(6): 670-674.
- Singh, Parmatma and Ikbal Singh (1995), Sustainability of groundwater resource in Haryana and Punjab, *Kautilya*, **15**(182): 24-29.
- Vasisht, A.K., Chhotan Singh and Ikbal Singh (1995), Temporal and spatial changes in the price spread of agricultural commodities in India, *Indian Journal of Agricultural Marketing*, Conference issue.

- Wader, L.K. and Praduman Kumar (1995), Determination of deviation between scientific grading and eye-sight grading of cotton marketing in Karnataka, *Indian Journal of Agricultural Marketing*, **9**(2).
- Atteri B.R. (1994), A study on physical and economic losses of Dushehari and Chausa varieties of mangoes in Delhi market, *Bihar Journal of Agricultural marketing*, **2**(4): 325-329.
- Atteri, B.R. and A.K. Ray (1994), Detection of lead and lag relation – a cross spectral approach, *Agricultural Situation in India* **49**(9): 637-641.
- Birthal, P.S. and R.P. Singh (1994), Contractual arrangements in agriculture of a developing economy, *Indian Journal of Agricultural Economics*, **49**(2): 187-204.
- Birthal, P.S. and R.P. Singh (1994), Permanent labour in the context of agricultural development in east Uttar Pradesh, *Journal of Agricultural Development and Policy*, **3**(2): 1-12.
- Chand, Puran, B.R. Atteri and A.K. Ray (1994), Agricultural wages and wage righting in India, *Agricultural Situation in India*, **49**(2): 95-100.
- Dass, Shiv Ram (1994), Pulse consumption in India, *Financial Express*, **19**: (331) 8
- Dass, Shiv Ram and Parmatma Singh (1994), Comparative advantage, trend, exportable surplus and direction of India's rice export, *Indian Journal of Agricultural Economics*, **49**(3): 454-55.
- Dass, Shiv Ram, V.C. Mathur and Iqbal Singh (1994), Comparative advantage, trends and exportable surplus in India's tea export, *Indian Journal of Agricultural Marketing*, Conference Special Issue: 46-51.
- Krishnan, M., T. Ravishankar and B.M. Sharma (1994), Development prospects of marine products exports from India, *Indian Journal of Agricultural Marketing*, Conference special issue: 39-45.
- Kumar, Praduman and Mark W. Rosegrant (1994), Productivity and sources of growth for rice in India, *Economic and Political Weekly*, 183-188.
- Lal, Roshan and R.P. Singh (1994), Structural changes in Haryana agriculture, the issue of growth and equity, *Agricultural Economics Research Review*, **7**(2).
- Mathur, V.C. and A.K. Vasisht (1994), An analysis of fluctuations in unit values, quantum and export values of tea, *Agricultural Economics Research Review*, **7**(1) 25-37.
- Jain, S.K. and I. Singh (1993), Prospects of increasing income and employment through edible oilseed production in Haryana state, *Indian Journal of Agricultural Economics*, **48**(3): 418-19.
- Singh, Chhotan (1994), Edible oilseeds and oils situation in India, *Southern Economist*, **32** (20).

- Singh, Chhotan and A.K. Vasisht (1994), Performance and prospects of agricultural exports in India, *Indian Journal of Agricultural Economics*, **49**(3): 446.
- Singh, Chhotan and V.C. Mathur (1994), Growth and instability in the production and price of potato in India, *Agricultural Situation in India*, **49**(6): 429-433.
- Singh, Chhotan, R.P. Singh and A.K. Singh (1994), Economics and response of wheat to nitrogen and phosphorus in Diara land of Bihar, *Annual of Agricultural Research*, **15**(4): 471-475.
- Vasisht, A.K. and Chhotan Singh (1994), Growth and potential of exportable agricultural commodities in India under changing economic scenario, *Indian Journal of Agricultural Marketing, Conference Special Issue*: 17-24.
- Birthal P.S. and R.P. Singh (1993), Permanent labour in the context of agricultural development in east Uttar Pradesh, *Journal of Agricultural Development and Policy*, **3**(2): 1-12.
- Birthal P.S. and R.P. Singh (1993), Segmentation and interest rate in rural credit markets: Some evidence from east Uttar Pradesh, *Bangladesh Journal of Agricultural Economics*, **16**(2): 107-117.
- Chandra, D. and I. Singh (1993), Economics of different irrigation systems: A case study of Ghaziabad district of U.P., *Southern Economist*, **32**(2): 17-19.
- Gajanan, T.M. and B.M. Sharma (1993), Enterprises system to reduce risk on drought-prone marginal farmers in Karnataka, India, *Asian Economics Review*, **35**(3): 384-405.
- Pal, Suresh, D.K. Bahl and P. Kumar (1993), Stability aspect of agro-climatic zonal planning, *Agricultural Situation in India*, **18**(10): 775-779.
- Singh, R.P., Roshan Lal and D.R. Singh (1993), Cotton development and export potential in India, *Agricultural Situation in India* 251: 256.
- Tyagi, V.P. (1993), Marketing of oilseeds and pulses – A sample study, the conference issues of *India Journal of Agricultural Economics*, **48**(3): 374.
- Vasisht, A.K. (1993), An econometric analysis of growth trends and area response of commercial crops in Punjab agriculture-some policy issues, *Journal of Indian Society of Agricultural Statistics*.
- Vasisht, A.K. and S.K. Goel (1993), Inter and intra variations in productivity of major pulse crops over time and regions and their classification – a principal component analysis, *Indian Journal of Agricultural Economics*, **48**(3).
- Atteri, B.R. and A.K. Ray (1992), Impact of HPMC on the wholesale prices behavior of apple-a special approach, *Agricultural Situation in India*, **47**(5): 581-586.

- Atteri, B.R. and Geeta Bisaria (1992), Agricultural trade policy in India and its impact on economic performance, *Indian Journal of Agricultural Economics*, **47**(3): 379.
- Chandra, Dinesh (1992), Resource use efficiency on different irrigation systems in Ghaziabad district of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **47**(3): 494.
- Chandra, N. and R.P. Singh (1992), Determinant and impact of new technology adoption on tribal agriculture in Bihar, *Indian Journal of Agricultural Economics*, **47**(3): 297-303.
- Dass, Shiv Ram (1992), Impact of new trade and industrial policy in agricultural terms of trade, income and exports, *Indian Journal of Agricultural Economics*, **47**(3): 370-371.
- Dass, Shiv Ram (1992), Rice export: Advantage India, *Financial Express* 7. (May 9, 1992).
- Deoghare, P.R. and B.M. Sharma (1992), Prospects of increasing farm income in marginal and small farms, *Agricultural Situation in India*, **46**(12).
- Goel, S.K. and A.K. Vasisht (1992), Classification of major edible oilseeds regions of India – a district based production and productivity status analysis, *Journal of Rural Development-NIRD*, **11**(6): 803-826.
- Goel, S.K. and A.K. Vasisht (1992), Discriminant analysis of agro-economic development indicators for tribal areas in hills and plains, *Indian Journal of Agricultural Economics*, **47**(3): 404-409.
- Kumar, Praduman (1992), Marketing and farm inputs in India, *Indian Journal of Agricultural Marketing*, **6**(2): 72-75.
- Kumar, Praduman and Mruthyunjaya (1992), Measurement and analysis of total factor productivity growth in wheat, *Indian Journal of Agricultural Economics*, **47**(3): 541-458.
- Mathur, V.C. (1992), Factors influencing the spread of fertilizer retailers outlets in India – An econometric analysis, *Indian Journal of Agricultural Marketing*, **6**(2): 18-24.
- Pal, Suresh (1992), Agricultural exports of India: Issues of growth and instability, *Indian Journal of Agricultural Economics*, **47**(2): 185-194.
- Pal, Suresh (1992), Farmers response to economic incentives, *Indian Journal of Agricultural Economics*, **47**(1): 715-716.
- Pal, Suresh (1992), Soyabean system in India, *Agricultural Economics Research Review*, **5**(2).
- Pal, Suresh, Mruthyunjaya and P.S. Birthal (1992), Changes in the agriculture of green revolution states: Implications for agricultural development, *Agricultural Economics Research Review*, **5**(1): 1-21.

- Sharma, B.M., S.K. Goel and G.P. Sharma (1992), Input use efficiency on tractor and bullock operated farms in Aligarh district of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **47**(3): 487.
- Singh, Chhotan (1992), Resource use efficiency and productivity on different size of farms in Salem district (Tamil Nadu) *Indian Journal of Agricultural Economics*, **47**(3): 488-489.
- Singh, Ikbal (1992) Irrigation water efficiency through conjunctive use of surface and ground water in upper Ganga canal command, *Indian Journal of Agricultural Economics*, **47**(3): 489-490.
- Singh, R.P. (1992) Rural energy and agricultural interactions in 2000 AD – a study of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **47**(4).
- Singh, R.P. and Suresh Pal (1992), Technological advancement and the state of maize development in India – An appraisal, *Agricultural Situation in India*, **47**(4): 245-252.
- Singh, R.P. *et al* (1992), Rural energy and agril, interaction in 2000 AD, study of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **47**(4): 601-617.
- Tyagi, V.P., B. Prakash and S. Srivastava (1992), An economic study of the constraint on maximization of pulse production in India, *Indian Journal of Pulse Research*.
- Atteri, B.R., Geeta Bisaria (1991), Temporal land distribution and land market structure. *Indian Journal of Agricultural Economics*, **46**(3): 401.
- Birthal, P.S. and R.P. Singh (1991), Land lease market, resource adjustment and agricultural development, *Indian Journal of Agricultural Economics*, **46**(3): 361-368.
- Chand, Puran, Chhotan Singh and B.M. Singh (1991) Trends in agricultural input-output prices in India. *Southern Economist*, **29**(20).
- Dass, Shiv Ram (1991), Agricultural prices, non-agricultural prices and agricultural terms of trade, *Agricultural Situation in India*, **46**(3): 137-142.
- Dass, Shiv Ram (1991), Economic aspects of India's international trade in coffee, *Indian Journal of Agricultural Economics*, **46**(2): 142-152.
- Deoghare, P.R., B.M. Sharma and S.K. Goel (1991), Impact of credit and technology on income and employment of small farms under different farming systems in Karnal district of Haryana *Agricultural Situation in India*, Vol. (2).
- Deoghare, P.R., B.M. Sharma and S.K. Goel (1991), Impact of mixed farming system and employment on small farms in Karnal district of Haryana, *Agricultural Situation in India*, **46**(1): 665-670.

- Goel, S.K. (1991), Taxonomic analysis of zonal differences in relation to factors of groups production, *Agricultural Economics Research Review*, **4**(2).
- Krishnan, M., A.K. Vasisht and B.M. Sharma (1991), Growth and instability in Kerala agriculture, *Agricultural Situation in India*, **46**(1): 21-25.
- Krishnan, M.I., A.K. Vasisht and B.M. Sharma (1991), Growth, geographical distribution and import penetration of shrimp exports from India, *Sea Food Export Journal*, **23**(10): 5-13.
- Patil, H.K. and R.P. Singh (1991), Modern technology and credit requirement: A case study of tribal farms of Thane district in Maharashtra, *Agricultural Economics Research Review*, **4**(1): 14-24.
- Sharma, G.P., B.M. Sharma and Iqbal Singh (1991), A comparative study on income and employment of tractor and bullock operated farms in Chandausi block of Aligarh district, U.P., *Agricultural Situation in India*, **46**(7).
- Singh, Chhotan and Puran Chand (1991), Technological changes and agricultural production in post-green revolution belt in India, *Indian Journal of Agricultural Economics*, **46** (3): 463.
- Singh, Iqbal, C.P. Yadav, Chhotan Singh and B.M. Sharma (1991), Performance of major crops in different agro-climatic regions of Bihar, *Agricultural Situation in India*, **44**(3).
- Singh, Parmatma, C.B. Tiwari and V.K. Dwivedi (1991) Estimation of future demand for feeds and fodder in India, *Indian Journal of Animal Sciences*, **61**(8): 876-879.
- Singh, Parmatma, C.B. Tiwari and V.K. Dwivedi (1991), Regional imbalance in population dynamics of pigs in India – an appraisal, *Indian Journal of Animal Sciences*, **61**(1): 71-74.
- Yadav, C.P., Iqbal Singh, B.M. Sharma and Chhotan Singh (1991), Performance of major crops in different agroclimatic regions of Bihar, *Agricultural Situation in India* **46**(3): 147-151.

## **B. Published proceedings of Conferences/Workshops**

- Singh, R.P., K. Sathees Babu and Roshan Lal (1998), Pulse production in India: Emerging trends and food security concerns, souvenir, *National symposium on Management of biotic and abiotic stresses in pulses crops*, Indian society of pulse research and development and Indian Institute of Pulse Research, Kanpur, 28-43.
- Vasisht, A.K. *et al* (1998), Exploring agricultural land used options for the state of Haryana: Linking biophysical modeling with socio-economics, SYSNET paper series No. 1: 89-92 *Proceedings of International workshop held at Can Tho City, Vietnam*.

- Singh, Chhotan and A.K. Vasisht (1997), Growth in agricultural technology and its impact on environment presented in the *International conference on Ecological agriculture: Towards sustainable development*, held at CRRID, Chandigarh.
- Singh, R.P (1997), People technology and its relevance in the changing scenario of Indian agriculture Presidential Address, agricultural science section *21<sup>st</sup> Indian Social Science Congress*, December 1-6, 1997, Thanjavur, Bharatiya Samajik Chintan 20(3-4): FI-19.
- Morris, Michael, R.P. Singh and Suresh Pal (1994), Evaluating public and private seed industries: Technical constraints, practical considerations and institutional realities, *Workshop on Integration of research evaluation efforts of ICRISAT with National Agricultural Research Services (NARSs) and other International Agricultural Research Centres (IARCs)*: Hyderabad, India.
- Prakash, Brahm, V. P. Tyagi and Sushila Srivastav (1994), Analysis of trends in market arrivals and prices of chickpea and pigeonpea in Uttar Pradesh, *International Symposium on Pulses Research*, New Delhi.
- Singh, Parmatma and Suresh Pal (1994), Economic tools for ex-ante and ex-post evaluation of technology, *National seminar on Farming Systems Research for Improving Livestock Production and Crop Residue Utilization*, NDRI, Karnal.
- Tyagi, V.P., Puran Chand and B.R. Atteri (1994), Economic analysis of production, price spread and potential gap of major pulses in India, *International Symposium on Pulses Research*, New Delhi.
- Atteri, B.R. and Puran Chand (1993), Impact of the new economic policy of India on horticultural commodities export, paper presented at the first *National conference on Agril. Policy in the Context of New Economic Policy*, held at IARI, New Delhi.
- Kumar, P. and Mruthyunjaya (1993), Price policy model for agricultural commodities, paper presented at the *International workshop on Methods for agricultural marketing research in developing countries*, IARI – CIP New Delhi.
- Kumar, P. and M.W. Rosegrant (1993), Productivity and sources of growth in rice: India, paper presented at the *2nd Workshop on Projections and policy implications of medium and long term rice supply and demand*, International Rice Research Institute, Los Banos, Philippines.
- Vasisht, A.K. and S.K. Goel (1993), Productivity status analysis with respect to major foodgrain crops – A district based classification using principal component analysis, paper presented in the section of statistics at the *80<sup>th</sup> Session of Indian Science Congress*, Goa
- Kumar, Praduman and V.C. Mathur (1992), Demand and supply analysis of rice in India: methodological issues, paper presented at the planning *Workshop on Projections and Policy implication of medium and long term rice supply and demand*, International Rice Research Institute, Philippines.

- Vasisht, A.K (1992), An econometric analysis of output response of rapeseed and mustard crop vis-a-vis its competitive crops in Uttar pradesh, paper presented at the *India and South-East Asia Meeting of the Econometric Society*, Indira Gandhi Institute of Development Research, Bombay, Dec. 19-21.
- Vasisht, A.K. and S.K. Goel (1992), Productivity status analysis with respect to major foodgrain crops – A district base classification using principal component analysis, proceedings of *80<sup>th</sup> Session of the Indian Science congress*, Goa.
- Krishnan, M. and A.K. Vasisht (1991), An economic analysis of the performance of selected horticultural and vegetable crops of Himachal Pradesh, paper presented at *National seminar on Economic Prospects of Commercial Crops in Hilly Areas*, Himachal Pradesh Krishi Vishwa Vidyalaya, Palampur.
- Mathur, V.C., Chhotan Singh and R.P. Singh (1991), Production and export performance of major fruit crops of Himachal Pradesh with special reference to apple exports, Paper presented at *Seminar on Process of Commercial Crops in Hill Areas*, HPKVV, Palampur, Himachal Pradesh.
- Tyagi, V.P (1991), An analytical study on area, production and productivity of pulses during pre and post green revolution periods, paper presented at *National conference on Agricultural Productivity*, Calcutta.
- Vasisht A.K (1991), An economic analysis of the performance of selected horticultural and vegetable crops of Himachal Pradesh, paper presented at *National seminar on Economic Prospects of Commercial Crops in Hilly Areas*, Himachal Pradesh Krishi Vishwa Vidyalaya, Palampur July 5-6.
- Vasisht, A.K. and M. Krishnan (1991) An analysis of the impact of technology and prices on the growth of commercial and competing non-commercial crops – a stability index approach, paper presented at the *44<sup>th</sup> Annual Conference of Indian society of Agricultural Statistics*.

### **C. Bulletins/Policy Papers**

- Singh, R.P. and Morris. M (1997), Adoption, management and impact of hybrid maize seed in India, CIMMYT Economics Working Paper 97-06.
- Singh, R.P., Suresh Pal and M.L. Morris (1995), Maize research, development and seed production in India: Contribution of the public and private sectors, Economics working paper CIMMYT 95-03.
- Gajanana, T.M. and B.M. Sharma (1991), Farmers adjustment to risk in farming – An assessment of drought prone farmers strategies in Karnataka (India) Working paper No. 926, Indian Institute of Management.



Gajanana, T.M. and B.M. Sharma (1991), Adjustment to risk in farming- an assessment of drought prone farmers strategies in Karnataka (India). Working Paper No. 926, *Indian Institute of Management*.

#### **D. Book Chapters**

Badal, P.S. (2000), Adoption and impact of modern maize cultivars in Bihar: Some policy reflections, social transformation in rural sector, edited by S.D. Mukhopadhyay and S. Chaudhary, *Palli Siksha Bhawan, Vishwa Bharati, W.B.*, 114-121.

Joshi, P.K., M. Asokan, K.K. Datta and P. Kumar (2000), Socioeconomic constraints to legumes production in rice-wheat cropping systems of India, Ed by C. Johansen, J.M. Duxbury, S.M. Virmani, CLL Gowda, S. Pande and P.K. Joshi, ICRISAT and Cornell University, 176-184.

Kumar, Praduman, and Mark W. Rosegrant (1996), Projects of medium and long term rice supply and demand in India vision of India's rice trade. (Ed) Ramesh Chand and T. Haque, *Workshop Proceedings 2, NCAP-IRRI*.

Kumar, Praduman, P.K. Joshi, C. Johansen and M. Asokan (2000), Total factor productivity of rice-wheat cropping systems in India. In legumes in, rice and wheat cropping systems of Indo-Gangetic plain-constraints and opportunities, Ed by C. Johansen, J.M. Duxbury, S.M. Virmani, CLL gowda, S. Pande and P.K. Joshi, ICRISAT and Cornell University, 166-175.

Aggarwal, P.K., N. Kalra, S. Kumar, S.K. Bandyopadhyay, H. Pathak, A.K. Vasisht. C.T. Hoanh and R. Roetter, (1999), Exploring land use options for sustainable increase in food grain production in Haryana: Methodological framework, chapter being published in a book brought out by international Rice Research Institute, Philippines.

Kumar Prduman, P.K. Joshi, C. Johansen and M. Asokan (1999), Sustainability of rice-wheat based cropping systems in India: Socio-economic and policy issues, *Rice-wheat consortium paper series 5* edited by Prabhu L. Pingali, 61-77.

Chand Ramesh and V.C. Mathur (1998), Challenges in the field of Agricultural and Agro-Industry. In agriculture – industry interface, Ramesh Chand and V.C. Mathur (eds.) *Agricultural Economics Research Association and Advance Publishing Concept, New Delhi*.

Jha, Dayanath and Praduman Kumar (1998), Impact of rice research in India. In impact of rice research edited by Prabhu L. Pingali and Mahabub Hossain, *International Rice Research Institute, 279-292*.

Pal, Suresh, R.P. Singh and Michael Morris (1998), Country case study: India a chapter in maize seed industries in developing countries, edited book, M.L. Morris, Boulder Colorado: Lynne Rienner, Publishers CIMMYT.

- Pal, S. R.P. Singh and M.L. Morris (1998), Country case study: India maize seed industries in developing countries, edited by M.L. Morris, Boulder, Colorado: Lynne Rienner Publishers and CIMMYT.
- Kumar, Praduman and V.C. Mathur (1997), Agriculture in Future: Demand-supply perspective, agricultural development perspective for the ninth five-year plan edited by Bhupat M. Desai, Oxford & IBH.
- Kumar, Praduman and V.C. Mathur (1997), Impact of IARI research, in training and capacity strengthening in agricultural economics policy research, final report of the centre of advanced studies in agricultural economics, Division of Agricultural Economics, IARI, New Delhi.
- Kumar, Praduman and V.C. Mathur (1996), Agriculture in Future: Deman Supply Perspective. In Agricultural Development Perspectives for Ninth Five Year Plan, Bhupat M. Desai (ed.) Oxford and IBH Publishing Company, New Delhi
- Pal. Suresh, Alka Singh and D. Jha (1996), Level of agricultural research investment: Lessons for the ninth five year plan, Agricultural Development *Perspective for the Ninth Five Year Plan*. Ed. Bhupat M. Desai, Oxford & IBH.
- Dass, Shiv Ram and Parmatma Singh (1995), Trends, exportable surplus and directions of India's rice export, export potential of Indian Agriculture, (Ed.) by Dr. G.S. Kainth, PAU, Kheti Bhawan, Amritsar: 97-106.
- Vasisht, A.K. (1995) Application of computers in agricultural research ed. In book on Discussion papers and proceedings, IASRI, 11<sup>th</sup> National conference of agricultural research statisticians.
- Krishnan M. and B.M. Sharma (1995), Structure, conduct and performance of Indian marine products exports, export potential of Indian Agriculture, Book Ed. By G.S. Kainth.
- Singh, Parmatma, Suresh Pal and C.B. Singh (1995), Economic tools for ex-ante and ex-post evaluation of technology, Farming systems research for improving livestock production and crop residue utilization (Ed.) by C.B. Singh, S.V.N. Rao and D.K. Jain (Eds.) NDRI, Karnal, 112-121.
- Mruthyunjaya and Praduman Kumar (1993), Short term financial requirements for crop production under modern technology in India, Proceedings of the First Agricultural Science Congress, edited by Prem Narain. NAAS, IARI, New Delhi.
- Kumar, Praduman and Gunvant M. Desai (1992), Fertilizer marketing environment in India during the mid-1980s: Micro level evidence, Agricultural input marketing, edited by S.P. Seetharaman, CMA Monograph No. 155. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.

Kumar, Praduman and Mruthyunjaya (1992), Price policy options for agricultural marketing perspective and issues, agricultural marketing perspective and issues, edited by L.P. Singh and Subhash Garg. Jaipur: Arihant Publishers.

Mruthyunjaya (1992), Farming for the future: An introduction to low external input and sustainable agricultural Coen Rajntjes, Best Harekort and Ann Waltersm, ILEIA, P.O. Box No. 64, ML 3830, Netherlands, McMillin Press Ltd., London, xvi + 247.

Gajanana, T.M. and B.M. Sharma (1991), Farmers adjustment to risk: Assessment of farmers strategies in Karnatka, India, Technologies for minimizing risk in rainfed agriculture Eds: S.P. Singh & C. Prasad, ICAR, New Delhi. 47-59.

Pal, Suresh and A.S. Sirohi (1991), Adoption of HYVs seeds and growth and instability in Indian agriculture: Implications for policy, in recent advances in agricultural statistics research Prem Narain, *et al.* (eds) Wiley Eastern, Delhi.

Vasisht, A.K (1991), Application of computers in agricultural research, summer institute compendium on Recent advances in quantities techniques for policy analysis in agricultural economics, Division of Agricultural Economics, IARI, New Delhi, July 10-29.

### **E. Books**

Singh, Chhotan and A.K. Vasisht, (1995), Performance and prospects of India's agricultural exports, export potential of Indian agriculture, Book ed. By G.S. Kainth.

Atteri, B.R. and Puran Chand (1994), Losses due to pests and pesticides use in Indian Agriculture in soil environment and pesticides (Edited Book), Venus publishing house, New Delhi: 35-43

Mruthyunjaya, V.C. Mathur and Praduman Kumar (1994), Agricultural credit – The next stage, New Delhi: Venus publishing house.

### **A. Published in professional journal**

#### **1981-1990**

Ballabh, Viswa and B.M. Sharma (1990), North-west area gain most from green revolution, *Link*, November 26.

Dass, Shiv Ram (1990), Quantum, terms of trade and purchasing capacity of tea exports, *Agricultural Situation in India*, **45**(1): 3-9.

- Dass, Shiv Ram and Ikbal Singh (1990), District wise disparities in agricultural growth in the arid and semi-arid districts of Rajasthan in relation to the rest of districts, *Indian Journal of Agricultural Economics*, **45**(3): 320.
- Deohare, P.R., B.M. Sharma and S.K. Goel (1990), Impact of mixed farming systems on income and employment on small farms in Karnal district of Haryana, *Agricultural situation in India*, **45**(10): 665-670.
- Gajanan, T.M. and B.M. Sharma (1990), Farm planning in dry zone: Systems approach to improve income and employment prospects, *Indian Journal of Agricultural Economics*, **45**(3).
- Gajanan, T.M. and B.M. Sharma (1990), Income and employment prospects of drought prone farmers: Role of credit and technology, *Agricultural Situation in India*, **45**(5): 307-312.
- Gajanan, T.M. and B.M. Sharma (1990), Instability in dryland agriculture: A study of a drought prone district in Karnataka, *Annal of Arid Zone*, **29**(4): 237-242.
- Goel, S.K (1990), Comparative performance of Indian states with respect to crops production and related infrastructural and their resource factors, *Agricultural Situation in India*, **54**(10): 803-808.
- Goel, S.K. and T. Haque (1990), Regional variations with respect to infrastructural and crop production efficiency factors in India-a cluster analysis of Indian States, *Journal of Rural Development*, **9**(3): 485-498.
- Lal Roshan and R.P. Singh (1990), Total Factor Productivity: A region wise analysis in Haryana agriculture, *Journal of Agricultural Development and Policy*, **1**(2): 50-57.
- Maji, C.C. and Suresh Pal (1990), Fertilizer use in Indian agriculture: Retrospect and prospect, *Journal of Agricultural Development and Policy* **1**(1): 55-63.
- Mruthyunjaya and Praduman Kumar (1990), Cropping pattern changes and supply response function: An economic analysis of commercial crops in India, *Rural Reconstruction*, **23**(2): 52-60.
- Singh, S.P. and Mruthyunjaya (1990), A Study on cost of short term agriculture credit for small and marginal farmers of Aligarh district in U.P, *Financing agriculture*, **31**(4): 2-15.
- Singh, Chhotan and Puran Chand (1990), Inter-Regional disparities in technological change and agricultural growth in India, *Indian Journal of Agricultural Economics*, **45**(3).
- Atteri, B.R. and A.K. Ray (1989), An economic analysis of apple in India, *Agricultural Situation in India*, **64**(6): 445-450.
- Dass, S.R (1989), Quantum terms of trade and purchasing capacity of coffee exports, *Indian Journal of Agricultural Economics*, **44**(3): 362.

- Kamble, H.G. and Puran Chand (1989), Comparative analysis of Vicone and Hege-125 combine for wheat harvesting, *PKV Research Journal*, **13**(1): 60-62.
- Krishnan, M. and M. Satyanarayana (1989), Growth, pattern and composition of marine products exports from India, *Indian Journal of Agricultural Marketing*: 115.
- Kumar, P. and Mruthyunjaya (1989), Price policy and marketed surplus of paddy and wheat in India, *Indian Journal of Agricultural Economics*, **44**(4): 430-435.
- Kumar, P (1989), Model for estimating the short term capital requirement in agriculture, *Annals of Agricultural Research*, **10**(2): 195-199.
- Narang, M.S., A.K. Vasisht and Ved Prakash (1989), Performance and prospects of major oilseed crops in India, *Agricultural Situation in India*, **54**(7): 559-566.
- Pal, Suresh (1989) Stagnant production and changing production instability of oilseeds in India: 1950-1984, *Agricultural situation in India*, **54**(5): 353-359.
- Pal, Suresh and A.K. Ray (1989), Export instability and economic growth in India: The role of agriculture, *Indian Journal of Agricultural Economics*, **44**(3): 352.
- Pal, Suresh and A.S. Sirohi (1989), Instability in Indian crop production its magnitude and sources, *Artha Vijnana*, **31**(3): 241-256.
- Pal, Suresh and A.S. Sirohi (1989), Sources of growth and instability in Indian crop production – a decomposition analysis, *Agricultural situation in India*, **53**(11): 933-936.
- Satyanarayana, M. and M. Krishnan (1989), Growth, geographical distribution and import penetration of shrimp exports from India, *Indian Journal of Agricultural Economics*, **44**(3): 371.
- Singh, C. and A.K. Vasisht (1989), Composition and growth of agricultural export from India, *Indian Journal of Agricultural Economics*, **44**(3): 354-355.
- Singh, C. and Puran Chand (1989), Interstate disparities in the growth of new technology and agricultural production in India, *Agricultural Situation in India*, **54**(2): 101-105.
- Singh, C., Puran Chand and A.S. Sirohi (1989), Growth and prospects of production, import and requirement of edible oil seeds and oils in India, *Agricultural Situation in India*, **53**(2): 945-949.
- Singh, R.P., S. Thomas and N. Chandra (1989), Factor demand, output supply and constraints to dryland rice production in Ranchi district of Bihar, India, *Agricultural Situation in India*, **47**(4): 265-269.

- Subbarayan, M. and Ikbal Singh (1989), Optimal use of irrigation water resource in the Eastern Yamuna canal command in Western U.P., *Indian Journal of Agricultural Economics*, **44**(3): 267.
- Dass, Shiv Ram, D. Srivastava and B.R. Atteri (1988), Some reflections on export performance of selected commercial crops, *Indian Journal of Agricultural Economics*, **43**(3): 497-503.
- Haque, T. and Sunita Verma (1988), Regional and class disparities in the flow of agricultural credit in India, *Indian Journal of Agricultural Economics*, and **43**(3): 356-363.
- Mruthyunjaya and Suresh Pal (1988), Rational land use plan for growth and stability in Western Rajasthan, *Agricultural Research*, **9** (1): 115-123.
- Pal, Suresh and A.S. Sirohi (1988), Source of growth and instability in the production of commercial crops in India, *Indian Journal of Agricultural Economics*, **43**(3): 456-463.
- Sateesh, A.V. and B.M. Sharma (1988), Farming systems: Income potential and credit requirements of non-viable farmers in Pithapuram block India, *Journal of Economic Development*, **13**(1).
- Satyanarayana, M. (1988), Private sector role in agricultural research and supply of input- The case of hybrid seed, *Southern Economist*, **27**(7): 11-12.
- Singh, Chhotan and A.S. Sirohi (1988), Estimation of normative demand for nitrogenous fertilizer and its impact on crop production in India, *Agricultural Situation in India*, **48**(4).
- Singh, Chhotan and M. Krishnan (1988), A study on seasonal price variations and marketing margins of vegetables, *Indian Journal of Agricultural Marketing* **2**(1).
- Singh, Chhotan and V.C. Mathur (1988), Growth and instability in the production of potato in India, *Indian Journal of Agricultural Economics*, **43**(3).
- Singh, R.P. and K. Mohan Dass (1988), Effect of price on factor demand, output supply, production cost and net income for bajra and wheat crops, *Agricultural Situation in India*, **33**(8): 681-684.
- Singh, R.P. and Naresh Chandra (1988), Economic efficiency of farmers growing high yielding and local varieties of paddy in Ranchi district of Bihar, *Oryza*, **27**(4).
- Sinha, R.P. and B.M. Sharma (1988), Role of credit and technology in increasing farm income and labour employment – a case study, *Economic Affairs*, **33**(1).
- Verma, Sunita and T. Haque (1988), Towards an appropriate farm strategy, *Financial Express*, (4th May) 18. Dapoli, Maharashtra.

- Wadhwa, C. and T. Haque (1988), Action plan on food grains: Lopsided strategic framework, *Financial Express*, New Delhi, June 8.
- Ballabh, V. and B.M. Sharma (1987), Adoption of high yielding varieties of paddy and wheat in flood prone and flood free districts of Uttar Pradesh- implications for research strategy, *Indian Journal of Agricultural Economics*, **42**(1).
- Chand, Puran and R.P. Singh (1987), An economic appraisal of farm credit for the farms of Haryana state, *Financing Agriculture*, **19**(4): 13-19.
- Guglani, P.L. and Iqbal Singh (1987), Alternative source of energy, *Kurukshetra*, 35(8).
- Haque, T (1987), Temporal and regional variations in agrarian structure in India, *Indian Journal of Agricultural Economics*, **42**(3).
- Haque, T (1987), The world economic crisis: Some policy options, *Indian Economic Journal*, 66-77.
- Sharma, V.K. and T. Haque (1987), Impact of fertilizer subsidy on agricultural growth and equity, IASRI souvenir, New Delhi.
- Singh, Chhotan and Pramod Kumar (1987), Changes in prices and marketing margins of fruits in India, *Indian Journal of Agricultural Economics*, **42**(2).
- Sudha, M. and B.M. Sharma (1987), Economics of anab-e-shahi grape cultivation in and around Rangareddy district of Andhra Pradesh, *Indian Journal of Agricultural Economics*, **42**(3).
- Yadav, C.P. and Iqbal Singh (1987), An analysis of long-term crop output growth in the state of Bihar, *Economic Affairs, Journal*, **3**(2).
- Atteri, B.R. and M. Krishnan (1986), Interstate variation in consumers' price index and the wages of skilled and unskilled workers, *Manpower Journal*, **22**(3): 54-68.
- Ballabh, V. and B.M. Sharma (1986), Technology input and productivity gaps in flood prone agriculture- a case study of Uttar Pradesh, *Management and Labour Studies*, **2**(2).
- Chand, Ramesh and Praduman Kumar (1986), Supply response functions for major crops of punjab in green revolution period – a profit function approach, *Indian Economic Journal*, **67**(264): 91-109.
- Dass, Shiv Ram (1986), Trends in coffee exports, *Financial Express* 2ndMay, **13**(64).
- Haque, T. (1986), Towards on appropriate land reform policy in India, *Indian Journal of Agricultural Economics*, **41**(4).
- Krishnan, M. and A.K. Vasisht (1986), Drought prone area programme- a district wise analysis, *Indian Journal of Agricultural Economics*, **41**(4).

- Mathur, V.C. and R.P. Singh (1986), Farm size and functional income distribution: A case study of Delhi wheat farms, *Annals of Agricultural Research*, **7**(2): 323-328.
- Mruthyunjya, D. Goyal and G.V.S.R. Krishna (1986), Distribution of crop yields in the arid regions of Rajasthan, *Annals of Arid Zone*, **25**(3): 203-209.
- Patil, H.N. and P. Kumar (1986), Performance and prospects of India's mango export, *Southern Economist*, **25**(12): 17-18.
- Patil, H.N. and P. Kumar (1986), Economic evaluation of capital investment in alphonso mango plantation in Ratanagiri district of Maharashtra, *Journal of Maharashtra Agricultural University*, **11**(2): 218-221.
- Patil, H.N., P. Kumar and M.A. Muralidharan (1986), Economics of alphonso mango production in Ratnagiri district (Maharashtra *Maharashtra Journal of Horticulture* **3**(1): 45-51.
- Sehra, D.B.S., Mruthyunjaya and M.L. Purohit (1986), Income sources and resource use in crop production in different land forms in the upper Lugi Basin, *Annals of Arid Zone*, **25**(3): 210-213.
- Singh Chhotan and Puran Chand (1986), Inequalities in the use of agricultural input subsidies in India, *Indian Journal of Agricultural Economics*, **41** (4).
- Singh Chhotan and R.B.L. Bhardwaj (1986), Economics and response of nitrogenous fertilizer for wheat in various agro climates, *Indian Journal of Agricultural Science* **56**(10): 1986.
- Singh, Bhupal, P. Kumar and R.K. Patil (1986), The effect of household composition on consumption pattern of milk and milk products, *Journal of Indian Society of Agricultural Statistics*, **38**(2): 173-179.
- Singh, Iqbal and M. Subbarayan (1986), Optimal use of energy inputs on different size of farms in Meerut district of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **41**(1).
- Sinha, R.P. and B.M. Sharma (1986), Prospects of increasing farm incomes in tubewell operated farms through new technology and credit, *Agricultural Situation in India*. **41** (3).
- Srivastava, D (1986), Marketing of horticultural crops, *Indian Society of Agricultural Marketing, Guntur, Newsletter* 9, 10 and 11.
- Srivastava, D. and T. Haque (1986), Technology, agricultural growth and regional imbalance, *Economic Times*, Feb, 5.
- Thakur, Jawahar and Praduman Kumar (1986), Price responsiveness in factor demand and output supply under different irrigation systems in Western Uttar Pradesh – a profit function approach, *Annals of Agricultural Research*, **9**(1): 106-114.



- Vasisht, A.K., Ved Prakash and M.I. Krishnan (1986), Food production – dimensions under planned economy, *The Economic Times*, **26**(226 October, 22).
- Atteri, B.R., P. Kumar, M.A. Murlidharan (1985), Factors affecting the prices of some important agricultural commodities in India, *Agricultural Situation in India*, **40**(8).
- Dass, Shiv Ram, A.K. Vasisht and Chhotan Singh (1985), Quantum, unit value and export value of coffee exports, *Agricultural Situation in India*, **39**(10).
- Devadoss, S., B.M. Sharma and Chhotan Singh (1985), Impact of farming systems on income and employment of small farms in Theni block (Tamil Nadu), *Journal of Farming Systems*, **1**(1&2): 48-54.
- Diwakar, G.D. and Mruthyunjaya (1985) Economics of water lifting devices in upper Luni basin of Rajasthan, *Annals of Arid Zone* **24**(2): 101-108.
- Haque, T (1985), Inter-sectoral linkages and economic growth in India, *Indian Economic Journal*.
- Haque, T (1985), Inter-sectoral linkages and economic growth, *Main Stream*, November 2nd.
- Haque, T (1985), Regional trends and pattern of diversification of the rural economy in India, *Indian Journal of Agricultural Economics*, **40**(3).
- Haque, T (1985), Factors accounting for low yields of rice in West Bengal, *Agricultural Situation in India*, **40**(9).
- Krishnan, M.I. and A.K. Vasisht (1985), Factors influencing wheat imports, *The Fincial Express*, February 23rd.
- Kumar, P., Mruthyunjaya and Ramesh Chand (1985) Stabilization of prices, supply and income for paddy and wheat in Punjab – a unified approach, *Indian Journal of Agricultural Economics*, **41**(3).
- Marwar, S.C., P.L. Guglani and Vinod Kumar (1985), Progress and performance of primary agricultural credit cooperative societies in India, *The Cooperator* **23**(12): 307-308.
- Patil, H. N., P. Kumar and M.A. Muralidharan (1985), Marketing efficiency of co-operative organisations, *Indian Co-operative Review*, **22**(4): 419-424.
- Patil, H.N. and P. Kumar (1985), An estimation of capital requirements for mango growers in Maharashtra, *Land Bank Journal*, **23**(3): 49-54.
- Ray, A.K., I.V. Rangarao and B.R. Atteri (1985), Impact of technological changes on economic status of female labour, *Indian Journal of Agricultural Economics*. **40**(3): 244-252.

- Sateesh, A.V., B.M. Sharma and V.K. Sharma (1985), Impact of diversification and liberal credit policy on income and employment of non-viable farms in Pithampur block of east Godavari district (AP), *Indian Journal of Agricultural Economics*, **41**(3).
- Singh, C., A.K. Vasisht, Iqbal Singh and B.M. Sharma (1985), Pattern and efficiency of energy inputs use in crops production in developing and developed countries, *Urja*, **17**(2).
- Singh, Chhotan and A.K. Vasisht (1985), A study of changes in producer's share in the consumer's rupee of agricultural commodities in India, *Indian Journal of Agricultural Economics*, **41**(3).
- Singh, Chhotan, A.S. Sirohi and Mruthyunjaya (1985), Impact of agricultural input subsidies and food subsidy on agricultural production and national income in India – a critical review, *Agricultural Science Progress*, **3**.
- Singh, R.P., D. Jha and Donald B. Drickson (1985), Efficiency versus equity thrust in agricultural extension: The case of small and marginal farmers, *Indian Farming*, **35**(3): 21-24.
- Srivastava, D. and Vinod Kumar (1985), Cost of credit, *Financing Agriculture*, **17**(1): 14-16.
- Ananthram, K. Mruthyunjaya, G.V.S.R. Krishna and D. Goyal (1984), Growth of goats and sheep in Rajasthan desert: Analysis and implications, *Agricultural Situation in India*, **38**(10): 635-639.
- Bhatia, M.S., V.K. Sharma and T. Haque (1984), Changes in factor relations and productivity in India, *Agricultural Situation in India*: 629-33.
- Bisaria, Geeta and T. Haque (1984), Regional variations in oilseeds production in India – emerging trend and future prospects, *The Economic Times*, June.
- Chand, Puran (1984), Livestock economy – an income equalizer, *Livestock Advisor*, **9**(1): 23-27.
- Chand Puran and J.N. Gupta (1984), Economic profile of buffalo breeders in Haryana, *Kurukshetra*, **32**(7): 3-33.
- Chand, Puran and R.P. Singh (1984), Economic appraisal of farm credit for the farms of Haryana state, *Financing Agriculture*, **19**(4).
- Dass, Shiv Ram (1984), Quantum, unit values, parity prices and purchasing capacity of sugar exports, *Indian Journal of Agricultural Economics*, **39**(3).
- Guglani, P.L. and R.K. Pandey (1984), Performance of Farmer's Service Society in Ratu block, Ranchi (Bihar), *Financing Agriculture*, **16**(2): 57-60.
- Harsh, L.N., Mruthyunjaya and S. Maurya (1984), Economics of pasture development in Pali, *Annals of Arid Zone*, **23**(2): 143-148.

- Krishnan, M. and A.K. Vasisht (1984), Absolute rural poverty description and measurements, *Southern Economist* **23**(8).
- Krishnana, M. and A.K. Vasisht (1984), Wheat consumption – trend of imports in developing countries, *The Economic Times*, **24**(113): July 19.
- Kumar, Ashok, Ved Pradash and A.K. Vasisht (1984), Response of rice to nitrogenous fertilizers in Jammu and Kashmir region – an economic analysis, *Fertilizers News*; **29**(10): 22-24 & 41.
- Kumar, Praduman (1984), Price policy made of sugarcane and its products, *Indian Journal of Agricultural Economics*, **39**(4).
- Patil, H.N., P. Kumar and M.A. Muralidharan (1984), Efficiency of marketing of mangoes in Ratnagiri district, Maharashtra, *Indian Journal of Marketing*, **14**(7): 15-17.
- Sharma, B.M., V.K. Sharma and Vinod Kumar (1984), An economic analysis of farm income, labour employment and credit needs under multiple cropping system in Delhi region, *Indian Journal of Agricultural Economics*, **54**(7).
- Sharma, S.K. and Mruthyunjaya (1984), Economics of range reseeding in arid western Rajasthan, *Annals of Arid Zone*, **23**(3): 225-228.
- Singh, Chhotan, A.S. Sirohi and B.M. Sharma (1984), A study of the normative demand function for nitrogenous fertilizer in India, *Agricultural Situation in India*, **39**(7).
- Singh, Ikbal and C.P. Yadav (1984), Wheat production in Bihar –trend in growth performance, *The Economic Times*, April 12.
- Bhatia, M.S., V.K. Sharma and T. Haque (1983), Changes in factor relations and productivity in Indian agriculture, *Agricultural Situation in India*, **38**(10).
- Chengappa, P.G., M.A. Muralidharan and Mahesh Kumar (1983), The nature of price movements during pool shares auctions of coffee, *Agricultural Marketing*, **25**(1).
- Dass, Shiv Ram and A.K. Vashisht (1983), Trends in area, production and yield of forestry in India, *Indian Journal of Agricultural Economics*, **38**(3).
- Dass, Shiv Ram (1983), Energy crisis and agricultural exports, *The Economic Times*, **32**(103): 7.
- Dass, Shiv Ram (1983), Inflationary recession and farm goods exports, *Financial Express*, **10**(125): 3.
- Guglani, P.L. and R.K. Pandey (1983), Financing the neglected sector, agriculture, *Yojana*, **13**(7): 21-22.

- Guglani, P.L., R.K. Pandey and Pramod Kumar (1983), Role of FSS in advancing loans to farmers of Ranchi, *The cooperator*, **21**(4): 104-108.
- Haque, T. V.K. Sharma and M.S. Bhatia (1983), Temporal and spatial variations in factor shares in Indian agriculture, *Indian Journal of Agricultural Economics*, **38**(3).
- Jyothisri M. and Iqbal Singh (1983), Optimization of energy inputs of small farms, *Urja*, **13**(4).
- Kumar, Pranesh and B.M. Sharma (1983), Growth rates of agricultural wages in Haryana – a case study, *Indian Journal of Agricultural Economics*, **38**(2).
- Kumbhare, S.L., R.K. Patel and V.C. Mathur (1983), Dimensions of rural employment planning – an enquiry of landless farm labourers of Gharaunda (Haryana), *Agricultural Situation in India*, **37**(10).
- Patel, H.N., P. Kumar and M.A. Muralidharan (1983), Marketing margins and price spread in the marketing of alphonso mangoes in Ratnagiri district (Maharashtra), *Indian Journal of Marketing*, **14**(4): 21-24.
- Prakash, V. and A.K. Vasisht (1983), Bihar growth strategies and policies for development, *Annals of Agricultural Research*, 1 and 2.
- Ray, A.K., A.K. Vasisht and Ved Pradash (1983), Comparative study of jute and rice cultivation in India, *Agricultural Situation in India*, **38**(7).
- Sharma, P.K., C.B. Singh and V.C. Mathur (1983), Impact of crossbred cows on the income of landless labour households, *Dairy Guide*, **5**(5).
- Singh, Chhotan and David Zilberman (1983), Allocation of fertilizer among crop under risk – a quadratic programming approach, *Indian Journal of Agricultural Economics*, **39**(1).
- Singh, R.P (1983), Factor shares and farm size: A case study of Delhi wheat farms, *Indian Journal of Agricultural Economics*, **38**(4).
- Singh, R.P. and V.C. Mathur (1983), Production functions and allocative efficiency of wheat farms: A case study of bullock vs tractor operated farms in Delhi. *Annals of Agricultural Research*, **4**(1) & (2): 69-74.
- Sirohi, A.S., A.K. Vasisht and Chhotan Singh (1983), Trend of agricultural productivity and production in India, *Agricultural Situation in India*, **38**(5).
- Srivastava, D. and Iqbal Singh (1983), Integrated Rural Development Programme (IRDP) and regional disparities, *Cooperative Perspective*, **18**(2).
- Srivastava, D. (1983), Rural manpower planning for development, *Financial Express*.

- Atteri, B.R. and P.K. Joshi (1982), Capital requirement of marginal and small farmers – a case study in the union territory of Delhi, *Agricultural Situation in India*, **37**(5): 305-308.
- Das, P.K. and P.L. Guglani (1982), How IDA is helping tribals to become better farmers? *Kurukshetra*, **30**(19): 24-26.
- Dass, Shiv Ram (1982), Drought Prone Areas Programme in Andhra Pradesh, *Yojna*, **31**(12): 29-30.
- Dass, Shiv Ram (1982), Relative agricultural prices, *Financial Express*, **8**(342) February 5th.
- Eswaramoorthy, K. and Iqbal Singh (1982), Potential use of water resource in the lower Bhawani project command area (Tamil Nadu), *Rural Development Review*, **1**(3).
- Faleiro, J.R., S. Rai and A.K. Vasisht (1982), Sequential sampling plan for the management of leaf hopper population on okra, *Annals of Agricultural Research*, **3**(12): 164-170.
- Guglani, P.L (1982), Institutional finance and Regional Rural Banks, *The Cooperator*, **19**(18): 545.
- Mruthyunjaya, S.P. Malhotra and Amal Kumar Sen (1982), Technological possibilities for agricultural growth and stability in western Rajasthan: An assessment, *Annals of Arid Zone*, **22**(2): 121-133.
- Mruthyunjaya and V.R. Srinivasan (1982), Demand for potato in Karnataka: Policy alternatives, *Indian Journal of Agricultural Economics*, **37**(4): 511-516.
- Prasad, B. and Suresh Pal (1982), Contribution of food grains and agricultural commodities in Indian exports. *Indian Journal of Agricultural Economics*, **37**(3): 326.
- Puran Chand, A.S. Saini and Jagjit Singh (1982), A study on operating cost of tractor on rural farm households of Karnal, *Indian Journal of Agricultural Research*, **16**(2): 87-94.
- Rai, Samarjit, J.R. Faleiro and A.K. Vasisht (1982), Sequential sampling plant for okra, fruit borer *Earias vittella fab*, *Annals of Agricultural Research*, **3**(12): 52-58.
- Ray, A.K., B.R. Atteri and P.L. Guglani (1982), Progress of central cooperative bank in West Bengal, *Indian Cooperative Review*, **18**(3): 281-286.
- Sharma, B.M. and Chhotan Singh (1982), Trends in oil seeds production, *Eastern Economist*, **78**(22): 1278-1281.
- Sirohi, A.S. and Iqbal Singh (1982), Financial feasibility of biogas plants as alternative sources of energy, *Prashasika*, **40**(2-3).
- Srivastava, D (1982), Modernization of farm techniques, *Financial Express*, July 3.

- Srivastava, D. and Ikbal Singh (1982), Integrated Rural Development Programme and regional disparities, *Economics Times*, **22**(224), October 18th.
- Vasisht, A.K. (1982), Indian energy crisis need for conservation, *The Economic Times*, **21**(326): Jan. 28.
- Vijayaraghavan, K., Anita Jhamtani and B.R. Atteri (1982), Farm research past, present and future role, *The Economic Times*, Bombay, **22**(265): November 24th.
- Alshi, M.R. and P. Kumar (1981), Technological change and income distribution: A study of cotton crop in Akola district (Maharashtra), *Annals of Agricultural Research*, **2**(1-2).
- Atteri, B.R (1981), Important substitution in fertilizers, *Eastern Economist*, **76**(21): 1277-1280.
- Atteri, B.R., A.K. Ray and M.A. Muralidharan (1981), A study on changes in prices of some important agricultural commodities in India, *Indian Journal of Agricultural Economics*, **36**(4): 115.
- Bhide, S.A. Chaudhary, E.O. Heady and M.A. Muralidharan (1981), Structural change in agricultural assembly market: Case study of arecanut (Betelnut) market in Mangalore, Karnataka state, *Indian Journal of Agricultural Economics*, **36** (2): 25-34.
- Chengappa, P.G. and M.A. Muralidharan (1981), Factors affecting price variation in coffee between pool sales auction during any particular month, *Journal of Coffee Research*, **11**(3): 81-88.
- Dass, Shiv Ram (1981), An implicit index approach to agricultural terms of trade, agricultural production and non-agricultural income, *Indian Journal of Agricultural Economics*, **46**(4): 115-116.
- Diwakar, G.D. and M.A. Murlidharan (1981), A study of marketing cost and margin for potato in Farrukhabad district of Uttar Pradesh, *Agricultural Marketing*.
- Ghodake, R.D. and D. Jha (1981), Pesticide use decisions in agriculture: A note, *Indian Journal of Agricultural Economics*, **36**(2).
- Guglani, P.L (1981), Strategy for ensuring recovery of rural credit, *The Cooperator*, **19**(3): 59.
- Haque, T. (1981), Food trends and prospects in India, fred ii. Sanderson and Shyamal Roy, *Indian Journal of Agricultural Economics*, **36**(4): 147-149.
- Haque, T (1981) Inter-regional variations in credit and economic development, *Eastern Economist*, **76**(26): 1519-1523.
- Janvry, Alain and P. Kumar (1981), The transmission of cost inflation in agriculture with subsistence production – a case study in Northern India, *Indian Journal of Agricultural Economics*, **36**(2): 1-14.

- Joshi, P.K (1981), Productivity differences of rice and wheat, *Eastern Economist*, **76**(17): 1075-1078.
- Joshi, P.K., D.K. Bahl and D. Jha (1981), Direct employment effect of technical change in Uttar Pradesh agriculture, *Indian Agricultural Economics*. **36**(4): 1-16.
- Kumar, P., V.C. Mathur and R.P. Singh (1981), Estimating labour demand functions and labour absorption in agriculture: A case study of Delhi wheat farms, *Indian Journal of Agricultural Economics*, **36**(4): 7-13.
- Mohandass, V., Mruthyunjaya and K.V. Subrahmanyam (1981), Capacity utilisation concepts and their relevance to costs and returns of fruit and vegetable cold stores, *Indian Journal of Agricultural Economics*, **36**(2): 52-69.
- Mruthyunjaya (1981), Enterprise budgets of dry land crops and policy implication, *Indian Journal of Agricultural Economics*, **36**(1): 82-88.
- Ray, A.K., B.R. Atteri and P.L. Guglani (1981), Progress of Central Co-operative Banks in West Bengal, *Indian co-operative Review*, **18**(3).
- Ray, A.K., B.R. Atteri and T. Haque (1981), Variation in rice yield, *Economic Times*, **21**(329): 12, January 27.
- Ray, A.K., B.R. Atteri, A.K. Vasisht and G.S. Ram (1981), Impact of small farmers development agency programmes on the net farm income, labour employment pattern and farm income – a case study of West Bengal, *Financing Agriculture*, **13**(4).
- Sharma, V.K. (1981), A class of departmental designs for first residuals, *Australian Journal of Statistics*, **23**(2): 1-6.
- Sharma, V.K (1981), Construction of partially balanced ternary designs, *Journal of Indian Statistical Association*, **19**: 23-27.
- Sirohi, A.S. and Iqbal Singh (1981), Biogas energy for cooking and irrigation, *Urja*, **10**(5): 265-288.
- Sirohi, A.S. and Iqbal Singh (1981), Biogas energy: economic feasibility, *Eastern Economist*, **77**(6): 264-268.
- Vasisht, A.K. (1981), Energy and developing nations – pattern of utilization, *The Economic Time*, **21**(174): August 26.
- Vijayaraghvan, K., Y.P. Singh and A.K. Ray (1981), Modernizing agriculture – role of ICAR, *The Economics Times*, New Delhi, March 20th.

Vijayaraghvan, K., Y.P. Singh and A.K. Ray (1981), Role of ICAR in education, *The Economic Time*, Bombay, March 21st.

## **B. Published proceedings of Conferences /Workshops**

Atteri, B.R (1990), Survey of existing packing methods and losses of fruits and vegetables at wholesale and retail level, paper presented at 8<sup>th</sup> *Workshop of AICRP on PHT of horticultural crops and 4th workshop of INDO-USAID on PHT of fruits and vegetables* APAU, Hyderabad, February 20-22.

Mruthyunjaya and Praduman Kumar (1990), Productivity and stability in crop production on small farms in the states of north India, paper presented in *Seminar on Economics of agriculture with special reference to viability and sustainability of small and marginal farmers*, Hyderabad, 8-10 October.

Mruthyunjaya and M. Satyanarayana (1990), Socio-economic constraints in maximising productivity in rice - wheat system, paper presented at *The rice-wheat workshop*, Modipuram, October, 15-16.

Singh, R.P. and M. Satyanarayana (1990), Institutional credit as an instrument of socio-economic development of Arunachal Pradesh, paper presented in *Seminar on Appropriate technology for integrated development of Arunachal Pradesh*, organized by Science and Technology Council, Itanagar, April 24-26.

Atteri, B.R. (1989), A study on post harvest losses of dasehari and chausa varieties of mangoes at wholesale and retail markets in Delhi, paper presented at *Indo-USAID workshop on PHT*, New Delhi, February, 20-22.

Bisaria, G (1989), Production and export potential of fruits and vegetables in India, paper presented at *International symposium on Horticultural Economics*, July 1 to 23, Alemaya, Ethiopia, July 16 to 23.

Gajanana, T.M. and B.M. Sharma (1989) Agricultural growth and cropping pattern changes in dry region – a case study of Tumkur district in Karnataka, paper presented at the *Seminar on Perspective plan for development of agriculture in Karnataka*, USA, Bangalore, August.

Mruthyunjaya (1989), Crop area changes in Karnataka: Some reflections, paper presented at the *Seminar on Prospective plan for the development of agriculture in Karnataka during 8th plan*, UAS, Bangalore.

Pal, Suresh and T. Haque (1989) Regional variations in the small farmers access to groundwater, paper presented at the *Workshop on Ground water management*, Jan. 30- Feb. 1.



- Atteri, B.R. (1988), A study on loss assessment of rainy season guava in Delhi market, paper presented at *Workshop of INDO USAID sub-project on PHT of fruits and Vegetables*, KVK, Dapoli, Maharashtra, February.
- Atteri, B.R. (1988), A study on transportation losses of dashari mango variety from Malihabad, U.P. to N.S.M. Azadpur, New Delhi, paper presented at *Workshop of Indo- USAID Sub-project on PHT of Fruits and Vegetables*, KVK, Dapoli, Maharashtra, February.
- Haque, T (1988), Role of technological change in improving the socio-economic conditions of marginal farmers and landless labourers, proceedings, *First Joint Seminar of Scientists, Technologist and Social Scientists*, New Delhi, November 1-3.
- Krishnan, M., A.K. Vasisht and V.C. Mathur (1988), The Economics of inter-market linkage and the issue of human resources development – a case study, paper presented at the *International Seminar on Agricultural Marketing and Economic Development*, IDS, Mysore, October.
- Patil, H.N. and Praduman Kumar (1988), Factors influencing the prices of alphonso mango, paper presented at the *National Seminar on Agricultural Marketing*, Assam Agricultural University, Jorhat.
- Singh, Chhotan (1988), Relative price structure and marketing margins of fruits in India, paper presented at the *International Seminar on Agricultural Marketing and Economic Development* IDS, Mysore, October.
- Singh, Padam and A.K. Vasisht (1988,) An inclusion probability proportional to size sampling scheme, paper presented at the 75<sup>th</sup> *Session of the Indian Science Congress*, Pune, Jan, 7-12.
- Srivastava, D (1988), Natural disasters and relief measures, paper presented at the *International Workshop on Natural Disaster Management*, NIRD, Hyderabad, July. 11-16.
- Srivastava, D (1988), Role of women in agriculture, paper in the *Seminar on Recent Advances in the Development of Agricultural Marketing and Processing Equipment*.
- Srivastava, D (1988), Science for socio-economic transformation, paper presented at *National Symposium on the Role of Scientific Research and its Management in Accelerating Socio-Economic Transformation*, IARI, Sept.
- Viswanath, T. and M. Satyanarayana (1988), Developing market intelligence: Lessons from traditional trade in groundnut oil, paper presented at *International Seminar on Agricultural Marketing and Economic Development*, Institute of Development Studies, Mysore, October.
- Atteri, B.R. and M.I. Krishnan (1987), Effect of environment on production of food grains in India- proceedings *National Workshop on Science. Technology and Development*, Parliament annexe, Parliament STREET, New Delhi, Nov.

- Dass, Shiv Ram and B.R. Atteri (1987), Instability in quantum, unit values and export earnings of principal agricultural commodities, paper presented at the *National Symposium on Instability in India Agriculture*, IASRI, New Delhi, October.
- Haque, T (1987), Socio-economic constraints in rice production in the eastern and north-eastern regions of India, proceedings, *Annual Rice Workshop*, Patna, April 25-28.
- Haque, T (1987) Land rights and agricultural development, paper presented for discussion at the *20th International Conference of Agricultural Economists*, Buenos Aires, Argentine.
- Haque, T (1987), Technological change and socio-economic transformation in rural Punjab, proceedings, *International Symposium on Science, Technology and Development*, Vigyan Bhawan, New Delhi, March.
- Haque, T (1987), Towards an efficient and just system of agricultural marketing in India, proceedings of the *National Seminar on Dimensions of Rural Marketing Alternatives for the 21<sup>st</sup> Century*, IDS, University of Mysore, March 24-26.
- Haque, T. and Dru Srivastava (1987), Planning for alleviation of rural poverty in India, paper presented at the 7<sup>th</sup> general meeting of the *Association of Development Institutions of Research Training of Asia and Pacific (ADIPA)* New Delhi, November.
- Kataria, J.S., R.A. Day and Ikbal Singh (1987), Communication system approaches for rural development, paper presented at the *National seminar on Communication and Development for Rural Women*, Department Home Science Education and Extension, PAU, Ludhiana, October 27-29.
- Mruthyunjaya (1987), Personal and training policies and human resource development outline of an ongoing experiment in ICAR, paper presented at the *National conference on Human Resource Development for Managerial Excellence*, Administrative Training Institute, Mysore, June 11-12.
- Pal, Suresh and A.S. Sirohi (1987), Adoption of HYV's and growth and instability in Indian agriculture – implications for policy, paper presented at the *National symposium on Growth and Instability in Agriculture*, IASRI, New Delhi, August 19-21.
- Satyanarayana, M. and T. Haque (1987), An inquiry into the problem of over dues in agricultural credit in India, paper presented at *National seminar on Institutional Finance for Agriculture Problems and Prospects*, National Productivity Council, New Delhi.
- Singh, Chhotan and M.I. Krishnan (1987), Temporal changes in growth of edible oilseeds production in India, proceedings, *National symposium on Growth and Instability in Agriculture* IASRI, New Delhi, August 19-21.
- Singh, R.P. and Mruthunjaya (1987), Economics impact of crop technology transfer on farms: A case study of marginal and small farms in Rai Berielli and Sultanpur districts of U.P.,

- India, paper presented at the *International symposium on Science, Technology and Development*, Vigyan Bhavan, New Delhi, March 20-25.
- Srinivas, N. R.P. Singh and Mruthyunjaya (1987), Resource use and allocative efficiency of rice growing under different locations of canal reach- paper presented at the *IWRS Symposium on Integrated Water Resource Management for Drinking, Agriculture and Industry: Policy and Issue*, Hyderabad, 24-25 January.
- Srivastava, D. (1987), Agricultural growth in India, paper presented at the *National seminar on Agrarian Structure, Land Reforms and Agricultural Growth in India*, Govind Ballabh Pant Social Science Institute, Allahabad.
- Srivastava, D and T. Haque (1987), Technological change and regional disparities in agricultural growth, proceedings *International symposium on Science, Technology and Development* Vigyan Bhavan, New Delhi March.
- Srivastava, D (1987), Development banking for agriculture, paper presented at *National seminar on Institution of Finance for Agriculture, Problems and prospects*, National Productivity Council, New Delhi.
- Vasisht, A.K. and Deepa Vasisht (1987), Constraints and prospects of resource management for pulse production – a case study of west Bengal, paper presented at *74<sup>th</sup> Session of Indian Science Congress* Bangalore from January 3-8.
- Vasisht, A.K. and M.I. Krishnan (1987), Sciences and technology: An appropriate prospective for economic development, proceedings of *Symposium on Science, Technology and Development*, Vigyan Bhavan, New Delhi, March 20-25.
- Yadav, C.P. and Iqbal Singh, (1987), A critical study of growth of crops output and instability in their yields paper presented at the *National Seminar on Growth and Instability in Agriculture* IASRI, New Delhi, August 19-21.
- Atteri, B.R. (1986), Assessment of losses of guava and orange fruits at retail outlet, paper presented at *Workshop of Coordinated Research Project and INDO-USAID Project on Post Harvest Technology, CIHRP*, Lucknow, Feb. 24-26.
- Atteri, B.R. (1986), Assessment of physical losses of potato at harvesting stage, paper presented at *Workshop of Coordinated Research Project and INDO-USAID Project on Post Harvest Technology, CIHRP*, Lucknow, Feb. 24-26.
- Haque, T. (1986), Regional disparities in agricultural development, proceedings *National convention on Role of Agricultural Universities in Rural Development*, RAU, Bihar, Oct., 24-25.
- Haque, T. (1986), Trends and prospects of structural change in the rural economy of India, proceedings, *National Seminar of IASSI and Planning Commission*, NCAER, New Delhi, May 20-22.

- Hauqe, T. (1986), Organizational and structural set-up and constraints of the *International workshop on Planning and Management of Minor Irrigation Scheme*, held at Fort Louis, Mauritius, August 25-29.
- Singh, R.P. and Mruthyunjaya (1986), Some thought on increasing oilseed and pulse production in India, *Symposium on Transfer of Technology*, Allahabad Agricultural Institute, Allahabad, Dec.
- Srivastava, D and T. Haque (1986), Agricultural growth and regional disparities, paper presented at the *National seminar on Exploring India' Development Perspective for the year 2000*, IASRI, New Delhi, May.
- Srivastava, D (1986), Development banking for agriculture – lead paper presented at the *National Seminar on Role of Management in the Changing Scenario of Rural Development*, IARI, February.
- Vasisht, A.K (1986), Problems in the management of 20 points programme with special reference to integrated rural development, paper presented at the *National seminar on Rural Development* IIT, Kanpur, May 3-4.
- Mruthyunjaya and D. Jha (1985), A note on impact of varietal improvement and intercropping on variability of cereal yields, paper presented at the *Workshop on Sources of Increased variability in Cereal yields*, Feldafing, Germany, Nov. 26-29.
- Sirohi, A.S., Chhotan Singh and A.K. Vasisht (1985), Changes in price spread, relative price structure and terms of trade in agriculture during last decade in India, proceedings of *Seminar on Prices of Agricultural Products*, Gramin Vikas Sangh, New Delhi.
- Srivastava, D (1985), Agricultural management education in India, paper presented at the *National workshop on States of Agricultural Management Education in India*, Tamil Nadu Agricultural University, Coimbatore, July, 23-25.
- Srivastava, D and Geeta Bisaria (1985), Marketing margins of various functionaries for mangoes marketed in Azadpur market of Delhi, India, paper presented at the *International Horticultural Congress*, Davis, California, August.
- Bisaria, Geeta and Puran Chand (1984), Problems in the implementation of 20-points programme: A case of pulses and oilseeds in India, paper presented at *Seminar on Problems of management of 20 point programme*, Agro Economic Research Center, University of Allahabad
- Krishnan, M. and A.K. Vasisht (1984), Cooperative farm management development- suggestions for improvement paper presented at *Seminar at V.L. Mehta Institute for Cooperative Management* Pune, September.

- Kumar, P. and Dinesh Chandra (1984), Prospects of sugar industry in Western U.P: A price policy analysis, paper presented at *Golden Jubilee National Seminar of ISMA*, April.
- Mruthyunjaya (1984), Employment implications of technical change in agriculture- a case study, paper presented at the *Training Programme at the Institute of Applied Manpower Research*, New Delhi, 7<sup>th</sup> July.
- Prakash, Ved and A.K. Vasisht (1984), Agricultural credit under new 20 point programme, paper presented at the *67th annual conference of India Economic Association*, Agra.
- Singh, Padam and A.K. Vasisht (1984), A sampling scheme for two stage designs, paper presented at the *38<sup>th</sup> Annual conference of Indian society of Agricultural Statistics*, Calcutta.
- Sirohi, A.S (1984), Impact of agricultural subsidies and procurement prices on production and income distribution in India, presidential address, *Annual Conference of the Indian Society of Agricultural Economics*.
- Srivastava, Dru, T. Haque and H.S. Vijay Kumar (1984), Agricultural development in 2000 and its credit needs, lead paper submitted to the National Institute of Bank Management for their national seminar.
- Atteri, B.R. and S.K. Roy (1983), Assessment of losses of guava and orange at retail level, paper presented in *IFCON at CFTRI*, Mysore, Karnataka, February.
- Haque, T. and A.S. Sirohi (1983), Agrarian reform and institutional changes in agriculture, paper presented at the *International Conference of the Committee for Studies on South Asian Regional Cooperation*, India International Centre, New Delhi, July, 1983.
- Singh, Ikbal (1983), Integrated approach to irrigation water management in lower Bhawani project command (Tamil Nadu) paper presented in the *National seminar on Integrated Approach to Water Management in the Command Area*, Water Technology Centre, IARI, New Delhi, September 6-8.
- Sharma, B.M., Ikbal Singh, Daroga Singh, R. Dayal and Vinod Kumar (1983), Role of livestock and poultry enterprise in rural development: A case study of Alipur Block, Delhi, paper presented at the *National seminar on Challenges for Rural Development in the North Western region of India*, Department of Agricultural Economics, Haryana Agricultural University, Hissar, March 2-3.
- Srivastava, D. (1983), Some reflection on utilization of human energy in agriculture, paper presented at the *Conference of State Agricultural Federations*, Chandigarh.
- Srivastava, D. (1983), Public distribution for social welfare, paper presented at *National seminar on Public Distribution*, Ujjain, December.

- Vasisht, A.K. and Ved Prakash (1983), Trends in area, production and yield of jute in India, paper presented at the 37<sup>th</sup> Annual Conference of Indian Society of Agricultural Statistics, Shimla.
- Mathur, V.C. and B.R. Atteri (1982), Problems in the management of market handling perishables – a case study of Delhi (Azadpur) market, paper presented at *National Workshop on Regulation and Management of Agricultural Produce Markets*, Pune, India.
- Haque, T. (1981), Some aspects of agrarian reforms in West Bengal, paper presented at the *West Bengal Comprehensive Area Development Corporation*, Calcutta, April 6th.
- Sharma, B.M. (1981), Economic analysis of integrated farming systems under irrigated and unirrigated condition of small farm in Theni Block (Tamil Nadu) paper presented at the *Symposium on Recent Trends in Systems of Farming in India*, HAU, Hissar.
- Rai, S., M.G. Jotmani and A.K. Vasisht (1981), Use of sequential sampling plan in the management of sorghum shoot fly, proceedings, *National seminar on Strategies of Pest management*, IARI, New Delhi.
- Ray, A.K., D. Srivastava and J. Lal (1981), Wastage of energy in the union territory of Delhi, paper presented at the *National Seminar on Pattern of Energy Utilization and Returns in Different Farming Systems in India*, Division of Agricultural Economics, IARI, New Delhi, March 16-18.
- Singh, R.P., G.S. Ram and A.S. Sirohi (1981), Losses and negative returns in Delhi Union territory, paper presented at the *National Workshop on Farm Level*.
- Sirohi, A.S. and Iqbal Singh (1981), Utilization of biogas energy for cooking and irrigation under crop and dairy farming systems in India, paper presented at the *National Seminar of Pattern of Energy Utilization and Returns in Different Farming Systems in India*, Division of Agricultural Economics, IARI, New Delhi.
- Sirohi, A.S., B.M. Sharma, Chhotan Singh and Rameshwar Dayal (1981), Optimization of energy inputs in production of major crops in the union territory of Delhi paper presented at the *Seminar of Pattern of Energy Utilization and Returns in Different Farming Systems in India*”, Division of Agricultural Economics, IARI, New Delhi.
- Srivastava, D. and J. Lal (1981), Planning utilization of cereal varieties by storage characteristics, paper presented at the *National Workshop on Farm Level Post Harvest Technology for Prevention of Food Losses*, Division of Agricultural Economics, IARI, New Delhi, January 29.

### C. Bulletin/Policy Paper

- Ballabh, V. and B.M. Sharma (1989), HYV adoption, productivity gaps and production adjustment mechanisms in flood – prone areas of Uttar Pradesh: A synthesis, research paper No. 5, Institute of Rural Management, Anand, March.
- Singh, R.P., Puran Chand and Bishamber Singh (1985), An economics evaluation of various crop demonstration in ORP villages of Gurgaon district of Haryana (1984-85), Report Unit of Transfer of Technology, IARI, New Delhi.
- Sirohi, A.S., Ikbal Singh and Ranvir Singh (1985), Irrigation water pricing criteria for optimization of agricultural production in Ganga basin – a parametric programming approach, *Agricultural Economics Research Bulletin* No. 9, Division of Agricultural Economics, IARI, New Delhi April.
- Singh, R.P. and Puran Chand (1984), Report on bench-mark survey of Rampura and Shikhopur villages in Gurgaon district, Haryana, Unit of Transfer of Technology, IARI, New Delhi.

### D. Book Chapters

- Kumar Praduman and Mruthyunjaya (1990), Price policy options for agricultural marketing- perspectives and issues, (ed) by L. P. Singh and S. Garg, Centre for Agricultural Marketing, Jaipur.
- Sinha, Suresh, K.K. Kailasnath and A.K. Vasisht (1987), Drought management in India: Steps towards eliminating famines and Planning for Drought, (ed) D.A. Wilhite, W.E. Easterling and D.A. Wood, Westview Press, UNEP: 453-470.
- Singh Ikbal, (1984), Rural development in India, NCERT, New Delhi.
- Haque, T. (1981), Analysing the recent agrarian changes in Bihar, in Essays in Honour of Dr. Gyan Chand, People's Publishing House, New Delhi: 212-222.

## 1971-1980

### A. Published in professional journals

- Bhide, Shashanka, Ashok Chaudhary, E.O. Heady and M.A. Muralidharan (1980), Structural changes in an agricultural assembling market in Manglore, Karnataka state, journal paper J. 9871 of the Iowa Agricultural and Home Economics Experiment Station, Ames, Iowa, U.S.A. Project No. 1203.
- Dass, S. R. (1980), Agricultural vs Non-agricultural prices and output, *Eastern Economist*, **74** (20): 978-983.

- Dass, S.R. (1980), Drought prone areas programme, *Indian Journal of Agricultural Economics*, **35** (4).
- Haque, T. (1980), An economic analysis of socialist and non-socialist viewpoints on the New International Economic Order, *Indian Economic Journal*, **28** (2).
- Haque, T. (1980), Credit planning and economic development in India, *Indian Economic Journal*, **28** (2).
- Haque, T., C.C. Maji and P.K. Joshi (1980), Some economic aspects of livestock enterprise in India, *Annals of Agricultural Research*, **1**.
- Joshi, P.K (1980), Technical inputs and agricultural growth, *Eastern Economist*, 115-119.
- Joshi, P.K. and T. Haque (1980), An economic inquiry into the long term prospects of balanced agricultural growth in India, *Indian Journal of Agricultural Economics*, **35** (4).
- Kumar, P. and R. P. Singh (1980), Dynamic feed-milk relationship and technological change in milk production, *Indian Journal of Agricultural Economics*, Vol. **35** (4).
- Ram, G.S., R. P. Singh and Kartar Singh (1980), Inter-state variations in growth of pulses, *Eastern Economist*, **74** (24): 175-176.
- Ray, A.K. and C.C. Maji (1980), Demand for borrowing on irrigated small farms under traditional and modern technology-a case study in Hoogly district of West Bengal, *Indian Journal of Agricultural Statistics*, **32** (3).
- Sirohi, A.S., B. M. Sharma, Iqbal Singh and Rameshwar Dayal (1980), Role of dairy and poultry enterprises for increasing income and employment of farms in the Union Territory of Delhi, *Indian Journal of Agricultural Economics*, Vol. **35** (4).
- Diwakar, G. D. and M. A. Muralidharan (1979), Analysis of pricing efficiency of potato in Farukhabad district of Uttar Pradesh, *Indian Journal of Agricultural Economics*, **34** (4): 215.
- Gupta, A. K. and G.S. Ram (1979), Behavior of marketing margins and cost of vegetable in Delhi, *Indian Journal of Agricultural Economics*, **34** (4): 210.
- Haque, T (1979), An inter-temporal and inter-regional analysis of the economics of human capital, *Indian Economic Journal*, **27** (2): 62-73.
- Haque, T. and A. S. Sirohi (1979), An analysis of intersectoral growth trade and income distribution in India, *Indian Journal of Agricultural Economics*, **34** (4): 121.
- Haque, T. and C. C. Maji (1979), A comparative study of economic development in India and China in the past two decades, *Indian Journal of Agricultural Economics* I: 39-52.
- Joshi, P. K. and V. K. Sharma (1979), Retail-farm price spread of rice in selected states of India, *Indian Journal of Agricultural Economics*, **34** (4): 130-135.



- Joshi, P.K (1979), Linkage between agricultural output growth and new technical in-puts of industrial sector in selected states of India, *Indian Journal of Agricultural Economics*, **34** (4): 120.
- Kumbhare, S. L. and A.S. Sirohi (1979), Optimum inter-state movement and storage of wheat, *Journal of the Indian Society of Agricultural Statistics*, **31** (2): 41-44.
- Kurkute, Kumar and A.S. Sirohi (1979), A study of effects of procurement prices and prices of farm inputs on production of rice and wheat in India, *Prajnam*, **8** (3): 305-325.
- Maji, C.C and T. Haque (1979), Efficiency of agricultural extension in technology transfer and income generation before and after the green revolution in India, *Indian Journal of Agricultural Economics*, **34** (4): 1-11.
- Murthyunjaya and A. S. Sirohi (1979), An economic analysis of crop yield and product price variability in Bijapur arid agriculture, Karnataka, *Annals of Arid Zone*, Vole. **18** (3): 186-198.
- Murthyunjaya and A. S. Sirohi (1979), Enterprise system for stability and growth on drought-prone farms: An application of parametric linear programming, *Indian Journal of Agricultural Economics*, **34** (1): 27-42.
- Pandey, U. K. and M. A. Muralidharan and C.C. Maji (1979), Extent of wilful default in the repayment of cooperative credit, *Indian Cooperative Review*, **16** (3): 286-296.
- Pandey, U.K. and M. A. Muralidharan (1979), Overdues and size of holdings of defaulters, *Financing Agriculture*, **11** (4): 12-16.
- Ram, G.S. and A.S. Sirohi (1979), An economic evaluation study of operational research project in rural Delhi, *Indian Journal of Agricultural Economics*, **34** (4): 20-26.
- Ray, A.K., B. R. Atteri, A. C. Sen and P. N. Mathur (1979), Qualitative impact of training and visit system on different group of farmers-a case study of Hoogly district, West Bengal, *Indian Journal of Agricultural Economics*, **34** (4): 12-20.
- Singh, S.N., G.S. Ram and Kartar Singh (1979) Marginal farmers development programme, (Mimeo), Division of Agricultural Extension, IARI, New Delhi.
- Atteri, B.R. and C. C. Maji (1978), Performance in rice production – a comparison between the traditional and non-traditional areas, *Indian Journal of Genetics and Plant Breeding*, **39** (A): 152-156.
- Atteri, B.R., A.S. Sirohi and R. N. Tiwari (1978), An appraisal of Indo-German agricultural project, Mandi, H.P, *Indian Journal of Agricultural Economics*, **33** (4).
- Atteri, B.R., R. P. Singh and C. C. Maji (1978), A study on cropping intensity and cropping pattern of hilly areas of India, *Indian Journal of Agricultural Economics*, **32** (1).

- Chaudhary, A and G. S. Ram (1978), Price response of perennial crop:A case study of Indian tea, *Indian Journal of Agricultural Economics*, **33** (3): 74-83.
- Giglani, P.L. (1978), Involvement of cooperatives in family welfare programme, *Cooperator*, **15** (17): 440.
- Haque, T. and C.C. Maji (1978), Structure and flow of agricultural cooperative credit in India, *Indian Journal of Agricultural Economics*, **33**, (4): 72-78.
- Joshi, P. K. and D. Jha (1978), Growth of rice in non-traditional areas-an economic analysis, *Indian Journal of Genetics and Plant Breeding*, **39** (A): 145-151.
- Kumar, P., P. K. Joshi and M.A. Muralidharan (1978), Estimation of demand for credit on marginal farms-a profit function approach, *Indian Journal of Agricultural Economics*, **33** (4): 106-114.
- Maji, C. C. and Earl O. Heady (1978), International allocation of irrigation water in the Mayurakshi project (India): An application of chance constrained linear programming, *Water Resources Research*, **14** (2): 190-196.
- Mudholkar, N. J., Chhotan Singh, I.P.S. Ahlawat, R.B. L. Bhardwaj and R. B. Lal (1978), Response and economics of nitrogen fertilization in Durum and Aestivum wheats, *Seeds and Farms*, **4** (10): 36-39.
- Patil, R.G. and D.Jha (1978), Output growth and technological change in Maharashtra agriculture – a district wise analysis, *Indian Journal of Agricultural Economics*, **33** (3): 31-39.
- Ray A.K. and C. C. Maji (1978), Demand for borrowing on irrigated small farms under traditional and modern technology-a case study in Hoogly district, *Indian Journal of Agricultural Economics*, **33** (4).
- Sarkar, T.K. and C. C. Maji (1978), Integration of drainage decision with irrigation management and crop planning-an application of concave programming, *Journal of Agricultural Engineering* **15** (2): 60-68.
- Sirohi, A.S., and B. M. Sharma (1978), Maximization of returns through farm planning under fertilizer constraint in Alipur block of the Union Territory of Delhi, *Indian Journal of Agricultural Economics*, **18** (3): 186-198.
- Guglani, P. L. (1977), More profit at less cost, *Intensive Agriculture*, **15** (15).
- Gunjal, K. R. and G. S. Ram (1977), Nutrition management for farmers and agricultural labourers in the Union Territory of Delhi, *Indian Journal of Agricultural Economics*, **32** (3).
- Haque, T. (1977), What ails our agriculture? *Green and Glory*, Central Staff College For Agriculture (ICAR) Hyderabad.

- Kumar, P., C. C. Maji and R. K. Patel (1977), Returns to investment in research and extension: A study on Indo-Swiss cattle improvements projects, Kerala, *Indian Journal of Agricultural Economics*, **32** (3).
- Mahalle, Y. P. and D. Jha (1977), Economics of pesticides use in cotton production, *Indian Journal of Agricultural Economics*, **32** (1).
- Maji, C.C (1977), Economic analysis of irrigation and crop planning for optimal water use, in *Water Requirement and Irrigation Management of Crops in India*, Water Technology Centre, I.A.R.I.
- Muralidharan, M.A., P. Kumar and V. K.Sharma (1977), An analysis of nutrition levels of farmers in Eastern U.P., *Indian Journal of Agricultural Economics*, **32** (3).
- Pandey, U. K. and M. A. Muralidharan (1977), An application of discriminant function in agricultural finance, *Indian Journal of Agricultural Economics*, **32** (2)
- Pandey, U. K. and M. A. Muralidharan (1977), Mounting overdues in cooperative credit institutions, *Indian Cooperative Review*, **15** (1): 35-60.
- Pandey, U. K. and M. A. Muralidharan (1977), Socio-economic factors affecting overdues of primary agricultural credit societies, *Indian Cooperative Review*, **14** (2)
- Ram, G.S., K.N. Singh and Kartar Singh (1977), A study on loss of wheat crop due to untimely rains and hailstorms in the Union Territory of Delhi, (Mimeo) Division of Agriculture Extension, I.A.R.I., New Delhi.
- Sharma, B. M. and A.S.Sirohi (1977), Farm labour employment and income implication of multiple cropping, fertilizer, credit use and farm mechanization-a normative analysis for farms in Alipur Block (Delhi), *Indian Dissertation Abstracts: 156-160*.
- Sharma, V.K. (1977), Change over designs with complete balance for first and second residual effects, *The Canadian Journal of Statistics*, **5** (1).
- Singh, Iqbal and A.S.Sirohi (1977), Optimization of water resource of upper Ganga canal in Western U.P., *Indian Journal of Agricultural Economics*, **32** (1).
- Singh, J. P., N. P. Singh and D.Jha (1977), Rotational considerations in fertilizer use, *Fertilizer News*, **22** (5).
- Singh, S.V., J. Singh, D. Singh and D. K. Bahl (1977), Genetics-environmental interactions in a diallel cross of opaque-2 maize, *Maydica*, **22**.
- Banerjee, B.N. and A.S.Sirohi (1976), Economic analysis of farm business of small farmers of village Tendul, Varanasi district, *Indian Journal of Agricultural Economics*, **31** (3).
- Guglani, P.L. (1976), Agriculture and inflation, *World Science News*, June.
- Guglani, P.L. (1976), Profit maximizing use of fertilizer, *Kurukshetra*, **24**, (10).

- Jha, D. and P. Kumar (1976), Effect of price changes of cost structure and factor demand: A case study on selected farms in Delhi Territory, *Indian Journal of Agricultural Economics*, **31**, (3).
- Maji, C. C. and T.K. Sarkar (1976), Optimal cropping system and irrigation efficiency in an existing canal area, *Journal of Agricultural Engineering*, **13** (4).
- Sirohi, A.S., G.S. Ram and C. B. Singh (1976) Inter-state variations in the distribution of land holdings in rural India, *Indian Journal of Agricultural Economics*, **31**.
- Banerjee, B. N and A. S. Sirohi (1975), Identification of small farmers in Chandauli tehsil; district Varanasi, *Indian Journal of Agricultural Economics*, **30** (3).
- Guglani, P. L (1975) Significance of cooperatives to agricultural economy, *The Cooperator*, **13** (2).
- Kumar, P (1975), An application of generalized least square estimation of linear regression model with random coefficients to paddy production function for Sambalpur district (Orissa), *Indian Journal of Agricultural Economics*, **30** (4).
- Kumar, P (1975), Production function and resource productivity or small scale farming in Orissa, *Indian Journal of Agricultural Economics*, Vol. **30** (3).
- Kumar, P. (1975), Evaluation of water use and management in Ayucut area of Sambalpur district (Orissa), *Indian Journal of Agricultural Research*, **9** (2).
- Muralidharan, M. A. and G.R. Bhatia (1975), An analysis of wheat prices for quality differences in two primary markets of Delhi, *Agricultural Marketing*, **18** (1).
- Raju, V.T., D. H. Srivastva and A. S. Sirohi (1975), Economic analysis of wheat enterprise in district Raipur, *Financing Agriculture*.
- Sharma, B.M. and A. S. Sirohi (1975), Credit needs of farmers in relation to multiple cropping in Delhi area, *Indian Journal of Agricultural Economics*, **30** (3).
- Sharma, V.K (1975), An easy method of constructing latin square designs balanced for the immediate residual and other order effects, *Canadian Journal of Statistics*, **3** (1).
- Sidhu, D. S. and A. S. Sirohi (1975), Estimation of short run supply functions for eggs in Punjab state – an econometric study, *Journal of Research, P.A.U.*, **2** (3).
- Singh, C. B. and R.K. Patel (1975), Human labour employment and efficiency on poultry farms in the Union Territory of Delhi, *Indian Poultry Review*.
- Singh, P. and D. Jha (1975), Efficiency of feeds and fodder resource allocation of mixed farms in Etah district (U.P), *Journal of Research, H.A.U.*, **5** (2).
- Singh, V. T., D. H. Srivastava and A.S. Sirohi (1975), Economic analysis of wheat enterprises in district Raipur, *Financing Agriculture*.

- Sirohi, A. S. and G. S. Ram (1975), Effects of agricultural prices and policies on inflation in India, *Northern Economist*, **2** (2) and (3).
- Srivastava, D. H. and C. B. Singh (1975), Disparities in cooperative credit in India, *International Journal of Rural Cooperation* (CIRCOMD) International Research Centre in Rural Cooperative Community, Tel - Aviv, Israel, **3** (2).
- Trivedi, H.T., and V.K. Sharma (1975), On the construction of group divisible incomplete block design, *Canadian Journal of Statistics*, **3** (2).
- Das, P. K. and D. H. Srivastava (1974), Credit needs of small farmers and its impact on farm earnings and employment in Orissa, *Orissa Economic Journal*, **7**.
- Das, P.K. and D.H. Srivastava (1974), Productivity of farm capital, *Orissa Economic Journal*, **7**.
- Guglani, P. L (1974) Infrastructure of rural credit system in India, *Indian Cooperative Review*, **2** (2).
- Jha, D. and G. S. Ram (1974), Instability in sugarcane acreage in India: An inter-regional analysis, *Indian Journal of Agricultural Economics*, **29** (3).
- Jha. D (1974) Technology, agricultural growth and equity, *Indian Journal of Agricultural Economics*, **29** (3).
- Kumar, P (1974), An economics study of water management programme in Sambalpur district (Orissa), *Indian Journal of Agricultural Economics*, **29** (2).
- Muralidharan, M. A. and T. P. Gangadharan (1974), Demand for chemical fertilizers in Kerala, *Fertilizer Marketing News*, **5** (9) (10) and (11).
- Ra, G.S. and R. Swarup (1974), Marketing costs, margins and efficiency in a regulated fodder market, *Agricultural Marketing*, **17** (2).
- Ram G. S. and C. B. Singh (1974), Wages and employment of agricultural labourers in Uttar Pradesh and Punjab, *Indian Journal of Agricultural Economics*, **29** (3).
- Singh, C. B. and A.S. Sirohi (1974), Disparities in agricultural growth and equity in India, *Indian Journal of Agricultural Economics*, **29** (3).
- Singh, Rajvir, R. K. Patel and A. S. Sirohi (1974), Economics of Maxican wheat cultivation in western Uttar Pradesh, *Financing agriculture*.
- Sirohi, A.S. and P. L. Guglani (1974), Combination of crop and dairy enterprises increase the farm returns, *World Science News*, **11** (2).
- Srivastava, D.H. and B. Borate (1974), Green revolution in northern region – impact of selective farm mechanization on farm employment, *Northern Economist*, **1** (2) and (3).

- Anderson, J.R. and N.S. Jodha (1973), On Cobb-Douglas and related myths, *Economic and Political Weekly*, **8**.
- Borate, S and D.H. Srivastava (1973), Pattern of unemployment on bullock operated and mechanized farms, *Finance and Commerce*, **16** (6) and (7).
- Chaudhari, A.K. and A. S. Sirohi (1973), Allocation of fertilizers among crops and regions in U.P., *Indian Journal of Agricultural Economics*, **28** (3).
- Evenson, R. E. and D. Jha (1973), Contribution of agricultural research system to agricultural production in India, *Indian Journal of Agricultural Economics*, **28** (4).
- Ghodake, R. D., A. S. Sirohi and D. Jha (1973), Economics of pest control for cotton crop, *Indian Journal of Agricultural Economics*, **28** (4).
- Guglani, P. L (1973), Financial institution face new challenge, *Indian Farming*, **22** (10).
- Jodha, N. S (1973), Long term cooperative credit in Gujarat: A note on regional distribution, *Financing Agriculture*, **22** (4).
- Jodha, N.S. (1973), Special programmes for rural poor: The constraining framework, *Economic and Political Weekly*, **8** (13).
- Mohan, R., R.E. Evenson and D. Jha (1973), Agricultural research expenditure in India, *Economic and Political Weekly*, **8**.
- Ram, G.S (1973), Estimation of on-farm demand for cereals in different states, *Agricultural Marketing*, **1** (3).
- Ram, G.S (1973), Total supply response of cereals in different states of India, *Agricultural Situation in India*, **28** (7).
- Singh, Rajvir and A.S. Sirohi (1973), Capital structure and productivity on farms in Saharanpur and Meerut districts of Western Uttar Pradesh, *Indian Journal of Agricultural Economics*, **28** (1).
- Singh, U. S. and D. Jha (1973), A note of efficiency in transitional agriculture: A study of farms in rural Delhi, *Indian Journal of Agricultural Economics*, **28** (3).
- Srivastava, D. H. and C. B. Singh (1973), Disparities in cooperative credit in India, *Journal of Rural Cooperation*, **3** (2).
- Guglani, P. L. (1972), New horizon in cooperation, *World Science News*, **9** (7).
- Sankhyan, P.L. and A. S. Sirohi (1972), Step demand function for fertilizer in Mandi district of Himachal Pradesh, *Indian Journal of Agricultural Economics*, **27** (3).
- Sidhu, D.S., M.P. Gupta and A. S. Sirohi (1972), Estimation of demand function for eggs in Punjab: An econometric study, *Indian Journal of Agricultural Economics*, **27** (3).

- Singh, Ikbal, D.H. Srivastava and Y. P. Gupta (1972), Impact of population on farm household income in village Daryapur Kalan of Union Territory of Delhi, *Sociologia Ruralies*, **12** (34).
- Sirohi, A. S., S. K. Goel (1972), Optimum doses of fertilizers and their profits for barley and maize crops at some important centers in India, *Agricultural Situation in India*, Vol. **25** (10).
- Sirohi, A.S. and P. L. Guglani (1972), Production pattern in Union Territory of Delhi – A case study, *Indian Journal of Agricultural Economics*, **27** (4).
- Sirohi, A.S., S. K. Goel and Kirpal Singh (1972), Impact of improved agricultural techniques in Delhi villages during ten years from 1960-61 to 1970-71.
- Sirohi, A.S., S.K. Goel and K. Singh (1972), Impact of high yielding varieties programme on income, cropping pattern and labour use in rural areas in Delhi, *Yojana*, **16** (22).
- Srivastava, D.H. and A. S. Sirohi (1972), Relationship of credit with short term farm investment, *Journal of All India Central Land Development Bank's Cooperative Union Ltd.*, **10** (4).
- Srivastava, D.H. and J.C. Saini (1972), Balance sheet analysis as a tool for agricultural credit division in India, *Finance and Commerce*, **15** (8)..
- Venkataraman, L. S. and M. A. Muralidharan (1972,) Seasonal price movements, market arrivals and returns to storage in Indian wheat markets, *Indian Journal of Agricultural Economics*, **27** (2).
- Gupta, Y. P (1971), Statistical estimation of linear economic relationship, Rotterdam University Press.
- Gupta, Y.P (1971), Estimation of the co-variance matrix of structural disturbance in a complete equation system, *Statistics*.
- Jha, D. and C. C. Maji (1971), Cobweb phenomenon and fluctuations in sugarcane acreage in North Bihar, *Indian Journal of Agricultural Economics*, **26** (1).
- Kaul, S. N (1971), Fallacies in estimates of farm supply elasticities: A study of cotton acreage response in Maharashtra, *Margin*, **1**, (2).
- Maji, C.C., D. Jha and B.M. Sharma (1971), Fertilizing pulses: An economic analysis, *Farm Extension Digest*, **3**.
- Maji, C. C., D. Jha and L. S. Ventakaraman (1971), Dynamic supply and demand models for better estimation and projections: An econometric study for major food grains in the Punjab region, *Indian Journal of Agricultural Economics*, **26** (1).
- Raju, V. T., D. H. Srivastava and A.S.Sirohi (1971), Impact of Dena bank's direct farm finance in district Raipur, *Indian Journal of Agricultural Economics*, **26** (4).

- Sankhyan, P.L. and A. S. Sirohi (1971), Resource productivity and allocation efficiency on seed potato farms in Himachal Pradesh, *Indian Journal of Agricultural Economics*, **26** (3).
- Sharma, K. L. and M.P. Gupta (1971), Factors affecting marketed surplus of bajra, *Indian Journal of Agricultural Economics*, **26** (2).
- Singh, Kartar and Sri Mohan (1971), A case study of multiple cropping in Delhi state, *Agricultural Mechanization in Asia*, **4** (2): 35-40.
- Singh, U.S. and D. Jha (1971), A normative analysis of the impact of capital availability on farm incomes and demand for short-term credit on farms in Delhi, *Indian Journal of Agricultural Economics*, **26** (4).
- Sirohi, A.S. and S. K. Goel (1971), Profit and production maximizing doses of nitrogen for wheat at some important centres in India, *Fertilizer News*, Vol. **16** (8).
- Srivastava, D. H (1971), Rural credit, *Advance in Agriculture*, Institute of Agriculture Sciences, Kanpur, **1**.

#### **B. Published proceedings of Conferences /Workshops etc.**

- Atteri, B.R., A .K. Ray, A.S.Sirohi and T. Haque (1980), Development potential of farmers in hilly region (Simla H.P.), in proceedings of *Seminar on Development of Backward Areas with Special Reference to the Hill Areas of U.P.*, Giri Institute of Development Studies, Lucknow.
- Gustafson, W. Eric (1980), A review of thinking on charges of irrigation in India, in Proceedings of *National Seminar on Economic Criteria for Fixation of Irrigation Charges*, IARI, New Delhi.
- Maji, C.C (1980), Water pricing in public irrigation project- a programming approach, in proceedings of *National Seminar on Economic Criteria for Fixation of Irrigation Charges*, IARI, New Delhi.
- Maji, C.C., R.P. Singh and B. R. Atteri (1980), Comparative agricultural development in hilly areas of India with particular reference to Himachal Pradesh, in proceedings of *Seminar on Development of Backward Areas with Special Reference to Hill Areas of U.P.*, Giri Institute of Development Studies, Lucknow.
- Sirohi, A.S., Ikbal Singh and Ranvir Singh (1980), Irrigation water pricing criteria for optimization of agricultural production in Ganga basin – a parametric programming approach, in proceedings of *National Seminar on Economic Criteria for Fixation of Irrigation Charges*, IARI, New Delhi.
- Sirohi, A.S., A. K. Ray and B. M. Sharma (1980), Constraints to optimal use of fertilizer on small farms, in proceedings of *Seminar on Maximising Fertilizer Use Efficiency*, sponsored by India/FAO/Norway, New Delhi



- Singh, R.P., G.S. Ram and A. S. Sirohi (1979), An economics analysis of storage of wheat on farms in Union Territory of Delhi, *In Proceedings of 18<sup>th</sup> Indian Standards Convention, 1-7.*
- Sirohi, A. S. (1979), Economics of gobar gas plant in proceedings of *National Symposium on Bio-gas Technology and Usage*, 54-58, IARI, New Delhi.
- Kahlon, A. S. and A. S. Sirohi (1978), Economics of fertilizer use in India, paper presented at the *Annual Conference of the Fertilizer Association of India*, New Delhi.
- Patel, R.K., P. Kumar and K. Vogela (1978), Economics of cross-bred cattle in high ranges and plains in proceedings, *20th International Dairy Congress*, Paris.
- Ghodake, R.D., D.K. Bahl and D. Jha (1977), Economics of pesticide use, paper presented at the *Symposium on Model Building in Agriculture*, Indian Society of Agricultural Statistics, IARS, New Delhi.
- Kumar, P. (1977), Effect of irrigation field channels on crop productivity: A case study of Orissa region, paper presented in the international *Symposium on Improving Crop and Animal Productivity by Nuclear and Allied Techniques*, NRL, I.A.R.I.
- Maji, C.C. and E.O. Heady (1977), Optimum allocation of irrigation water in the Mayurakshi project *Symposium on Model Building in Agriculture*, Indian Society of Agricultural Statistics, IARS, New Delhi.
- Singh, C. B. and A. S. Sirohi (1977), Resource productivity and management in poultry production, paper presented in *International Symposium on Improving Crop and Animal Productivity by Nuclear and Allied Techniques*, NRL, I.A.R.I.
- Sirohi, A. S (1977), Cost benefit analysis of bio-gas plant in India, paper presented in the *Workshop on Bio-gas System.*
- Sirohi, A. S. and K.C. Hiremath (1977), Linear programming model for temporal and spatial allocation of irrigation water of reservoir, paper presented at the *Symposium on Model Building in Agriculture*, Indian Society of Agricultural Statistics, IARS, New Delhi.
- Bahl, D.K (1976), Computer, mathematical programming and irrigation planning, paper presented at the *2nd Annual Conference of Agricultural Research Statisticians*, I.A.R.S., New Delhi.
- Jha, D (1976), A review of recent trends in agricultural wage rates in India, paper presented at the *ADC Workshop on Technology and Factor Markets*, Singapore.
- Ram, G.S. and D. Jha (1976), Credit service and marketing needs of small farmers, paper presented at the *National seminar on New Agricultural Technology and Extension Strategy For Small and Marginal Farmers*, Punjab Agricultural University, Ludhiana.

- Sarkar, T. K. and C. C. Maji (1976), Economics of drainage development and choice of cropping pattern in an existing canal irrigation system, paper presented at the *All India Symposium of Agricultural System: Theory and Application*, P.A.U., Ludhiana.
- Singh, U. S. and D. Jha (1975), Certain aspects of economics of fertilizer use on entire cropping sequence, paper presented at the *FAI Group Discussion on Economics of Fertilizer Use*, New Delhi
- Sirohi, A. S. and B. M. Sharma (1975), Maximization of returns through farm planning under fertilizer constraint in Alipur block of the Union Territory of Delhi, paper presented at *Symposium on Self Sufficiency in Foodgrains under Constraints*, Haryana Agricultural University, Hissar.
- Srivastava, D. H (1975), Infrastructure for the economic efficiency of horticulture crops, paper presented at the *4th International Symposium on Horticultural Economics*, Wurzburg, Western Germany.
- Bahl, D.K (1974), Computer simulation and its application in agricultural economics, paper presented at the first *Annual Conference of Agricultural Research Statisticians*, IARS, New Delhi.
- Borate, S. and D. H. Srivastava (1973) Economics analysis of farm mechanization, paper presented in *All Indian Congress Committee*, New Delhi.
- Srivastava, D.H (1972), Cooperative credit and agriculture in India, paper presented at the *National Convention of Cooperative Bank Employees*.
- Srivastava, D.H (1972), Cooperative finance and agricultural development in India, paper presented at the *3<sup>rd</sup> World Congress on Rural Sociology*, held at Baton Rouge, Louisiana.
- Jha, D. and U.S. Singh (1971), Response of hybrid bajra to nitrogen on farmers' fields in the Union Territory of Delhi, paper presented at the *All India Research Workshop on Sorghum and Millets*.
- Srivastava, D.H. and C. B. Singh (1971), Stocks of agricultural produce: A potential for deposit mobilisation in Union Territory of Delhi, paper presented at *Symposium on Socio-Economic Implications of Agricultural Development*, Kanpur.

### **C. Bulletin/Policy paper etc.**

- Maji, C.C. and E. O. Heady (1980), Optimal reservoir management and crop planning under deterministic and stochastic inflows, *Water Resources Bulletin*, **16** (3): 436-443.
- Sirohi, A.S. and B. M. Sharma, (1980), Economics of multiple cropping on Delhi farms, in *Research Bulletin on New Multiple Cropping*, I.A.R.I.

- Kahlon, A. S., P.N. Saxena, H .K. Ba, and D. Jha (1977), Returns to investment in agricultural research in India, in T.A. Arndt, et al (eds.) *Research Allocation and Productivity in National and International Agricultural Research*, University of Minnesota Press, Minneapolis.
- Jha, D (1976), Research policy for agricultural development, paper commissioned by the *I.C.A.R. – I.C.S.S.R, Joint Scientific Panel on Agricultural Development*.
- Ram G.S and C.B. Singh (1976), Regional disparities in wheat performance in Uttar Pradesh, *Agricultural Development in Uttar Pradesh, Bulletin* (64).
- Sirohi, A. S., Iqbal Singh and B.M. Sharma (1976), Optimum water allocation and production in Rajasthan, *Proposal for Revision of Rajasthan Canal Project Phase II*, 1.
- Sirohi, A.S., et al (1976), The economics of cow dung gas plants, *Report of I.C.A.R. Committee on Cow Dung Gas Plant*.
- Banerjee B.N. and A. S. Sirohi (1974), Economic analysis of farms business of small farmers in Chandauli tehsil, district: Varanasi (U.P). *Agricultural Economics Research Bulletin*, I.A.R.I., (2).
- Hiremath, K. C. and A. S. Sirohi (1974), Temporal and spatial allocation of irrigation water in the Krishna Raj Sagar Project (Mysore) *Agricultural Economics Research Bulletin*, I.A.R.I., (2).
- Pal, T. K. and A.S. Sirohi (1974), A study of the normative demand functions for nitrogen fertilizer for Uttar Pradesh, *Agricultural Economics Research Bulletin*, IARI, (2).
- Guglani, P.L. (1973), The story of procurement- a note, *Agricultural Economics Research Bulletin*, I.A.R.I., (2).
- Ram, G. S. and G. R. Bhatia (1973), Wheat trade - a critical appraisal, *Agricultural Economics Research Bulletin*, IARI, (2).
- Sharma, B. M. and S. K. Goe (1973), Economics of irrigation devices used on Delhi farms, *Agricultural Economics Research Bulletin*, I.A.R.I., (1).
- Sharma, B. M., S. K. Goe and R.K. Patel (1973), Economic aspects of dwarf wheat, *Agricultural Economics Research Bulletin*, I.A.R.I., (1).
- Singh, C.B and R. K. Patel (1973), Resource allocation and efficiency on poultry farms in Delhi state, *Agricultural Economics Research Bulletin*, I.A.R.I., (1).
- Singh, Kartar (1973), Summary analysis of national demonstrations conducted in Union Territory of Delhi, *Agricultural Economics Research Bulletin*, I.A.R.I. (2): 99-104.
- Sirohi, A. S., R. V. Singh and L. R. Singh (1973), Allocative efficiency in transitional agricultural, *Agricultural Economics Research Bulletin*, I.A.R.I., (2).

- Sirohi, A. S. and U. S. Singh (1973), Optimal strategy for fertilizer application under weather uncertainty, *Agricultural Economics Research Bulletin*, I.A.R.I., (1).
- Sirohi, A. S. and P. L. Guglani (1973), Impact of high yielding varieties of wheat on farm resource use, income and production in the Union Territory of Delhi, *Agricultural Economics Research Bulletin*, I.A.R.I., (1).
- Srivastava, D. H. and C. B. Singh (1973), Probe into cost of production of a few varieties of wheat popularly grown in the Union Territory of Delhi, *Agricultural Economics Research Bulletin*, I.A.R.I., (2).
- Sirohi, A.S., R.K. Patel, B. M. Sharma and Kartar Singh (1972) An economic study of multiple cropping in village Chhatera, Research on Multiple Cropping, *Research Bulletin I.A.R.I.*, (8).
- Venkateraman, L.S., C. C. Maji, D. Jha and B. M. Sharma (1971), Economics for fertilizer use in pulses, *New Vistas in Pulse Production, Research Bulletin*, I.A.R.I.

#### **D. Book chapters**

- Maji, C. C. and T. K. Sarkar (1978), Optimal cropping system and irrigation efficiency in an existing canal area, in J. B. Dent and V.V.N. Murti (eds) *Agricultural Systems: Theory and Applications*, Punjab Agricultural University, Ludhiana, India: 56-61.
- Singh, Iqbal and A.S. Sirohi (1978), An application of linear programming for optimal allocation of canal and tubewell water among crop areas, in J. B. Dent and V.V.N. Murti (eds). *Agricultural Systems: Theory and Application*, Punjab Agricultural University, Ludhiana, India: 111-116.
- Sirohi, A.S., K. C. Hiremath and V. K. Sharma (1978), Use of linear programming and simulation for temporal and spatial allocation of irrigation water for reservoir project, in J. B. Dent and V.V.N.Murti (eds). *Agricultural Systems: Theory and Applications*, Punjab Agricultural University, Ludhiana, India: 34-40.

#### **A. Published in professional journal**

##### **1960-1970**

- Sirohi, A.S (1970), Agricultural production function analysis, *Extra Mural Lecture Booklet*, U.P. Institute of Agricultural Sciences, Kanpur.
- Maji, C.C. and T.K. Pal (1970), Cost of production of jute in district Nadia (West Bengal) *Agricultural Situation in India*, **25** (6): 585-590.
- Srivastava, D. H. (1970), Agriculture production and pricing, *In Whither India's Economy*, A.C.S. Calcutta.

- Srivastava, D.H., and C.B. Singh (1970), Study of marketable surplus of foodgrains of selected farms in Kanjhawala block, *The Hindustan Times*.
- Jha, D (1970), Acreage response of sugarcane in factory areas of North Bihar, *Indian Journal of Agricultural Economics*, **25** (1).
- Sharma, K.L. and M.P. Gupta (1970), Study of farm factors determining marketed surplus of bajra in Jaipur district, *Indian Journal of Agriculture Economics*, **25** (4): 64-68.
- Srivastava, D. H (1970), Role of commercial banks in financing agriculture, *Finance and Commerce*.
- Srivastava, D.H., A.S. Sirohi, Daroga Singh and K.N.Singh (1970), Analysis of productivity use of credit in IADP district, Shahabad, *Financing Agriculture*, **2** (2).
- Srivastava, D. H. and C. B. Singh (1970), Agriculture development and tribal population in India, *Indian Journal of Agricultural Economics*, **25** (3).
- Gangwar, A. C. and A.S. Sirohi (1969), A study of capital as a restraint on cultivators' holdings of Kanjhawala block, *Allahabad Farmer*, 43 (5).
- Gangwar, A.C. and A.S. Sirohi (1969), Impact of farm planning on human and bullock labour utilization on cultivator's holdings in Kanjhawala block, *Allahabad Farmers*, **43** (8).
- Maji, C.C (1969), Productivity and allocation of resources between rice and jute in West Bengal, *Economic and Political Weekly*, 4 (4).
- Maji, C.C and A.S. Sirohi (1969), A case study on the financial feasibility of electrically operated deep tube-wells in Illambazar development block in West Bengal, *Indian Journal of Agricultural Economics*, **24** (4).
- Pine, W.H. and A. S. Sirohi (1969), Irrigation with restraints on land and water resources, *Land Economics*, Vol. **43** (2).
- Rao, P.R (1969), A case for lowering fertilizer prices, *National Investment and Finance*.
- Singh, C. B. and D.H. Srivastava (1969), Agricultural investment and capital formation in Kanjhawala block, Delhi, *Indian Journal of Agricultural Economics*, Vol **24** (4).
- Singh, K.N. and R.K. Patel (1969), National demonstration, *World Science News*, **6**.
- Sirohi, A.S (1969), Linear programme in increasing farm returns, *Science Today*.
- Srivastava, D. H. D. Singh and A.S. Sirohi (1969), Short-term credit and farm productivity in an IADP district, *Kurukshetra*, **18** (2).

- Srivastava, D.H., D.Singh and A.S. Sirohi (1969), Agricultural credit and small farmer, *Journal of All India Central Land Development Banks, Cooperative Union Ltd.*
- Sirohi, A.S. and A.C. Gangwar (1968), Economic optima in resource allocation for the cultivator of Kanjhawala block, *Indian Journal of Agricultural Economics*, **23** (8).
- Sirohi, A.S., D. Jha, R.K. Patel and U.S. Singh (1968), Allocation of nitrogenous fertilizers among major foodgrain crops in Uttar Pradesh, *Agricultural Situation in India*, **23** (8).
- Patel, R.K., A.S. Sirohi and B.M. Sharma (1968), Productivity and allocation of resources in productivity of hybrid bajra in Delhi Territory, *Indian Journal of Agricultural Economics*, **23** (4).
- Koshi, Sucy and B.M. Sharma (1968), A study of food consumption of students of Indian Agricultural Research Institute hostels, *Journal of the Post-Graduate School, IARI*, **6** (2).
- Saxena, P.N. and A.S. Sirohi (1967), Response of Mexican dwarf and Indian tall varieties of wheat to nitrogen application, *Journal of the Post-Graduate School, IARI*, **5** (1).
- Desai, D.K. and B.M. Sharma (1966), Technological change and rate of diffusion, *Indian Journal of Agricultural Economics*, **21** (1).
- Chaudhary, S.L (1966), Intensifying cereal production for better economic returns, *Indian Journal of Agricultural Economics*, **21** (4).
- Chaudhary, S.L (1966), Growing wheat – an intensive way, *Indian Farming*, **16**.
- Singh, C.B (1965), An analysis of feed milk relationship and cost of production of milk on the farms of Delhi villages, *Indian journal of Agricultural Economics*, **20** (1).
- Singh Kirpal and J. P. Hrabovszky (1965), An economics analysis of bullock labour use in Delhi farms, *Indian Journal of Agricultural Economics*, **20** (4).
- Ramasubban, T.A. and S. K. Goel (1965), An enquiry into cost, consumption and supply aspects of milk produced by cultivator families in Delhi area, *Indian Journal of Agricultural Economics*, **20** (1).
- Ramasubban, T.A. and S.K. Goel and B. M. Sharma (1965), Farm resources productivity in relation to wheat crop, *Productivity*, **6**. (2) and (3).
- Chaudhari, T.P.S. S. L. Chaudhary, and B. M. Sharma (1965), Impact of intensive cultivator scheme programme of IARI in Delhi villages, *Indian Journal of Agricultural Economics*, **20** (3).
- Chaudhari, T.P.S. S. L. Chaudhary, and B. M. Sharma (1965), Farmer's perception of constraints influencing choice of crops and adoption of certain recommended practices, *Agricultural Situation in India*, **20** (1).

Srivastava, D.H (1965), State trading in foodgrains in India, *Journal of the Post-Graduate School, IARI*, **3** (1).

Srivastava, D.H (1965), Impact of different types of risks, *Productivity*, **6** (2) and (3).

Rao, P.R. and C. B. Singh (1964), A study on tractorization, *Agricultural Situation in India*, **19** (5).

Ramasubban, T.A and M. A. Muralidharan (1962), An alternative system of weighting the all India wholesale price indices, All India Congress Committee, *Economic Review*.

Chaudhari, T.P.S. and B.M. Sharma (1961), Female labour of the farm family in agriculture, *Agricultural Situation in India*, **16** (6).

#### **D. Published proceedings of Conferences /Workshops etc.**

Jha, D., Ikbal Singh and L.S. Venkataramanan (1970), Production, consumption and prices of jowar, bajra and maize: Some economic considerations, paper presented at the *All India Research Workshop on Sorghum and Millets*.

Sirohi, A.S (1970,) Economics use of irrigation water, *Seminar on Water Technology*, IARI.

Sirohi, A.S. and K. N. Nair (1970), A comparative study of farm labour productivity in some selected regions in India, *Seminar on Methodology of Studying Productivity in Agriculture*, ICAR.

Srivastava, D.H (1970), Agricultural productivity: Some qualitative and quantitative considerations, *Seminar on Methodology of Studying Productivity in Agriculture*, ICAR.

Srivastava, D.H. (1967), Agricultural credit and food problem in India, proceedings of the *4th World Congress of Agricultural Credit*, Zurich.

Srivastava, D.H (1965), Some implications of cooperative farming in extension work in India, *Archives International de Sociologie de la Cooperation*, No. 18, paper presented in *Rural Development*. Tel-Aviv.

#### **E. Bulletin/Policy Paper etc.**

Venkataramanan, L.S. and D. Jha (1970) Prices and marketing in dry areas: In A new technology for dry farming, *Bulletin, IARI*, New Delhi: 163-164.

Singh, K.N. and R.K. Patel (1969), National demonstration: Key to the success of high yielding varieties programme, *Government of India, Directorate of Extension, Bulletin*.

Patel, R.K. and K.N. Singh (1969), Guidelines on national demonstrations programme, *IARI Bulletin*.

## हिन्दी में प्रकाशन

- बिसारिया, गीता, पी एस बादल और प्रमोद कुमार (2009) राजस्थान में जलसंग्रहण विकास कार्यक्रमों में जन सहभागिता का महत्वपूर्ण योगदान, सतरंगी क्रांति हेतु कृषि एवं पशुपालन की समेकित प्रणाली : अनुसंधान, उपलब्धियां एवं रणनीति, 11वीं राष्ट्रीय कृषि विज्ञान संगोष्ठी, 13: 187 ।
- सिंह, कमलेश कुमार एवं महेश कुमार गुप्ता (2009) रोजगार की अपार संभावनायें - बायोडीजल विषय पर शोध पत्र बेहतर पर्यावरण के लिए भारतीय कृषि राष्ट्रीय वैज्ञानिक संगोष्ठी (आयोजनकर्ता: भारतीय कृषि अनुसंधान संस्थान, नई दिल्ली एवं भारतीय कृषि अनुसंधान परिषद, नई दिल्ली) का कार्यवृत्त सित. 2009 में पृष्ठ सं. 153-155 प्रकाशित हुआ ।
- सिंह, महेन्द्र, सुशीला दुबे, कमलेश कुमार सिंह एवं राम गणेश पोद्दार (2009) भारतीय कृषि अर्थव्यवस्था के टिकाऊपन एवं खाद्य सुरक्षा में पशुपालन उद्योग का योगदान: एक नीतिगत परिप्रेक्ष्य में अध्ययन, पृष्ठ सं - 182 विषय सतरंगी क्रांति हेतु कृषि एवं पशुपालन की समेकित प्रणाली : अनुसंधान, उपलब्धियां एवं रणनीति शोध सारांश प्रकाशित। ग्यारहवीं राष्ट्रीय कृषि विज्ञान संगोष्ठी आयोजक भारतीय कृषि अनुसंधान समिति, करनाल एवं भारतीय कृषि अनुसंधान, नई दिल्ली - 12 ।
- सिंह, अल्का, वी. सी. माथुर और के. के. सिंह (2008) कल का ईंधन - जट्रोफ़ा कृषि चयनिका, 29(2): 3-6 ।
- सेठी, विजय, गीता बिसारिया, सुरभी रॉय और ग्यानेन्द्र सिंह (2003) प्रसंस्करण द्वारा फलों के गुणों से पौष्टिक मूल्यों के संवर्धक पदार्थ।
- सिंह, अल्का और परमात्मा सिंह (1995) दंकल प्रस्ताव का महत्व, कृषि चयनिका: 54-60 ।
- त्यागी. वी.पी. (1995) पूर्वी उत्तर प्रदेश में कृषि ऋण की विवेचना, भारतीय कृषि अनुसंधान पत्रिका 9(3): 161-164 ।
- त्यागी. वी.पी. (1995) सहकारी ऋण की लागत, भारतीय कृषि अनुसंधान पत्रिका का 9(3): 187-191 ।
- दास, पी. के. और पी. एल. गुलानी (1983) सिंहभूम जनपद, बिहार में आदिवासी प्रक्षेत्रों का अध्ययन, हिन्दी रीडर डाइजेस्ट।
- गुलानी, पी.एल. (1977) अपनी उत्पादन लागत जानिए, खेती 12 (9)।
- गुलानी, पी.एल. (1974) कृषि ऋण की नई सुविधाएं, साक्षी, (ग्रामीण हिन्दी साप्ताहिक समाचार पत्र)।
- गुलानी, पी.एल. (1974) कृषि ऋण की नई पद्धति, खेती 27(5)।
- राम, जी.एस. और पी. एल. गुलानी (1973) खाद्यानों की मूल्य नीति का प्रभाव, खेती 26(7)।



## 7. List of Post - Graduate Courses

|           |            |   |
|-----------|------------|---|
| AG. ECON. | A14        | Fundamentals of Economics and Business Management                                     |
| AG. ECON. | 501        | Microeconomics-I  |
| AG. ECON. | 520        | Agricultural Production and Resource Economics-1 (Farm Management)                    |
| AG. ECON. | 530        | Agricultural Marketing  |
| AG. ECON. | 541        | Agricultural Finance-II   |
| AG. ECON. | 560        | Research Methods  |
| AG. ECON. | 602        | Macroeconomics-II   |
| AG. ECON. | 621        | Agricultural Production and Resource Economics-IV(Agricultural Production under Risk) |
| AG. ECON. | 630        | Agricultural Price Analysis   |
| AG. ECON. | 632        | Quantitative Analysis for Marketing and Business Decisions                            |
| AG. ECON. | 641        | Institutional and Legal Environment for Agribusiness                                  |
| AG. ECON. | 660        | Agricultural Project Analysis   |
| AG. ECON. | 691        | Seminar   |
| AG. ECON. | 502        | Macroeconomics-I  |
| AG. ECON. | 510/AS 568 | Agricultural Econometrics-I   |
| AG. ECON. | 521        | Agricultural Production and Resource Economics-II (Production Function Analysis)      |
| AG. ECON. | 532        | International Trade   |
| AG. ECON. | 550        | Agricultural Development and Policy Analysis  |
| AG. ECON. | 601        | Microeconomics-II   |
| AG. ECON. | 640        | Strategic Management for Agribusiness   |
| AG. ECON. | 642        | Management of R&D and Innovation  |
| AG. ECON. | 691        | Seminar   |
| AG. ECON. | 525        | Natural Resources Management and Environmental Economics                              |
| AG. ECON. | 535        | Fundamentals of Business Management   |
| AG. ECON. | 540        | Agricultural Finance-I  |
| AG. ECON. | 650        | Economic Development and Policy Analysis  |
| AG. ECON. | 610        | Agricultural Econometrics-II  |
| AG. ECON. | 620        | Agricultural Production and Resource Economics-III ( Linear Programming)              |
| AG. ECON. | 631        | Marketing Management  |
| AG. ECON. | 691        | Seminar   |

## 8. List of thesis

### Doctoral Degree

#### Farm Management and Production Economics

| S.No | Scholar               | Year | Title of thesis   | Chairperson        |
|------|-----------------------|------|---|--------------------|
| 1    | Jeevandas<br>Anupama  | 2007 | Irrigation development and water-use efficiency in Punjab Agriculture, India  | Dr. R.P.Singh      |
| 2    | A. Amarender<br>Reddy | 2004 | An of occupational diversification economic analysis among household in Andhra Pradesh                                | Dr. P. Kumar       |
| 3    | G. Anitha             | 2004 | Male-out migration, gender roles and rice farming: A case study of eastern Uttar Pradesh                              | Dr. R. P. Singh    |
| 4    | Ravishankar<br>Anand  | 2001 | System analysis of investment priorities and strategies for irrigation development in the Krishnan basin of Karnataka | Dr. S. Selvarajan  |
| 5    | Thimmappa K.          | 2001 | Economic evaluation of watershed based farming system for sustainable production in North Eastern Hill Region         | Dr. S. Selvarajan  |
| 6    | B.S. Kalra            | 2000 | An economic analysis of water resource use in eastern Yamuna canal command (U.P.)                                     | Dr. Ikbal Singh    |
| 7    | Ranjeet Kumar         | 2000 | Technology Mission and Edible Oilseeds Production in Rajasthan: Impact Assessment and Policy Perspectives             | Dr. Chhotan Singh  |
| 8    | Krishna Gopal         | 2000 | Micro-level evidence in the use of fertilizers and sustainability of agricultural production in UP hills              | Dr. Chhotan Singh  |
| 9    | Pramod Kumar          | 1999 | An economic analysis of canal irrigation system of sone command area, Bihar   | Dr. Praduman Kumar |
| 10   | P.S. Badal            | 1999 | Strategic change in maize production and its impact on the farm economy in Bihar                                      | Dr. R.P. Singh     |
| 11   | P. Samal              | 1998 | Analysis of demand and supply of rice in Orissa   | Dr. Praduman Kumar |
| 12   | A.K. Das              | 1998 | An economic appraisal of small tea farms of Assam   | Dr. R.K. Pandey    |

|    |                      |       |      |   |                    |
|----|----------------------|-------|------|---|--------------------|
| 13 | Luke Oyugi           | Owino | 1998 | Optimal resources allocation in farm enterprise: A case study of Embu district of Kenya   | Dr. R.K. Pandey    |
| 14 | M.K. Jally           |       | 1998 | Impact of agricultural technology on income, employment and income distribution of different categories of farm in Mathura district of Uttar Pradesh        | Dr. Chhotan Singh  |
| 15 | V. Shunmagum         |       | 1997 | Potentials of small farm diversification in Tamil Nadu  | Dr. B.M. Sharma    |
| 16 | Dharm Raj Singh      |       | 1997 | Efficiency and equity implication of groundwater markets on farm economy in western U.P.  | Dr. R.P. Singh     |
| 17 | P. Ranjitha          |       | 1997 | An analysis of investment in agricultural research and extension in India   | Dr. Mruthyunjaya   |
| 18 | Soibam Basanta Singh |       | 1997 | An economic analysis of shifting cultivation and its implications on the development of hill agriculture in Manipur   | Dr. R.P. Singh     |
| 19 | Samir Baran Roy      |       | 1997 | Techno-economic constraints and opportunity of pulse production in U.P.   | Dr. Chhotan Singh  |
| 20 | Sudhir K. Jain       |       | 1996 | An economic analysis of agro-forestry in Shahjahanpur distt. in U.P.  | Dr. Praduman Kumar |
| 21 | Mahendran K.         |       | 1995 | An economic study of farm mechnisation in South Arcot distt. of Tamil Nadu  | Dr. R.K. Pandey    |
| 22 | K.J.S. Satyasai      |       | 1995 | Economics of minor irrigation in semi arid tropics: A case of Ananpur distt. of A.P.  | Dr. Praduman Kumar |
| 23 | A.K. Sood            |       | 1995 | Economics of farming systems in Himachal Pradesh  | Dr. Ikbal Singh    |
| 24 | Pradeep Dogra        |       | 1994 | Optimal use of farm resource for nutrition and net return maximization for farm house hold of distt. Solan (HP): A multiple objectives programming approach | Dr. B.M. Sharma    |
| 25 | Sandeep Saran        |       | 1993 | Acreage response analysis of major edible oilseed crops in the districts of UP  | Dr. B.M. Sharma    |

|    |                  |      |   |                  |
|----|------------------|------|---|------------------|
| 26 | H.K. Changmai    | 1993 | Economic efficiency and factor employment on rice farms in Nagon distt. of Assam  | Dr. Mruthyunjaya |
| 27 | David, A         | 1993 | Impact of technology on foodgrains production in sub-montana zone of Maharashtra  | Dr. R.K. Pandey  |
| 28 | Krishnan, M.     | 1993 | Multi objective analysis of paddy-fishery enterprise systems in Kuttanad region of Kerala State   | Dr. B.M. Sharma  |
| 29 | S.K. Singh       | 1993 | Study of technological change and its implications for crop production and eastern resource use in Uttar Pradesh  | Dr. R.K. Pandey  |
| 30 | V. Kiresur       | 1992 | Technological dualism in agriculture: An econometric analysis of diffusion technology of jowar production in Karnatka   | Dr. R.K. Pandey  |
| 31 | Naresh Chandra   | 1992 | Determinants and impact of technology adoption on the farm economy in Chhotanagpur region, Bihar.   | Dr. R.P. Singh   |
| 32 | M.B. Dastagiri   | 1992 | Resource use efficiency, farm income and labour employment under different situations of irrigation in Chittoor district of A.P.                                  | Dr. R.P. Singh   |
| 33 | Puran Chand      | 1992 | Resource optimization and normative demand for irrigation water in Karnal district of Haryana   | Dr. B.M. Sharma  |
| 34 | Dinesh Chandra   | 1991 | Economic analysis of different irrigation systems in Ghaziabad  | Dr. Ikbal Singh  |
| 35 | Roshan Lal       | 1991 | Technological progress in Haryana agriculture-A region wise analysis  | Dr. R.P. Singh   |
| 36 | T.M. Gajanana    | 1990 | Farm planning in a dry zone- A study in Tumkur district, Karnatka   | Dr. B.M. Sharma  |
| 37 | M. Subbarayan    | 1989 | Conjunctive use of surface water and ground water for the optimal irrigation management and cropping pattern in the Eastern Yamuna Canal command area, Western UP | Dr. Ikbal Singh  |
| 38 | K. Pudmaikkannan | 1989 | An economic evaluation of integrated rural development project.   | Dr. R.K. Pandey  |

|    |                  |      |   |                 |
|----|------------------|------|---|-----------------|
| 39 | P.R. Deoghare    | 1987 | Impact of mixed farming on income and employment on farms in Karnal district of Haryana   | Dr. B.M. Sharma |
| 40 | Suresh Pal       | 1986 | Instability in agricultural production in India   | Dr. A.S. Sirohi |
| 41 | M.L. Chakravorty | 1985 | Effect of multiple cropping and credit use on farm income and labour employment in bullock and tractor operated farms of Sambalpur (IADP) district (Orissa) | Dr. A.S. Sirohi |
| 42 | R.P. Thakre      | 1985 | Economic analysis of poultry production in Maharashtra  | Dr. R.K. Pandey |
| 43 | R.P. Sinha       | 1985 | Effect of farm mechanization and credit use on the farm income and labour employment  | Dr. B.M. Sharma |
| 44 | Vishwa Ballabh   | 1984 | Determinants of adoption of improved technology and productivity adjustment mechanisms in flood prone areas of U.P.   | Dr. B.M. Sharma |
| 45 | U.N. Dixit       | 1984 | An economic analysis of constraint in pulse production in Haryana   | Dr. R.K. Pandey |
| 46 | Arun Lavania     | 1984 | Estimation of economic benefits from new rice technology in India   | Dr. R.K. Pandey |
| 47 | C.P. Yadav       | 1984 | An analysis of long-term growth and instability in the yields of major crops in Bihar   | Dr. Iqbal Singh |
| 48 | K.P.C. Rao       | 1983 | A study of the effect of risk and uncertainty on farming in West Godavari (AP)  | Dr. A.S. Sirohi |
| 49 | Chhotan Singh    | 1982 | A study of the normative demand for nitrogenous fertilizers for crop production in India  | Dr. A.S. Sirohi |
| 50 | M.R. Alshi       | 1982 | Impact of technological change on production, employment and factor shares in cotton crop in Akola district (MS)  | Dr. P. Kumar    |
| 51 | B.N. Das         | 1982 | A study on economics of fertilizer use under risk   | Dr. C.C. Maji   |
| 52 | G.G. Thakare     | 1982 | Farm size, economic efficiency use in thane district of Maharashtra   | Dr. C.C. Maji   |
| 53 | Jawahar Thakur   | 1982 | An economic analysis of various sources of irrigation in western Uttar Pradesh  | Dr. P. Kumar    |

|    |                 |      |   |                 |
|----|-----------------|------|---|-----------------|
| 54 | B.C. Bhowmick   | 1982 | Analysis of risk in farm production in Kamrup district, Assam- A parametric risk programming approach   | Dr. A.S. Sirohi |
| 55 | A.S. Patil      | 1982 | Economics of farm mechanization and energy use in Ahmednagar district of Maharashtra  | Dr. A.S. Sirohi |
| 56 | M. Govindaswamy | 1981 | Estimation of economic gains from new heat varieties in India   | Dr. R.K. Pandey |
| 57 | A.K. Ray        | 1979 | Optimization of resource use in irrigated farms of Hoogly district: An application of linear programming technique  | Dr. C.C. Maji   |
| 58 | S.L. Kumbhare   | 1978 | Transport and storage cost minimization through optimum interstate movements and storage of wheat and rice in India   | Dr. A.S. Sirohi |
| 59 | K.D. Kurkute    | 1978 | Study of effects of procurement prices and farm input prices on production of rice and wheat in India   | Dr. A.S. Sirohi |
| 60 | R.D. Godake     | 1977 | Economics of pests control in rice  | Dr. D. Jha      |
| 61 | S.M. Elias      | 1977 | Optimal cropping patterns in Dacca-Narayanganj-Damra Irrigation Project (Bangladesh): An integration of irrigation management and drainage development                    | Dr. C.C. Maji   |
| 62 | Mruthyunjaya    | 1977 | Economic analysis of risk of drought prone farms in Bijapur district, Karnatka  | Dr. A.S. Sirohi |
| 63 | V.K. Sharma     | 1976 | Optimal water resource use under uncertainty (A simulation and dynamic programming approach)  | Dr. A.S. Sirohi |
| 64 | B.M. Sharma     | 1975 | Farm labour employment and income implications of multiple cropping, fertilizer, credit use and farm mechanization- A normative analysis for farm in Alipur block (Delhi) | Dr. A.S. Sirohi |
| 65 | Ikbal Singh     | 1975 | Allocation of irrigation water of upper Ganga canal in Western U.P  | Dr. A.S. Sirohi |
| 66 | Y.P. Mahalle    | 1975 | A decision theoretic analysis of cotton pest control  | Dr. D. Jha      |
| 67 | R.G. Patil      | 1975 | Total factor productivity changes in  | Dr. D. Jha      |

|    |                  |      |   |                      |
|----|------------------|------|---|----------------------|
|    |                  |      | agriculture and source of differences in output among districts in Maharashtra  |                      |
| 68 | S.S. Gour        | 1975 | Impact of technological change and uncertainty on supply response of wheat in M.P   | Dr. D. Jha           |
| 69 | T.K. Pal         | 1974 | A study of the normative demand function for nitrogen fertilizer for Uttar Pradesh  | Dr. K. Kanungo       |
| 70 | B.N. Benerjee    | 1974 | Economic analysis of farm business of small farmers in Chandauli tehsil district Varanasi (UP)  | Dr. A.S. Sirohi      |
| 71 | K.C. Hiramath    | 1973 | Temporal and spatial allocation of irrigation water in the Krishna Raj Sagar project (Karnataka State)  | Dr. A.S. Sirohi      |
| 72 | H.P. Singh       | 1972 | An economic analysis of weather factors in production of irrigated wheat and bajra crops in India   | Dr. A.S. Sirohi      |
| 73 | G. Moti Lal      | 1972 | Resource allocation, production efficiency and comparative economics of cultivars on tractor and bullock operated farms in Union Territory of Delhi | Dr. R.K. Patel       |
| 74 | D.K. Das         | 1972 | A study on resource allocation and optimum cropping pattern with special reference to multiple cropping   | Dr. D. Jha           |
| 75 | K.N.S. Nair      | 1972 | Constraints that are limited agricultural production and causing uneven distribution of grains- A case study in Palghat district, Kerala state      | Dr. K. Kanungo       |
| 76 | J.S. Dhaliwal    | 1972 | Crop enterprise reorganization on farms and step supply function of Gur in Delhi  | Dr. A.S. Sirohi      |
| 77 | G.S. Ram         | 1972 | Supply response of cereals in different states in India   | Sh. M.A. Murlidharan |
| 78 | P.K. Jadhao      | 1971 | Economics aspects of capital utilization in sugarcane production in Kolhapur district of Maharashtra.   | Dr. K. Kanungo       |
| 79 | A.K. Chaudhari   | 1971 | Allocation of fertilizers among crops and regions in U.P.   | Dr. A.S. Sirohi      |
| 80 | K.V. Subramanyam | 1971 | Resource productivity and optimal allocation of resources on farms in   | Dr. R.K. Patel       |

|    |                       |          | West Godavari district (AP)  |                      |
|----|-----------------------|----------|--|----------------------|
| 81 | P.L. Sankhayan        | 1971     | Step demand function for fertilizers and optimum resource use on the farms in Mandi district of Himachal Pradesh                 | Dr. A.S. Sirohi      |
| 82 | Raj Vir Singh         | 1971     | Returns to scale, farm size and productivity relationships on farms in Meerut district, Uttar Pradesh                            | Dr. R.K. Patel       |
| 83 | Parmatma Singh        | 1970     | Optimal combination of feed and fodder in dairy enterprise on farms in Etah district (UP)  | Dr. D. Jha           |
| 84 | T.D. J. Nagabhushanam | 1970     | Capital resource productivity and credit limits on farm firms in Krishna and Guntur districts of AP                              | Dr. K. Kanungo       |
| 85 | R.K. Singh            | 1970     | Optimal resource allocation among crop and dairy enterprises on farms of Etah district (UP)                                      | Dr. D. Jha           |
| 86 | B.L. Mishra           | 1970     | Allocation of nitrogenous fertilizers among major crops in M.P.  | Dr. A.S. Sirohi      |
| 87 | Dayanath Jha          | 1969     | Acreage response of sugar cane in factory areas of North Bihar   | Dr. K. Kanungo       |
| 88 | B.S. Rai              | 1969     | Capital in Indian agriculture, its growth and productivity   | Dr. A.S. Sirohi      |
| 89 | L. Ram Singh          | 1968     | Capital structure and productivity on farms in Saharanpur and Meerut district of western Uttar Pradesh                           | Dr. A.S. Sirohi      |
| 90 | D. Srivastava         | 1968     | Analysis of productive use of credit in IADP district, Shahabad  | Dr. A.S. Sirohi      |
| 91 | Rajendra Sinha        | Pd. 1967 | Optimal resource allocation among competitive crop enterprises on cultivators' holding.  | Dr. T.P.S. Chaudhary |
| 92 | Revanna Ramanna       | 1966     | Productivity of resources and income potential on subsistence and commercially oriented farms in Bangalore district              | Dr. T.P.S. Chaudhary |
| 93 | D.K. Singh            | 1966     | A study on the possibilities for increasing production and income on farms in Kanjhawala block, Delhi                            | Dr. T.P.S. Chaudhary |
| 94 | A.C. Gangwar          | 1966     | A study of optimal allocation of the resources on cultivators holding in Kanjhawala block (An application of linear programming) | Dr. A.S. Sirohi      |



## Agricultural Marketing and Price Analysis

|     |                        |      |   |                    |
|-----|------------------------|------|---|--------------------|
| 95  | Prabhuling S. Tevari   | 2008 | A location model for potato processing in Uttar Pradesh   | Dr. B. R. Atteri   |
| 96  | Raju R.                | 2008 | Export performance and prospects of Indian coffee under liberalized regime: An economic analysis              | Dr. B. R. Atteri   |
| 97  | R. Geetha              | 2008 | Dynamics, competitiveness and prospects of agricultural trade in India  | Dr. V.C. Mathur    |
| 98  | Shinoj P.              | 2007 | India's trade in agricultural commodities with major Asian trading partners: A post-reforms study             | Dr. V.C. Mathur    |
| 99  | Siddayya               | 2006 | Food safety measures and implication on export of major horticultural commodities from India                  | Dr. B.R. Atteri    |
| 100 | M.Venkatachalam        | 2005 | Efficacy of public distribution system in Tamil Nadu : Future directions                                      | Dr. B.R. Atteri    |
| 101 | Prem Chand Meena       | 2004 | Total factor productivity and marketed surplus for major crops in western India                               | Dr. P. Kumar       |
| 102 | Musebe Richard Omyango | 2000 | Dietary pattern and nutritional status of households in semi-arid tropics of India: A socio-economic analysis | Dr. Praduman Kumar |
| 103 | L.K. Wader             | 1993 | A study on quality grading and prices in cotton marketing in Karnatka   | Dr. Praduman Kumar |
| 104 | V.C. Mathur            | 1991 | Fertilizer consumption in India: A marketing perspective  | Dr. Praduman Kumar |
| 105 | Virender Kumar         | 1990 | Price policy models for groundnut and its oil in India  | Dr. Praduman Kumar |
| 106 | V. Balakrishanan       | 1990 | The effect of prices on factor demand output supply and marketed surplus for principal crop in T.N.           | Dr. Praduman Kumar |
| 107 | S.R. Das               | 1989 | Consumer demand systems for   | Dr. Praduman Kumar |

|     |                |      |   |                      |
|-----|----------------|------|---|----------------------|
|     |                |      | major foodgrains in India   |                      |
| 108 | Jiten Kumar    | 1989 | Factor demand, output supply, prices and income: A policy analysis for major foodgrains in India  | Dr. Praduman Kumar   |
| 109 | S.N. Sarkar    | 1987 | Marketing problems of paddy in West Bengal  | Sh. M.A. Murlidharan |
| 110 | B.R. Atteri    | 1987 | Impact of Himachal Pradesh Horticultural produce Marketing and Processing Corporation (HPMC) on marketing of apple in HP                  | Dr. Praduman Kumar   |
| 111 | P.C. Ravi      | 1986 | Price efficiency of groundnut in Karnataka  | Sh. M.A. Murlidharan |
| 112 | B. Munyandi    | 1985 | Price efficiency of groundnut marketing systems in Tamil Nadu   | Sh. M.A. Murlidharan |
| 113 | K.C. Talukdar  | 1984 | A study of efficiency and equity in marketing of major agricultural commodities in Assam state  | Sh. M.A. Murlidharan |
| 114 | Ramesh Chand   | 1984 | Effects of factor and product prices on factor demand, output supply and marketed surplus of major crops in Punjab                        | Dr. P. Kumar         |
| 115 | J.R. Pawar     | 1983 | A study of future market in turmeric  | Sh. M.A. Murlidharan |
| 116 | H.N. Patil     | 1982 | Production and marketing of mangoes in Ratanagiri district of Maharashtra   | Dr. P. Kumar         |
| 117 | S.N. Sahay     | 1981 | A comparative study of economic of production, marketing, income and consumption on eribal and non-tribal farms of Ranchi district, Bihar | Dr. C.C. Maji        |
| 118 | P.G. Chengappa | 1980 | An analysis of coffee prices in India: A spectral approach  | Sh. M.A. Murlidharan |

|     |                 |      |  |                       |
|-----|-----------------|------|--|-----------------------|
| 119 | S.N. Tilekar    | 1980 | A study on marketing problems of farmers in Ratnagiri district: A price analysis approach.                                     | Sh. M.A. Murlidharan  |
| 120 | B.D. Bhole      | 1980 | A study in economic planning for transportation and storage of major foodgrains over space and time in Maharashtra             | Dr. C.C. Maji         |
| 121 | Gaya Deen       | 1978 | Marketing of potato in Farrukhabad district of Uttar Pradesh   | Sh. M.A. Murlidharan  |
| 122 | G.R. Bhatia     | 1976 | Dynamics of demands for pesticides in West Godavari district of Andhra Pradesh   | Sh. M.A. Murlidharan  |
| 123 | A. Govindan     | 1975 | Analysis of price behaviour and retail margins in selected food grains markets in India-An application of special analysis.    | Dr. Y.P. Gupta        |
| 124 | K. Satyanaryana | 1974 | Impact of new farm technology on the economy of the cultivar households in Punjab  | Sh. M.A. Murlidharan  |
| 125 | S.S. Acharya    | 1973 | Study on the impact of technological change, on farm employment and income distribution in agriculture                         | Dr. L.S. Venkataraman |
| 126 | B. Bhuyan       | 1973 | Factors affecting consumption of major food grains by cultivator households in Punjab (1951-1970)                              | Sh. M.A. Murlidharan  |
| 127 | H.K. Sandhu     | 1972 | Agricultural export performance and foreign exchange earnings: A case study of exports of jute manufactures and tea from India | Dr. L.S. Venkataraman |
| 128 | U.S. Singh      | 1971 | Optimal resource allocation and normative supply response on farms in the Union Territory of Delhi                             | Dr. K. Kanungo        |
| 129 | D.S. Thakur     | 1971 | Economic and operational efficiency in marketing of Himachal Pradesh apples in India   | Dr. D. Jha            |
| 130 | Ram Das Singh   | 1970 | Supply response of Virginia  | Dr. P.R. Rao          |

|     |                   |      |  |                      |
|-----|-------------------|------|--|----------------------|
|     |                   |      | tobacco in India   |                      |
| 131 | D.S. Sidhu        | 1970 | Demand and supply of eggs in Ludhiana (Punjab)   | Dr. M.P. Gupta       |
| 132 | K.L. Rathod       | 1970 | Sugarcane acreage response and variations in cane supply to sugar factories in western U.P: An empirical investigation | Dr. K. Kanungo       |
| 133 | K.K. Sahay        | 1970 | A study on the acreage response of groundnut for major groundnut producing zones in India                              | Sh. M.A. Murlidharan |
| 134 | T.P. Gopaldaswamy | 1969 | A spatial equilibrium model for food grains distribution in India  | Dr. K. Kanungo       |
| 135 | S.N. Sharma       | 1968 | An economic analysis of growers-processor contract and relationship for green peas in contract farming areas of U.P.   | Dr. M.P. Gupta       |
| 136 | S.N. Kaul         | 1968 | A study on dynamics of cotton acreage response in Maharastra region  | Sh. M.A. Murlidharan |

### **Agricultural Finance and Project Analysis**

|     |                      |      |   |                  |
|-----|----------------------|------|---|------------------|
| 137 | Manik Chandra Pandit | 2007 | Adoption of resource conserving technologies in trans-gangetic plain of India : An economic appraisal in Rajasthan        | Dr. R. P. Singh  |
| 138 | Manesh Choubey       | 2003 | Rural credit and inter linked transaction implication of agrarian efficiency and policy perspective                       | Dr. R. P. Singh  |
| 139 | Subhasis Mondal      | 2003 | Institutional financing for shallow tubewell in lower gangetic plain : An economic approach                               | Dr. R. P. Singh  |
| 140 | Sathees Babu K.      | 1999 | Institutional credit supply and repayment behaviour of farmers in Kerala: A policy perspective.                           | Dr. R.P. Singh   |
| 141 | S.P. Singh           | 1990 | An economic analysis of short-term agricultural credit available by small and marginal farmers of Aligarh district, (U.P) | Dr. Mruthyunjaya |
| 142 | Partap Singh         | 1990 | Interlinkage and land, labour and   | Dr. R.P. Singh   |

|     |                 |      |  |                      |
|-----|-----------------|------|--|----------------------|
|     |                 |      | credit relations in the agricultural economy of eastern U.P  |                      |
| 143 | M. Satyanarayna | 1989 | Ex-post evaluation of a multipurpose irrigation project-A case study of Tunghbhadra Project                                | Dr. D. H. Srivastava |
| 144 | H.K. Patil      | 1989 | An economic analysis of agricultural credit and non-tribal farmers in Thane district of MS                                 | Dr. R.P. Singh       |
| 145 | S.S. Marawar    | 1987 | Reorganisation of crop enterprises and assessment of credit needs of farmers in Tehsil Pandharkawad district Yavatmal (MS) | Dr. P.L. Guglani     |
| 146 | H.S.Vijay Kumar | 1984 | An economic analysis of planning for agricultural development in India   | Dr. D. H. Srivastava |
| 147 | R.K. Pandey     | 1984 | Flow of institutional finance and credit needs of tribal farmers in Ranchi district of Bihar                               | Sh. M.A. Murlidharan |
| 148 | J.N. Chaudhary  | 1982 | Economic analysis of the lead bank scheme of Muzaffarpur district of Bihar   | Dr. D. H. Srivastava |
| 149 | D.G. Parkale    | 1982 | Impact of cooperative sugar factories on the economy of member cultivators in Pune district of Maharashtra state           | Sh. M.A. Murlidharan |
| 150 | U.K. Pandey     | 1976 | A study on over dues of cooperative credit in Banda district of U.P.   | Sh. M.A. Murlidharan |
| 151 | R.A. Singh      | 1972 | Study of farm finance in IADP district Shahabad  | Dr. D.H. Srivastava  |
| 152 | P.K. Das        | 1972 | Capital and credit needs of selected farms of Cuttack district   | Dr. D.H. Srivastava  |

## Agricultural Econometrics

|     |                |      |   |                      |
|-----|----------------|------|---|----------------------|
| 153 | D.V. Singh     | 1990 | Economics of crop insurance in Uttar Pradesh                                  | Dr. R.K. Pandey      |
| 154 | B.C. Barah     | 1976 | An econometric study of weather uncertainty and crop production               | Dr. K. Kanungo       |
| 155 | Praduman Kumar | 1972 | Economic analysis of village irrigation system in Sambalpur district (Orissa) | Dr. L.S Venkataraman |

## Agricultural Development and Policy

|     |                           |      |  |                    |
|-----|---------------------------|------|--|--------------------|
| 156 | Mahantesh N.              | 2008 | Pesticide usage in vegetables in western Uttar Pradesh: Economic and environmental issues                  | Dr. Alka Singh     |
| 157 | P. Vidhyasagar Arya       | 2004 | Social pricing of IPR in Indian Agriculture-conceptual and methodological Issues                           | Dr. Parmatma Singh |
| 158 | Suresh A.                 | 2003 | An economic analysis of rice-varietal diversity and its conservation in Kerala State                       | Dr. Puran Chand    |
| 159 | Mohd. Mizanui Haque Kazol | 2002 | Inter-state disparities in agricultural development in India : Status and policy implications              | Dr. Puran Chand    |
| 160 | B.C. Roy                  | 2001 | Investment and productivity in Indian agriculture  | Dr. Suresh Pal     |
| 161 | Mahendra Singh            | 2001 | Sustainability of rice-wheat system in eastern Uttar Pradesh: An economic perspective                      | Dr. Suresh Pal     |
| 162 | N.P. Singh                | 2000 | An economic appraisal of sugar industry under different processing sector of U.P.                          | Dr. Parmatma Singh |
| 163 | N.R. Kumar                | 1999 | An economic evaluation of agril watershed development project for sustainable agriculture in Bareilly (UP) | Dr. Parmatma Singh |

## Masters Degree

### Farm Management and Production Economics

| S.No | Scholar                    | Year | Title of thesis   | Chairperson        |
|------|----------------------------|------|---|--------------------|
| 1    | Kaviarasan K.              | 2009 | An economic study of flower production in Tamil Nadu  | Dr. D. R.Singh     |
| 2    | Shivendra Kumar Srivastava | 2007 | Efficiency and pricing mechanism in central plain zone of Uttar Pradesh   | Dr. Ranjit Kumar   |
| 3    | Hema M.                    | 2006 | Production trade and price behaviour of major spice of Western Ghat region in India   | Dr. Ranjit Kumar   |
| 4    | Radhika C.                 | 2006 | Adoption and impact of virus management technology on cultivation of banana in Maharashtra groundwater use                      | Dr. P.S. Badal     |
| 5    | George Paul                | 2005 | Production performance and economic efficiency of watershed development programme: A case study of Jaipur district of Rajasthan | Dr. P. S. Badal    |
| 6    | Anupma Jeewandas           | 2004 | Economic efficiency of maize production in Madhya Pradesh – A frontier production approach                                      | Dr. R.P. Singh     |
| 7    | L.R. Kumar                 | 2001 | Constraint analysis of onion production in Maharashtra  | Dr. R.K. Pandey    |
| 8    | G. Anitha                  | 2000 | Acreage response analysis of cotton in Haryana  | Dr. R.K. Pandey    |
| 9    | P.V.S. Arya                | 1999 | Socio-economic dimensions of farm mechanization in Meerut district of Western U.P.  | Dr. Ikbal Singh    |
| 10   | Sandhu S.                  | 1998 | Productivity trends and efficiency of rice production in Pakkad district of Kerala  | Dr. R.K. Pandey    |
| 11   | Velrasu P.                 | 1998 | Fertilizer use pattern and its impact on crop productivity in Tamil Nadu  | Dr. Parmatma Singh |

- |    |                 |      |   |                  |
|----|-----------------|------|---|------------------|
| 12 | M. Tarachand    | 1991 | Optimum cropping plan under depleting ground water aquifer in Kurukshetra district of Haryana   | Dr. Ikbal Singh  |
| 13 | S.K. Jain       | 1991 | An economic analysis of major edible oilseeds production in Gurgaon district of Haryana State   | Dr. Ikbal Singh  |
| 14 | Manimala T.     | 1990 | An economic analysis of women employment in crop production: A case study in Thanjavur district, Tamil Nadu   | Dr. Mruthyunjaya |
| 15 | M. Champa Lal   | 1989 | The role of commercial crops in generating income and employment on different sizes of farms in Kathegaudam Mandal of Khammam district in U.P.          | Dr. Ikbal Singh  |
| 16 | Alvaris David   | 1989 | Socio-economic constraints in the adoption of new rice production technology in Kolhapur district of Maharashtra  | Dr. T. Haque     |
| 17 | Naresh Chandra  | 1987 | Impact of technological change on resource use productivity and functional income distribution on tribal farms of Ratu block of Ranchi district (Bihar) | Dr. R.P. Singh   |
| 18 | Basant Bage     | 1987 | Economic analysis of upland rice and kharif pulse production in Gumla district of Bihar   | Dr. R.K. Pandey  |
| 19 | Jai Singh Meena | 1987 | An economic analysis of constraints in gram and wheat production in Sawai Madhopur district of Rajasthan  | Dr. B.M. Sharma  |
| 20 | Thomas Saji     | 1986 | Resource use, productivity and constraints in dryland rice production – A case study in Ranchi district of Bihar  | Dr. R.P. Singh   |



- |    |                  |      |   |                 |
|----|------------------|------|---|-----------------|
| 21 | N. Srinivas      | 1986 | An economic analysis of crop production under different locations of canal irrigation – A case study of Vamnidhara irrigation project (A.P) | Dr. R.P. Singh  |
| 22 | G.P. Sharma      | 1985 | Effect of tractorization on farms employment, productivity and income in Chanduasi block of Aligarh district (U.P)                          | Dr. B.M. Sharma |
| 23 | K.M. Das         | 1985 | Resource use efficiency, output supply and factors demand on Delhi farms- A profit function approach  | Dr. R.P. Singh  |
| 24 | Mysore Sudha     | 1984 | Economics of grape and other major field crops in Rangareddy district of Andhra Pradesh   | Dr. B.M. Sharma |
| 25 | M. Subbarayan    | 1984 | Energy utilization for crop production on different sizes of farms in Meerut district, UP   | Dr. Ikbal Singh |
| 26 | Jiten Kumar      | 1984 | Farm management and factors demand for wheat crop in Delhi  | Dr. R.P. Singh  |
| 27 | A.V. Satheesh    | 1982 | Income potential of non-viable farmers in Pithapuram block. East Godavari district (AP)   | Dr. B.M. Sharma |
| 28 | M. Jyothisri     | 1982 | Utilization of energy inputs for production of enterprises on different sizes of farms in Krishna district (A.P)                            | Dr. Ikbal Singh |
| 29 | S. Eswaramoorthy | 1981 | Allocation of irrigation water among various periods and crop areas in lower Bhavani Project Command Area (T.N)                             | Dr. Ikbal Sigh  |
| 30 | A. Bhattacharjee | 1981 | Economic implications of land redistribution programme: A case study in WB  | Dr. B.M. Sharma |

- |    |                |      |   |                  |
|----|----------------|------|---|------------------|
| 31 | B. Munyandi    | 1981 | Study of yield gap and constraints involved in groundnut production in South Arcot district (T.N)                                   | Dr. Bhagat Singh |
| 32 | S. Devadoss    | 1980 | A study on maximization of income and employment on small farms of Theni Block, district. Madurai (T.N.)                            | Dr. B.M. Sharma  |
| 33 | P. Thangaval   | 1979 | Economic analysis of yield constraints on rice farms in Madurai district of Tamil Nadu  | Dr. R.K. Pandey  |
| 34 | R. Thamodaran  | 1979 | Economics of crop production under various water management systems (concrete, silt and traditional) in Udangudi Block of Tamilnadu | Dr. C.C. Maji    |
| 35 | D. Durai       | 1978 | Relative costs and returns of various types of fishing methods in marine fisheries in Thanjavour district (T.N)                     | Dr. R.K. Pandey  |
| 36 | M.Govindaswamy | 1978 | Estimation of labour use in crop production (UP)  | Dr. R.K. Pandey  |
| 37 | A.S.M. Rehman  | 1977 | Benefit cost and productivity analysis of major crops in Bangladesh – A case study in Savar Thana Irrigation Scheme                 | Dr. C.C. Maji    |
| 38 | A.S. Patil     | 1977 | An economic study of fertilizer demand in Indian agriculture  | Dr. R.K. Pandey  |
| 39 | K.R. Gunjal    | 1977 | Nutrition management for farmers and agricultural labourers in Union Territory Delhi  | Dr. G.S. Ram     |
| 40 | Kamal Mazumdar | 1976 | Difference in Aman rice production technology between small and large farms in Hooghly district (W.B.)                              | Dr. D. Jha       |

|    |                  |      |   |                 |
|----|------------------|------|---|-----------------|
| 41 | D.P. Patil       | 1973 | An economic analysis of pesticides use in cotton production   | Dr. A.S. Sirohi |
| 42 | R.D. Ghodake     | 1973 | Economics of the use of pesticides in cotton crop   | Dr. A.S. Sirohi |
| 43 | J.P. Mishra      | 1969 | A study on the response of bajra (Pennisetum Typhodeum) to nitrogen in various regions of India   | Dr. K. Kanungo  |
| 44 | D.P. Antiporta   | 1969 | Optimum cropping strategy for Delhi state   | Dr. A.S. Sirohi |
| 45 | B.M. Sharma      | 1969 | Cost of production and resource allocation efficiency for major crops in Union Territory of Delhi (with special reference to high yielding varieties) | Dr. R.K. Patel  |
| 46 | D.S. Tongdung    | 1969 | Optimum allocation of nitrogen among various crops in the Union Territory of Delhi  | Dr. A.S. Sirohi |
| 47 | V.K. Gharate     | 1969 | Optimum resource allocation on cotton farms of Dhulia district (Maharashtra state)  | Dr. K. Kanungo  |
| 48 | S.C.S. Mahapatra | 1968 | Economic aspect of paddy fertilization under West Bengal conditions   | Dr. K. Kanungo  |
| 49 | Raj Vir Singh    | 1968 | Productivity of farm resources and their allocation among major crops of Meerut district, Uttar Pradesh   | Dr. A.S. Sirohi |
| 50 | D.L. Patil       | 1968 | Potentialities of increasing resource returns and productivity through Mexican wheats in Union Territory of Delhi                                     | Dr. R.K. Patel  |
| 51 | Dalip K. Das     | 1968 | Economic analysis of response of jowar to nitrogen in selected tracts of India  | Dr. K. Kanungo  |
| 52 | P.L. Sankhayan   | 1968 | Resource productivity and allocation efficiency on seed potato farms in Himachal  | Dr. A.S. Sirohi |

|    |                |      |  |                      |
|----|----------------|------|--|----------------------|
|    |                |      | Pradesh  |                      |
| 53 | C.C. Maji      | 1967 | Productivity and allocation of resources in jute and paddy-A farm level study in Mondahat (Burdwan) and Narioha (Hoogly) | Dr. K. Kanungo       |
| 54 | Utpal Gupta    | 1967 | Economic efficiency of fertilizing jute under West Bengal conditions.  | Dr. K. Kanungo       |
| 55 | N.S.P. Rebello | 1963 | Efficiency study in the production of wheat in Kanjhawala block of Delhi   | Dr. D.K. Desai       |
| 56 | B.P. Dhital    | 1963 | Impact of industrialization on rural economy in Kanjhawala block of Delhi  | Dr. T.A. Ramasubban  |
| 57 | P.M. Mandal    | 1963 | An appraisal of cooperative farming societies in Union Territory of Delhi  | Dr. T.P.S. Chaudhary |

### **Agricultural Marketing and Price Analysis**

|    |                         |      |   |                    |
|----|-------------------------|------|---|--------------------|
| 58 | Ravi Duptal             | 2008 | Production and marketing of cotton in Karnataka: A case study of Dharwad district | Dr. N. P. Singh    |
| 59 | Kamble Ankush Lala      | 2007 | Analysis of prices and market integration of onion in Maharashtra                 | Dr. Amit Kar       |
| 60 | Anu Susan Sam           | 2007 | A study of futures' markets for agricultural commodities in India                 | Dr. N. P. Singh    |
| 61 | Aniruddha Roy           | 2007 | Marketing of jute in West Bengal: A case study of Coochbehar District             | Dr. Amit Kar       |
| 62 | Tigist Teketel Forssido | 2004 | Demand for beverages and processed food in Delhi state of India                   | Dr. Praduman Kumar |
| 63 | Shinoj P                | 2004 | Production and demand analysis for major spices in India                          | Dr. Praduman Kumar |
| 64 | Luong.Ngoc Trung Lap    | 2004 | Demand for fruits in Delhi state of India   | Dr. B. R. Atteri   |
| 65 | P.S.Tevari              | 2003 | Consumption pattern of commodities under public                                   | Dr. Praduman Kumar |

- distribution systems in southern states of India
- 66 Sulphy B. J. 2003 Changes In consumption pattern and future demand of milk and milk products in Kerala Dr. B.R. Atteri
- 67 Ackson K.N.R. Kaonga 2002 Nutrition and hunger – micro-level evidences in some selected pockets of India Dr. Praduman Kumar
- 68 C. Sundara Moorthy 2001 Economic analysis of trade in selected edible oils-implications of liberalisation Dr. V.C. Mathur
- 69 Prashant Amatya 2001 Comparative analysis of India's Agricultural Export to the SAARC and non-SAARC Countries Dr. V.C. Mathur
- 70 M. Venkatchalam 2000 Demand analysis of pulses in Delhi state Dr. B.R. Atteri
- 71 Dimple Tresa Abraham 1999 Progress and pattern of grading of agricultural commodities in India Dr. Praduman Kumar
- 72 Molla Alemayehu 1999 Analaysis of price behaviour of important vegetables in Delhi wholesale market Dr. B.R. Atteri
- 73 Manesh Choubey 1997 A study on production and marketing of Litchi (Litchi Chinensis) in Bihar Dr. B.R. Atteri
- 74 V. Ponnraj 1997 Agmark grading and its use pattern: A case study of metropolitan Delhi Dr. Praduman Kumar
- 75 D. Jon. Raj 1980 Comparison between costs and returns in the regulated and unregulated markets of groundnut in South Arcot district (TN) Dr. P.L. Guglani
- 76 A.K. Gupta 1979 Study of marketing margins in vegetables and business structure of different market functionaries in vegetables marketing in Delhi Dr. G.S. Ram

|    |                    |      |  |                       |
|----|--------------------|------|--|-----------------------|
| 77 | Mehrabdhin Samadhi | 1978 | Retention and disposal behaviour of farm products in Union Territory of Delhi                              | Dr. G.S. Ram          |
| 78 | Z. Pashtoon        | 1978 | Locational differences in retail prices of selected vegetables in Delhi city                               | Dr. D. Jha            |
| 79 | Mohd. Akbari       | 1978 | A study of consumption of vegetables in rural households of eastern Uttar Pradesh                          | Sh. M.A. Murlidharan  |
| 80 | S.N. Tilekar       | 1976 | A study on economics of storage at farm level.   | Sh. M.A. Murlidharan  |
| 81 | P. Sengupta        | 1975 | An analysis of the vegetable prices in Subzi Mandi, Delhi  | Sh. M.A. Murlidharan  |
| 82 | Shashanka Bhide    | 1975 | A study of structural changes in the arecanut market, Mangalore, Karnatka state                            | Sh. M.A. Murlidharan  |
| 83 | A.K. Chawdhary     | 1975 | The impact of price changes on area, production yield and employment in the Indian tea industry.           | Dr. G.S. Ram          |
| 84 | C.B. Deviah        | 1973 | Resource productivity in rice under irrigated conditions of farming in Sambalpur district, Orissa          | Dr. L.S. Venkataraman |
| 85 | G.R. Bhatia        | 1973 | A study of price differentials in wheat due to quality factors in two primary markets of Delhi             | Sh. M.A. Murlidharan  |
| 86 | T.P. Gangadharan   | 1973 | Demands for chemical fertilizers in Kerala   | Sh. M.A. Murlidharan  |
| 87 | A.S.V. Rao         | 1972 | Factors affecting consumption of pulses by cultivator families in Kanjawala block Delhi                    | Sh. M.A. Murlidharan  |
| 88 | K. Satyanarayana   | 1970 | Response of market supply of paddy and chilli in Guntur district of Andhra Pradesh                         | Dr. C.C. Maji         |
| 89 | N.U. Krishnan Nair | 1970 | Acreage response of important crops in Kerala  | Dr. D. Jha            |
| 90 | E.R.N. Nair        | 1970 | Factors affecting marketed surplus of paddy-a case study in 'Kannadi' village of Palghat district (Kerala) | Dr. P.R. Rao          |
| 91 | B.L. Maharajan     | 1968 | Problems of agricultural inputs  | Dr. P.R. Rao          |

- in Bhaktapur district of Nepal
- 92 K.L. Sharma 1967 Study of firm factors determining marketed surplus of bajra in Jaipur district Dr. M.P. Gupta
- 93 G.S. Ram 1966 Regulated fodder market – A case study of Zakhira fodder market. Dr. R. Swroop
- 94 K.N.S. Nair 1965 Inter-regional comparison of farm labour productivity as revealed through the “Studies in the economics on farm management” Dr. A.S. Sirohi
- 95 S.N. Sharma 1963 Study of vegetable marketing costs and practices at Phool-Ki-Mandi, Daryaganj, Delhi Dr. M.P. Gupta
- 96 T.P.Gopaldaswamy 1963 Study of cost-price structure of wheat, gram and bajra in Kanjhawala block Dr. P.R. Rao

### **Agricultural Finance and Project Analysis**

- 97 Jaya Kumara Varadan R. 2009 An economic analysis of crop insurance in India: A case study of rice farmers in Tamil Nadu Dr. Pramod Kumar
- 98 Viswanatha Reddy 2008 An economic appraisal of mango processing plants of Chittoor district in Andhra Pradesh Dr. Pramod Kumar
- 99 Anup Kumar Layck 2007 Livelihood security through microfinance in Purulia district of West Bengal Dr. R. P. Singh
- 100 Ranijitha P. 1991 Performance and prospects of regional rural banks in Andhra Pradesh Dr. R.P. Singh
- 101 Mahendran K. 1990 Basis of cropping pattern: Role of subsidies by a co-operative sugar mill in Tamil Nadu Dr. Mruthyunjaya
- 102 M. Gopinath 1990 Economic analysis of benefits from the grants of department of agriculture to farms in the Union Territory of Pondicherry Dr. Mruthyunjaya

- |     |                  |      |   |                     |
|-----|------------------|------|---|---------------------|
| 103 | S.K. Singh       | 1989 | An economic analysis of over dues in agricultural loans in Rudrapur block of Nainital district, UP  | Dr. T. Haque        |
| 104 | Pradeep Dogra    | 1988 | A study of changes in income and consumption of rural households in H.P.  | Dr. D.H. Srivastava |
| 105 | Masooma Nazhat   | 1988 | Capital formation and resource productivity of sampled farm of union territory of Delhi   | Dr. D.H. Srivastava |
| 106 | Virender Kumar   | 1986 | Assessment of short-term credit needs of small and marginal farmers at existing and recommended levels of technology.   | Dr. P.L. Guglani    |
| 107 | Pratap Singh     | 1986 | A study of income, saving and farm investment of farm households of Tosham block (District Bhiwani), Haryana.   | Dr. D.H. Srivastava |
| 108 | Assudullah Bahar | 1985 | Short-term production credit requirements on marginal and small farms in Union Territory of Delhi   | Dr. Iqbal Singh     |
| 109 | Dramu Ravi       | 1984 | Assessment of credit worthiness and savings of farm households of Mandevalli block of Krishna district (A.P)  | Dr. D. Srivastava   |
| 110 | S.M. Walizada    | 1983 | Optimum crop enterprise organization and short-term credit needs of farms in rural India.   | Dr. P.L. Guglani    |
| 111 | M. Satyanaryana  | 1983 | Study of the income and consumption pattern of farm households of the village Manepalli of Annantpur district (A.P)   | Dr. D.H. Srivastava |
| 112 | K. Pudmaikkannan | 1983 | A study on credit needs, income, savings and employment at the existing and recommended levels of technology.   | Dr. P.L. Guglani    |
| 113 | P.K. Das         | 1980 | Effect of credit facilities and other activities of tribal development agency (TDA) on production and employment of farms in tribal area of Singhbhum district, Bihar | Dr. P.L. Guglani    |
| 114 | Laskar Ayoubzada | 1976 | Marketing problems and needs of small farmers in Afghanistan  | Dr. G.S. Ram        |



|     |               |      |  |                      |
|-----|---------------|------|--|----------------------|
| 115 | D. Sengupta   | 1974 | Economy of small farms in rice growing region- A study in Hoogly district, WB  | Dr. K. Kanungo       |
| 116 | A.K. Ray      | 1974 | Development potential of small farmers: A case study of Hooghly district, W.B.   | Dr. K. Kanungo       |
| 117 | S.L. Kumbhare | 1974 | Assessment of credit needs of farms in Alipur block of Delhi. An exercise in production functions.   | Dr. D. Jha           |
| 118 | K.D. Kurkate  | 1974 | An appraisal of the institutional support to small farmers: A case study of small farmers development agency, Hoogly district W.B                    | Dr. K. Kanungo       |
| 119 | A.A. Rane     | 1973 | Economic analysis of farm returns, farm household incomes and farm household savings of few selected farms of Mehrauli block, Delhi                  | Dr. D.H. Srivastava  |
| 120 | J.C. Saini    | 1972 | Assessment of credit needs and potential for deposit mobilization of the farms in the Union Territory of Delhi                                       | Dr. D.H. Srivastava  |
| 121 | S. Borate     | 1972 | Economic analysis of bullock labour, farm family labour and cost comparison of some operations of the selected farms in the Union Territory of Delhi | Dr. D.H. Srivastava  |
| 122 | J.S.C. Laing  | 1971 | Capital formation and resource productivity on the selected farms of Union Territory of Delhi  | Dr. D. Srivastava    |
| 123 | V.T. Raju     | 1970 | The role of direct bank finance in district Raipur   | Dr. D.H. Srivastava  |
| 124 | A. Chamras    | 1969 | Analysis of productive use of credit in Chacoengaso Cooperative Society Ltd., Thailand.  | Dr. D.H. Srivastava  |
| 125 | P. Pinutai    | 1968 | A study of the working of Wangpratall Land Co-operative Society  | Sh. M.A. Murlidharan |

## Agricultural Development and Policy

|     |                |      |   |                     |
|-----|----------------|------|---|---------------------|
| 126 | Tarun Kumar    | 2005 | An economic analysis of labour migration in Bihar   | Dr. Puran Chand     |
| 127 | Tin-Tin Aung   | 2004 | An economic analysis of integrated pest management in paddy   | Dr. (Ms)Alka Singh  |
| 128 | Rakesh Kumar   | 2003 | Public investment in agricultural, research, education and extension –A comparative study of Bihar and Punjab | Dr. (Ms) Alka Singh |
| 129 | Siddayya       | 2002 | Accelerating growth of pigeon-pea production in Karnataka-Constraints and policy perspectives.                | Dr.(Ms) Alka Singh  |
| 130 | Lijo. Thomas   | 2002 | An economic analysis of labour bank experiment in Kerala  | Dr. Parmatma Singh  |
| 131 | Nakangu Nusula | 2002 | Female employment status and wage differentials in Rajasthan agriculture                                      | Dr.(Ms)Alka Singh   |
| 132 | Amy Soe        | 2002 | House hold food consumption pattern and demand in North-Eastern states of India                               | Dr. (Ms) Alka Singh |

## List of Foreign Students

### Doctoral Degree

| S.No. | Name of the Foreign Student | Year | Chairperson        | Country    |
|-------|-----------------------------|------|--------------------|------------|
| 1.    | Dr. Mohd. Mizanul H. Kazol  | 2002 | Dr. Puran Chand    | Bangladesh |
| 2.    | Dr. Richard Omyango Musebe  | 2000 | Dr. Praduman Kumar | Kenya      |
| 3.    | Dr. Luke Owino Oyugi        | 1998 | Dr. R.K. Pandey    | Kenya      |
| 4.    | Dr. S. M. Elias             | 1977 | Dr. C.C. Maji      | Bangladesh |

### Master's Degree

| S.No. | Name of the Foreign Student | Year | Chairperson               | Country     |
|-------|-----------------------------|------|---------------------------|-------------|
| 1.    | Luong Ngoc Trung Lap        | 2004 | Dr. B.R. Atteri           | Vietnam     |
| 2.    | Tin Tin Aung                | 2004 | Dr. Alka Singh            | Myanmar     |
| 3.    | Tigist Teketal Forssido     | 2004 | Dr. Praduman Kumar        | Ethiopia    |
| 4.    | Nakangu Nusula              | 2002 | Dr. Alka Singh            | Uganda      |
| 5.    | Ackson K.N.R. Kaonga        | 2002 | Dr. Praduman Kumar        | Zambia      |
| 6.    | Amy Soe                     | 2002 | Dr. Alka Singh            | Myanmar     |
| 7.    | Prashant Amatyia            | 2001 | Dr. V.C. Mathur           | Nepal       |
| 8.    | Molla Alemayehu Yismaw      | 1999 | Dr. B.R. Atteri           | Ethiopia    |
| 9.    | Masooma Nazhat              | 1988 | Dr. (Mrs) D.H. Srivastava | Afghanistan |
| 10.   | S.M. Walizada               | 1983 | Dr. P.L. Guglani          |             |
| 11.   | Mehrabuddin Samadi          | 1978 | Dr. G.S. Ram              | Afghanistan |
| 12.   | Z. Pashtoon                 | 1978 | Dr. D. Jha                | Afghanistan |
| 13.   | Mohd. Askar Akbari          | 1978 | Mr. M.A. Murlidharan      | Afghanistan |
| 14.   | A.S.M. Rehman               | 1977 | Dr. C.C. Maji             | Bangladesh  |
| 15.   | Lashkar Ayoubzada           | 1976 | Dr. G.S. Ram              | Afghanistan |
| 16.   | J.H.C. Liang                | 1971 | Dr. (Mrs) D.H. Srivastava |             |
| 17.   | D. S. Tongdung              | 1969 | Dr. A.S. Sirohi           | Thailand    |
| 18.   | D. B. Antiporta             | 1969 | Dr. A.S. Sirohi           |             |
| 19.   | Arunpoo Chamras             | 1969 | Dr. (Mrs) D.H. Srivastava | Thailand    |
| 20.   | P. Pinutai                  | 1968 | Mr. M.A. Murlidharan      | Thailand    |
| 21.   | B.L. Maharajan              | 1968 | Dr. P.R. Rao              | Nepal       |
| 22.   | B.P. Dhital                 | 1963 | Dr. T.A. Ramasubban       | Nepal       |
| 23.   | N.S.P. Rebello              | 1963 | Dr. D.K. Desai            |             |

## 9. List of Training Programmes

### Centre of Advanced Faculty Training

Since 1995, the Division has been working as a Centre of Advanced Faculty Training of ICAR and has organized twenty three advanced level (21 days) training programmes for researchers and teachers of the national agricultural research system of the country. So far 439 professionals have been trained under CAFT (formerly CAS) scheme. Few specialized trainings were also organized for civil servants, foreign researchers and policy planners. The major themes covered in different training programmes organized so far include advances in methodologies for policy research in agricultural economics, quantitative analysis, research evaluation and impact assessment, demand supply projections, measurement of technological change, conceptual and methodological issues in the new regime of international trade, agricultural development and policies, advances in food and agricultural marketing, and climate change, environmental sustainability and agricultural development. Distribution of the trainees by training themes is given below:

| S.No | Broad Theme of Training Courses                           | No. of Trainings | No. of Participants |
|------|---|------------------|---------------------|
| 1    | Quantitative Techniques for Agricultural Policy Analysis  | 5                | 94                  |
| 2    | Impact assessment of Agricultural Research and Technology | 7                | 147                 |
| 3    | Sustainable Agricultural Development and Food Security    | 8                | 148                 |
| 4    | Advances in Agricultural Marketing and Trade              | 3                | 50                  |
|      | Total   | 23               | 439                 |

## List of Training Courses

| <b>Year</b> | <b>Title of the training</b>   | <b>Period</b>            | <b>No. of trainees</b> |
|-------------|--|--------------------------|------------------------|
| 2011        | Agricultural Growth, Diversification and Food Security                                     | 15.11.2011 to 05.12.2011 | 13                     |
| 2011        | Institutional Change for Inclusive Agricultural Growth                                     | 15.02.2011 to 07.03.2011 | 18                     |
| 2010        | Climate Change, Environmental Sustainability and Agricultural Development                  | 09.03.2010 to 29.03.2010 | 14                     |
| 2009        | Sustainable Agricultural Development for Food Security                                     | 08.01.2009 to 28.01.2009 | 17                     |
| 2008        | Advances in Agriculture and Food Marketing   | 03.12.2008 to 23.10.2008 | 13                     |
| 2006        | Agricultural Development and Policy  | 24.02.2006 to 16.03.2006 | 20                     |
| 2005        | Conceptual and Methodological Issues in the New Regime of International Agricultural Trade | 29.11.2005 to 19.12.2005 | 19                     |
| 2004        | Quantitative Techniques for Policy Analysis in Agricultural Economics                      | 01.12.2004 to 21.12.2004 | 20                     |
| 2004        | Measurement of Technological Change in Agriculture   | 26.02.2004 to 17.03.2004 | 20                     |
| 2003        | Impact Assessment of Agricultural  | 11.11.2003 to 01.12.2003 | 16                     |
| 2002        | Role of Social Science in Agro-biological Research   | 13.03.2002 to 02.04.2002 | 24                     |
| 2002        | Demand – Supply Projections of Agricultural Commodities                                    | 24.08.2002 to 13.09.2002 | 20                     |
| 2001        | Conceptual and Methodological Issues in the new Regime of International Trade              | 00.01.2001 to 31.01.2001 | 18                     |
| 2001        | Agricultural Development and Policy  | 13.03.2001 to 02.04.2001 | 18                     |
| 2001        | Sustainable Agricultural Development for Food Security                                     | 09.10.2001 to 29.10.2001 | 24                     |
| 2000        | Impact Assessment of Agricultural Technology   | 13.03.2000 to 02.04.2000 | 20                     |
| 2000        | Quantitative Techniques for Policy Analysis in Agricultural Economics                      | 07.08.2000 to 05.09.2000 | 16                     |
| 1999        | Role of Social Sciences Under Changed Scenario of Agricultural Research                    | 30.03.1999 to 19.04.1999 | 20                     |
| 1999        | Demand Supply Projections of Agricultural Commodities                                      | 07.09.1999 to 27.09.1999 | 18                     |
| 1999        | Measurement of Technological Change in Agriculture   | 11.11.1999 to 01.12.1999 | 15                     |
| 1998        | Advances in Methodologies for Policy Research in Agricultural Economics                    | 16.05.1998 to 29.05.1998 | 18                     |
| 1997        | Agricultural Development and Policies  | 11.02.1997 to 25.02.1997 | 31                     |
| 1996        | Agricultural Research Evaluation and Impact Assessment                                     | 13.02.1996 to 27.02.1996 | 29                     |
| 1996        | Role of Social Sciences in Agro-biological Research  | 24.10.1996 to 07.11.1996 | 23                     |
| 1995        | Quantitative Techniques for Policy Analysis in Agricultural Economics                      | 27.11.1995 to 09.12.1995 | 24                     |

