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## **Publications Received**

- Alagh, Yoginder K. *The Future of Indian Agriculture*, National Book Trust, India, New Delhi, 2013. Pp. 220. Rs. 90.00.
- Ashokvardhan, C. and Vachhani, Ashish (Eds.), *Socio-Economic Profile of Rural India*, Series II, Vol. IV (Eastern India), Concept Publishing Company Pvt. Ltd., New Delhi, 2011. Pp. xxxix + 560. Rs. 1200.00.
- Bhargava, U.N. *An Open Letter to Reserve Bank of India's Governor Designate Raghuram G. Rajan*, Rae Bareli, 2013. Pp. 29.
- Biswas, Saswata Narayan, *Organisational Behavior in Co-operatives*, Working Paper 243, Institute of Rural Management, Anand, Gujarat, June 2013. Pp. 29.
- Dadabhoy, Bakhtiyar K. *Barons of Banking: Glimpses of Indian Banking History*, Random House Publishers India Pvt. Ltd., Noida, 2013. Pp. xxxix + 478. Rs. 599.00.
- Debashish, Debnath, *Indigenous Knowledge, Bio-diversity Conservation and Livelihoods Development*, Serials Publications, New Delhi, 2013. Pp. xv + 242. Rs. 1500.00.
- Desai, Nitin Mathur, Rajeev, D. *Growth and Equity: Essays in Honour of Pradeep Mehta*, Academic Foundation, New Delhi, 2013. Pp. 222. Rs. 995.00.
- Ferroni, Macro (Ed.), *Transforming Indian Agriculture: India 2040: Productivity, Markets and Institutions*, Sage Publications India Pvt. Ltd. New Delhi, 2013. Pp. xxii+357. Rs. 995.00.
- Guha, Atulan, *Exchange Rate Movement of Developing Countries like India: An Alternative Theoretical Framework*, Working Paper 246, Institute of Rural Management, Anand, Gujarat, June 2013. Pp. 22.
- Guha, Atulan, *The Service Sector Growth and Urban Consumption*, IDRC TTI Working Paper, Institute of Rural Management, Anand, Gujarat, July 2013. Pp. 25.

- Guha, Atulan and Pal, Parthapratim, *Global Ramifications of Reoriented US Policies Towards Employment Generation*, Working Paper 244, Institute of Rural Management, Anand, Gujarat, June 2013. Pp. 38.
- Gupta, Kamal and Angadi, V.B. (Eds.), *Inclusive Growth*, Smit Arts, Ghatkopar, Mumbai, 2013. Pp. xiv + 221.
- Guru Arjan Dev (GAD), Institute of Development Studies Society, *Water Security and Climate Change: Challenges and Strategies*, Guru Arjan Dev Institute of Development Studies, Amritsar, November 2011. Pp. 72.
- Mishra, R.K. and Trivikram, K., *The Global Financial Crisis: Challenges and Opportunities*, Academic Foundation, New Delhi, 2013. Pp. 458. Rs.1195.00.
- Modi, Pratik and Kaur, Gurjeet, *Internal Market Orientation: Construct Validation and Scale Finalization in the Non-Profit Context*, Working Paper 250, Institute of Rural Management, Anand, Gujarat, July 2013. Pp. 34.
- National Institute of Ecology, *Proceedings of the National Workshop on Water Science and Policy for Sustainable Development*, Raipur, 22-23 March 2013, New United Process, New Delhi, 2013. Pp. 29.
- Paul, Samuel, *Fighting Corruption: The Way Forward*, Academic Foundation, New Delhi, 2013. Pp. 298. Rs. 995.00.
- Priya, Preeti, *Consumer-Level Determinants of Store Brand Proneness: An Empirical Study with Indian Consumers*, Working Paper 241, Institute of Rural Management, Anand, Gujarat, May 2013. Pp. 26.
- Raju, B. Yerram, *Agricultural Banking: Getting the Perspective Right*, Konark Publishers Pvt. Ltd., New Delhi, 2013. Pp. xxxiii + 202. Rs. 595.00.
- Santhakumar, V., *Economics in Action: An Easy Guide for Development Practitioners*, Sage Publications India Pvt. Ltd., New Delhi, 2013. Pp. xix + 350. Rs. 545.00.
- Saxena, Raka, Tanwar, Deepak and Tanwar, Ajay (Eds.), *Annual Report 2012-13*, National Centre for Agricultural Economics and Policy Research, (NCAP), New Delhi, 2013. Pp. xxii + 66.
- Securities and Exchange Board of India, *Banyan Tree to E-Trading SEBI: An Agent of Change*, Silverpoint Press Pvt. Ltd., Mumbai, 2013. Pp. 192.

- Sethi, Rajmohini, *Socio-Economic Profile of Rural India*, Series II, Vol. V (North and Central India), Concept Publishing Company Pvt. Ltd., New Delhi, 2011. Pp. xix + 314. Rs. 750.00.
- Shaikh, Ateeque, Modi, Pratik and Yadav, Vanita, *A Paradigmatic and Methodological Examination of the Market Orientation Research*, Working Paper 242, Institute of Rural Management, Anand, Gujarat, May 2013. Pp. 42.
- Shanmugam, Velmurugan P. and Paul, W. Armah, *Excessive Speculation and Market Efficiency of U.S. and Indian Agri-Commodity Future Markets*, Serials Publications, New Delhi, 2013. Pp. xiv + 181. Rs. 795.00.
- Sharma, S.S.P. and Singh, S.P. *Growing Rural-Urban Disparity in Uttar Pradesh*, Serials Publications, New Delhi, 2012. Pp. xi+300. Rs. 995.00.
- Singh, Ramendra and Modi, Pratik, *A Market Separations Perspective to Market Development at Bottom of Pyramid: A Case Study on Def's Chanderiyaan Project*, IDRC TTI Working Paper, Institute of Rural Management Anand, Gujarat, June 2013. Pp. 18.
- Sreedharan, M. and Mujumdar, N.A. (Eds), *The Philosophy of Financial Inclusion*, Excel Books, New Delhi, 2013. Pp. xvii+ 81. Rs. 195.00.
- Suresh, P. Srinivasa, *Investment Behaviour in Indian Sugar Industry: An Econometric Study*, Global Research Publications, New Delhi. Pp. 195. Rs. 750.00.
- The World Bank, *Global Economic Prospects: Assessing Growth over the Medium Term*, International Bank for Reconstruction and Development, Washington, D.C., U.S.A., Vol. 6, January 2013. Pp. v+168.
- Vaidyanathan, A. *India's Evolving Economy: Puzzles and Perspectives*, Academic Foundation, New Delhi, 2013. Pp. 348. Rs. 1195.00.

## **Ph.D. Theses in Agricultural Economics Completed in Universities in India: 2012-2013**

In pursuance of the decision to publish information on completed Ph.D. Theses in Agricultural Economics from Universities/academic institutions in India on a regular basis, in the last issue of the Journal every year, a questionnaire was canvassed in December 2013 to 39 Universities/Institutions, seeking the required information for the academic year 2012-2013. The information received from 6 Universities/Institutions is processed and listed under 6 broad subject categories.

The list presented below contains 10 titles of theses, classified subjectwise, which were awarded Ph.D. degrees during the academic year 2012-2013. The information is presented in the following order: the name of the author, his/her institutional affiliation, the name of the University granting the degree, title of the thesis and the year in which the thesis was submitted/accepted for the Ph.D. award - *Editor*.

### **1. Agricultural Growth/ Production/ Risk and Uncertainty**

Immanuelraj, Kingsly T. Division of Agricultural Economics, Indian Agricultural Research Institute, Pusa, New Delhi - 110 012. *A Study of Factor Demand, Output Supply and Net Income for Major Cash Crops in Maharashtra*, 2013.

Hasan, Rooba, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, (Uttar Pradesh). *Structural Transformation in Production and Consumption of Agricultural Commodities in Uttar Pradesh*, 2013.

### **2. Agricultural Labour/ Employment**

Gautam, Kusumakar, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, (Uttar Pradesh). *Natural and Human Resource Use Planning for Vindhyan Region of Eastern Uttar Pradesh: A Multi Objective Programming Approach*, 2013.

### **3. Forestry/ Fisheries**

Kumar, Hraday, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, (Uttar Pradesh). *Economic Analysis of Fresh Water Aquaculture in Maharajganj District of Eastern Uttar Pradesh*, 2013.

#### **4. Marketing and Processing of Agricultural Commodities**

Dinesh, Chand Meena, Department of Agricultural Economics, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, (Uttar Pradesh). *Dynamics of Spot and Futures Market of Mustard and Its Derivatives in India*, 2013-14.

Sharma, Hemant, Department of Agricultural Economics and Management, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur – 313 001 (Rajasthan). *Market Intelligence with Reference to Price Behaviour of Major Foodgrains in Rajasthan*, 2013.

#### **5. Trade in Agricultural Commodities**

Sundaramoorthy, C., Division of Agricultural Economics, Indian Agricultural Research Institute, Pusa, New Delhi - 110 012. *Analysis of Price Dynamics and Market Integration in Cotton Value Chain under Different Trade Regime*, 2013.

Thomas, Lijo, Division of Agricultural Economics, Indian Agricultural Research Institute, Pusa, New Delhi - 110 012. *Oilseed Economy of India: The Role of Policy Trade and Technology*, 2013.

Venkatesh, P., Division of Agricultural Economics, Indian Agricultural Research Institute, Pusa, New Delhi-110 012. *Intellectual Property Rights and Development of Indian Seed Industry*, 2013.

#### **6. Technological Change and Its Impact**

Dubey, Sangeeta, Department of Economics, University of Mumbai, Mumbai. *An Inquiry into the Viability of BT Cotton*, 2013.

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## **Abstract of Ph.D. Thesis in Agricultural Economics**

*Market Intelligence with Reference to Price Behaviour of Major Foodgrains in Rajasthan*, Thesis Submitted by Hemant Sharma and accepted by Department of Agricultural Economics and Management, Rajasthan College of Agriculture Maharana Pratap University of Agriculture and Technology, Udaipur – 313 001, Rajasthan in 2013.

Major Advisor: Dr. S.S. Burark, Prof. & Head, Department of Agricultural Economics & Management, Rajasthan College of Agriculture , Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan).

The study examines the magnitude and extent of fluctuations in the farm prices, seasonal behaviour, price forecast, market integration and market concentration of major foodgrains (bajra, maize, moong, moth, jowar, barley, gram, wheat) of Rajasthan. The secondary time series data covering the period from 2002 to 2012 and primary data for the period 2011-12 were analysed to achieve the stated objectives. The farm harvest prices of all selected six crops recorded a positive price variation from 87 per cent to 100 per cent and negative price variation in three crops from 6.7 to 13 per cent for a period of 15 years, i.e., 1995-2009 with the base year as 1995. The gross increase in annual farm harvest prices of maize, bajra and sorghum during the period 1995-97 to 2007-09 increased by 205.21, 206.85 and 192.25 per cent, respectively. Whereas the increase in farm harvest prices of gram, wheat, and barley in selected districts were 234.52, 228.81 and 225.84 per cent during the same period. The analysis of seasonal behaviour in maize, bajra, sorghum, moong and moth indicated that the period from October to December has accounted maximum arrivals in the selected markets and lower values of indices were observed during the period from January to September. The prices of selected commodities were forecasted by using ARIMA, ANN and smoothing exponential models using 10 years monthly average wholesale prices data. The results of Granger Casualty Test depicted that most of the markets had bidirectional influences on wheat and gram prices. These markets affected by prices of each other. The volatility in price of wheat and gram was not observed in any selected market. The market competitiveness in most of the markets was moderate to high as the arrivals were concentrated few large traders.

## NEWS

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### **Regional Seminar on Water and Food Security in India with Special Reference to Punjab and Ludhiana**

The Society organised a Regional Seminar on “Water and Food Security in India with Special Reference to Punjab and Ludhiana” jointly with the Institute of Development and Planning, Amritsar at Khalsa College of Education, Amritsar on November 8-9, 2013. Dr. T.S.Chahal undertook the responsibility of organising the Seminar.

### **74th Annual Conference of the Indian Society of Agricultural Economics**

The 74th Annual Conference of the Indian Society of Agricultural Economics will be held under the auspices of Dr.Babasaheb Ambedkar Marathwada University, Marathwada , Aurangabad sometime during November/December 2014. The exact dates will be announced shortly. Dr. P.K.Joshi, Director, South Asia, International Food Policy Research Institute, New Delhi has been elected to preside over the Conference. The following three subjects have been selected for discussion at the Conference.

1. Livestock Marketing and Supply Chain Management of Livestock Products.
2. Labour Scarcity in Agriculture and Mechanisation.
3. Subsidies in Agriculture and their Implications on Trade and Environment.

The Indicative Outlines on the three subjects would be circulated to the members and member institutions. **The Outlines on all the three subjects would also be made available in our Society’s website [www.isaeindia.org](http://www.isaeindia.org).** Research papers not exceeding 10 pages each (typed in double space – A4 size – on one side only) including tables, annexures, reference, etc., are invited for discussion at the Conference. Three copies of the papers along with Summaries (not exceeding 250 words) should reach the Society’s office not later than May 15, 2014. In the case of papers accepted for publication in full length in the Conference Number of the Journal, the authors should email a copy each of their papers at: [isae@bom7.vsnl.net.in](mailto:isae@bom7.vsnl.net.in) or send the CD of their papers in Microsoft Word for quick conversion.

### **Dr. D.K. Desai Prize Award for the Best Article published in the IJAE in 2012**

Under Dr. D.K. Desai Prize Award Scheme instituted by the Indian Society of Agricultural Economics, eight articles published in the three regular issues of the



Indian Journal of Agricultural Economics during the year 2012 were considered for prize by the Prize Awards Committee. On the recommendations of the Prize Awards Committee, the Society awarded a prize of Rs. 5,000/- to the following full length article which was adjudged the best :

“Electricity Subsidy in Punjab Agriculture: Extent and Impact” by Dr. Karam Singh (published in October-December 2012 issue).

**Dr. Anamitra Saha Prize Award for the Best Article  
published in the IJAE in 2012**

Under Dr. Anamitra Saha Prize instituted by the Indian Society of Agricultural Economics eight articles published in the three regular issues of the Indian Journal of Agricultural Economics during the year 2012 were considered for prize by the Prize Awards Committee. On the recommendations of the Prize Committee, the Society awarded a prize of Rs. 10,000/- (Rupees Ten thousand only) to the following full length article which was adjudged the best:

“Performance and Factors Influencing the Impact of Watershed Development Programme in Rajasthan” by V. Ratna Reddy, Sanjit Kumar Rout, T. Chiranjeevi and S.S.P. Sharma (published in January-March 2012 issue)

The announcement of these awards was made at the 73rd Annual Conference of the Society held at National Academy of Agricultural Research Management, Hyderabad on December 18, 2013.

**Guidelines for Organisation of Regional Seminars**

The Indian Society of Agricultural Economics has a scheme for organising Regional Seminars, from time to time, on topics of current importance. Senior agricultural economists working in agricultural universities/social science research institutions would be assigned full responsibility to hold such Seminars under the auspices of the sponsor University/Department of Agricultural Economics and Indian Society of Agricultural Economics. The organisers will need to submit a detailed synopsis of the subject selected for the Seminar and identify persons in the region who will be able to submit research-based papers on the subject. This preparatory work is essential before the Society could consider financial assistance. The idea is to promote analysis of region-specific issues supported by field level research ongoing in the region on selected subjects. The guidelines for the organisation of the regional Seminars can be had from the Honorary Secretary of the Society.

1. The scholars/institutions proposing to organise such Seminars are at liberty to select the subjects but the focus should be on aspects of importance to the region; and on giving an opportunity to scholars in the region to discuss their work among themselves and with select senior scholars.

2. The scholars proposing to hold such Seminars should submit to the Society well structured and focused synopses on regional themes along with a list of the proposed paper-writers from the concerned region(s). On the basis of this information the Society would be able to decide on the financing of the Seminar.

3. The number of papers invited for discussion at a Seminar should be restricted to about 10 to 12 and the number of participants be limited to about double the number of papers accepted for discussion but not exceeding 25. The duration of the Seminar shall be limited to 2-3 days. The organisers of the Seminar would have the freedom to decide about the selection of paper-writers from the region concerned as well as the participants.

4. Abstracts of the proposed papers on the subject selected for the Seminar should be submitted within three months after they are solicited by the organisers so that they can form the basis for selection of the paper-writers/participants. Besides, some invited papers may also be commissioned.

5. The scanning of the Abstracts, and the selection of paper-writers on the basis thereof will be the responsibility of the scholars/institutions proposing to organise the Seminar. Copies of the Abstracts and the list of selected paper-writers will be submitted to the Society by the Organisers. The Society will then publish the detailed synopsis of the proposed Seminar in the ensuing issue of the Indian Journal of Agricultural Economics.

6. It is desirable to ensure that the invitation to paper-writers is issued well in advance, say about one year in advance of the holding of the Seminar.

7. A first draft of the paper should be submitted by the selected paper-writers to the organisers within three months of the approval of the Abstracts. The draft papers would be peer reviewed and returned to the paper-writers with the comments of the referees, if any, for revision. The reference of the first draft of the papers will be made to the senior scholars experts by the organisers.

8. The revised papers should reach the host institution before two months of the date fixed for holding the Seminar, so that they can be circulated well in advance to all participants. Copies of the revised papers will be sent to the Society by the organisers as soon as they are received from the paper-writers.

9. The Society would nominate a senior scholar from the region to guide the organisation and conduct of the Seminar. The organisers of the Seminar and the nominated expert should conduct, guide, and monitor the discussions at the Seminar, advise the authors to revise their respective papers in the light of the comments made at the Seminar and the comments offered by the nominated senior expert for possible publication by the Society.

10. The organisers of the Seminar should also prepare a summary of the Proceedings of the Seminar and send it to the President of the Society, immediately after the holding of the Seminar.

11. The Society would provide financial assistance to the host institution, the proposal of which is accepted by the Society, to the extent of Rs. 50,000 to meet the expenses of the Seminar. The organisers of the Seminar should send to the Society item-wise statement of accounts duly certified by the head of the Department of the host institution or its auditors.

12. The Society may consider publication of the papers submitted at the Seminar along with the proceedings. In such an eventuality, the editing of the papers and proceedings will need to be done by the organisers.

#### **Information on Completed Ph.D. Theses in Agricultural Economics: 2013-2014**

The Society publishes a list of approved Ph.D. Theses in Agricultural Economics in the last issue of the Journal every year. The Chairman/Heads of the Department of Economics/Agricultural Economics in Universities and other institutions in India are requested to kindly send us a list of completed Ph. D. Theses in their Departments/Institutes during the academic year 2013-2014 giving the details about the titles of the Ph.D. theses, name of scholars and Superiors, University to which the thesis was submitted and the year of acceptance of the thesis for the Ph.D. award.

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## **Indicative Outlines of Subjects Selected for Discussion at the 74th Annual Conference of the Indian Society of Agricultural Economics**

The 74th Annual Conference of the Indian Society of Agricultural Economics will be held under the auspices of Dr. Babasaheb Ambedkar Marathwada University, Marathwada (Aurangabad), Maharashtra sometime during November/December 2014.

The following subjects are selected for discussion:

- (a) Livestock Marketing and Supply Chain Management of Livestock Products.
- (b) Labour Scarcity in Agriculture and Mechanisation.
- (c) Subsidies in Agriculture and Their Implications on Trade and Environment.

Research Papers on the above themes are invited from members and other paper-writers for discussion at the Conference. The scope of each of the three themes is spelt out in the enclosed Indicative Outlines below. The Indicative Outlines are also available on the Society's website [www.isaeindia.org](http://www.isaeindia.org).

Three copies of each paper (not exceeding 3500 words or 10 pages), with its Summary in triplicate not exceeding 250 words need to be submitted. The last date for the receipt of the papers at the Society's office is May 15, 2014.

### **SUBJECT I**

#### **LIVESTOCK MARKETING AND SUPPLY CHAIN MANAGEMENT OF LIVESTOCK PRODUCTS\***

India witnessed an impressive demand-led growth of over 4 per cent in its livestock sector in the past three decades. This contributed toward sustaining agricultural growth, reducing poverty and managing adverse effects of crop failures on food and nutrition security. For past one and half decade, India has retained its position as the largest producer of milk in the world, and has now emerged as the largest exporter of beef, mainly buffalo meat. Milk is now the largest agricultural commodity in physical as well as value terms.

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\* Prepared by Dr. P.S. Birthal, Principal Scientist, National Centre for Agricultural Economics and Policy Research (NCAP), New Delhi-110 012.

Rising incomes, a fast-growing urban population, and globalisation are opening up new market opportunities for livestock products. Market opportunities, however, are being accompanied by many complex challenges. Livestock producers lack access to resources, technologies, and markets. Markets for livestock and livestock products have by and large remained unorganised, traditional and fragmented even after decades of economic development. Livestock production is dominated by small-scale producers, and because of small scale production they are often unable to establish market linkages with processors and marketing firms. For example, about 60 per cent of the milk produced is marketed, of which only about 25 per cent is handled by the organised sector comprising co-operatives and private processors. The rest 75 per cent flows to the consumers through informal channels. Livestock products are perishable and need to be transported immediately to the demand centres or converted into less perishable forms. It is therefore essential to understand the markets or supply chains for livestock and livestock products – from production to consumption- in terms of activities, participation of different stakeholders and their relationships, institutional arrangements, financial and technical support, and the critical constraints that limit growth of livestock production and consequently the competitiveness of small-scale livestock producers.

The paper writers may focus on the following issues:

- Both formal and informal markets for live animals, especially ruminants, are not well analysed and understood. An analysis of structure, conduct and performance of formal markets will enrich our understanding about their functioning, and suggest appropriate policy measures for efficient functioning of the existing markets, and to develop new markets for live animals. Potential contributors may focus on in-depth case studies of selected regulated markets for live animals. In the informal market segment, farmer-to-farmer exchange (mainly of large ruminants) and aggregation of animals (goats, buffalo calves) by the itinerant traders have remained important channels. Contributors may map the existing market channels and associated activities. Pricing live animals in formal as well as informal markets comprise an important topic for research.
- India's 'white revolution' spearheaded by the National Dairy Development Dairy (NDDDB) is as celebrated as 'green revolution'. Village level dairy co-operatives promoted by NDDDB have played an important role in providing farmers an access to markets at their doorstep, and in supplying inputs and services including credit and insurance. Contributors may examine these value chains in terms of efficiency, inclusiveness and benefit sharing. It would worth studying the economic and social dimensions of dairy producers' companies, the new form of linking farmers to markets.

- Unfolding of economic reforms has provided a fillip to private sector investment in livestock value chains. Most private dairy processors have now their plants in well-endowed dairy regions, and have developed linkages with the farmers through one or another form of contract farming. It would be interesting to compare different models of contract farming in respect of their terms and conditions, that is selection of partners, exclusionary criteria, and provision of technology, inputs, and services, price fixation, sharing of benefits, social and economic impacts, and governance mechanisms. It is also important to (i) study how the dairy value chains are financed, and (ii) how these have scaling- up and – out?
- Led by private sector there has been a rapid transformation in the poultry value chains. The introduction of contract farming has turned subsistence production into a commercial venture. The contract farming in poultry, however, is different than in dairying. Fixed income contracts are common in broilers. Under such contracts, processors share sizeable share of cost by providing critical inputs such as chicks, feed and medicines to the farmers. This in a sense is financing of the value chain. Farmers for their contribution to cost receive fixed growing charges on body weight basis, which in a sense an insurance against market risks. These provisions have led to scaling up of the broiler production. The authors may examine these issues?
- Other forms of institutions linking livestock producers to markets are self-help groups and producers' associations, though these are not much noticed in the livestock sector. Being collectives, these generate scale economies and strengthen farmers' bargaining power vis-à-vis large agribusiness firms. Contributors may examine their role in enhancing farmers' access to markets, technologies, inputs and services.
- Informal value chains are still important to serve the local markets. These include milk vendors and peri-urban dairies which locally procure or produce milk and sell directly to the consumers or institutions in the locality or nearby cities and town. Many a times, vendors operate inter-linked transactions by advancing credit to the producers. These chains may be studied for their efficiency, sustainability and impact.
- With multiple stakeholders markets for livestock and livestock products are expected to be more competitive. This is likely to influence prices of livestock products, and consequently the welfare of the farmers. It is thus important to study the likely impacts of increased competition on welfare and farmers and benefit sharing among other stakeholders on the value chain.
- Bulk of the labour demand in animal husbandry especially in dairying is met by women. How the women would be impacted by development of supply chains is worth examining.
- Expanding demand for livestock products is being accompanied by increased demand for safety and hygiene. Food safety and quality issues are becoming

more important in export-driven value chains. Now food safety regulations are in place in order to ensure that consumers get safe and quality foods. The issues that may be examined in this context are: How formal and informal value chains comply with food standards? What are the costs of compliance at different stages of the value chain? Is there any premium on price for safe and quality food? Are the benefits due to improved safety and quality shared with farmers?

In general, the paper writers should focus on (i) understanding the operations of formal and informal markets for livestock and livestock products, (ii) opportunities for small livestock producers to benefit from value chains, (iii) policies and institutions that reduce transaction costs and facilitate small producers' participation in modern value chains.

## SUBJECT II

### LABOUR SCARCITY IN AGRICULTURE AND FARM MECHANISATION\*

Labour in agriculture is becoming scarce in most parts of India. High economic growth, fast infrastructure development and more wages are pushing farm labourers to migrate to urban areas or find alternative job opportunities. The labour scarcity in rural areas is leading to increase in farm wages and adding to the cost of production of agricultural commodities. Farm machinery is the possible option for substituting labour and improving the productivity of labour, land and other inputs. Introduction of machinery to substitute labour (labour saving) is a common phenomenon associated with the release of labour for employment in other sectors of the economy. The purpose of mechanisation is also to produce more from the existing land, using machinery as a complementary input, required to achieve higher land productivity. Similarly, machines are required to reduce post-harvest losses and improve processing of agricultural commodities. The added benefit of mechanisation is associated with a reduction in the drudgery of farm work, greater leisure, or reduction of risk, etc.

Consequent upon the transformation of agriculture in terms of technological advancements, change in cropping pattern, cropping intensity, mechanisation of field operations, and use of inputs such as high-yielding variety seeds, fertilizers, irrigation and pesticides, the employment of human labour has undergone various structural changes in Indian agriculture. Though, India has abundant labour force in agriculture, non-availability of manpower during peak crop season is a growing problem. One of the serious problems concerning labour employment is its seasonality which has caused under-utilisation of the available labour in some seasons and over-utilisation

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\*Prepared by Dr. D.K. Grover, Director, Agro-Economic Research Centre, Punjab Agricultural University, Ludhiana-141 004 (Punjab)

in other periods. The peak and troughs are pronounced more in recent years due to specialised kind of farming especially in green revolution belt of the country. To cover up the gap between supply and demand of farm labour in a specific season, migration from labour abundant (especially from Bihar and Uttar Pradesh) to labour scarce states (like Punjab and Haryana) is a common phenomenon. During recent years, continuous shift of rural population towards service sector for better working conditions, increasing urbanisation and migration of villagers in search of greater opportunities, rise of rural entrepreneurs, etc. has resulted into the shortage of agricultural labour. The implementation of MGNREG scheme in 2006 has further aggravated the problem of labour scarcity in rural areas. The 2011 census points towards the movement of labour away from agriculture in recent years. Indian agriculture now needs to infuse technologies, including mechanisation, to overcome the labour scarcity.

The future of agriculture is dependent on penetration of scale-neutral technologies; trends of which have already begun in some ways. According to the Department of Agriculture, the share of agriculture workers and draught animals (farm power sources in agriculture) has come down from 63.5 per cent in 1971-72 to 13.67 per cent in 2009-10, whereas the share of tractors, power tillers, and motors has gone up from 36.51 per cent to 86.33 per cent during the same period. With newer farm techniques such as combined harvester, irrigation equipments (sprinklers/drip), plant protection equipments (high clearance self-propelled sprayer, blast/aero sprayer), crop/operation-specific machines (rice planter, pre-germinated-paddy seeders, cotton pickers, sugarcane harvesters, wheat straw reaper/loader, paddy straw bailers, maize planter/dehusker/thresher, etc.), resource conserving technologies (zero-till-drill, raised-bed planter, laser leveller, happy seeders, etc.), the dependence on farm mechanisation has substantially increased. Sub-Mission on Agricultural Mechanisation has been proposed for the Twelfth Plan, which includes custom-hiring facilities for agricultural machinery as one of its major components. Its focus is on increasing the reach of farm mechanisation to small and marginal farmers and to the regions where availability of farm power is low.

Though the country has been witnessing considerable progress in farm mechanisation, its spread across the country still remains uneven. Introduction and adoption of agricultural machinery in the recent past has mainly been confined to some of the northern states and some parts of coastal India. However, with the increase in the irrigation facilities and modernisation of the cropping practices, the demand for agricultural machinery has shown an increasing trend in the southern and western parts of the country. The eastern and the north-eastern states have been less responsive to adoption of agricultural machinery. While the farm power availability of Punjab has reached to over 3.5 Kw/ha, it is still less than 0.90 Kw/ha, in many states like Odisha, Rajasthan, Himachal Pradesh, Jammu & Kashmir, Chhattisgarh, Jharkhand, Gujarat, Assam, Madhya Pradesh and Maharashtra. Tractors are mainly used in the states like Punjab, Haryana, Uttar Pradesh, Rajasthan, Madhya Pradesh,



and Gujarat. These six States together account for around 80 per cent of the total tractors in the country. Punjab has the highest density of tractors in terms of gross cropped area. Empirical data confirmed that availability of farm power has a direct correlation to agricultural productivity.

Indian agriculture is dominated by small and marginal farmers. Smallholding is one of the major constraints in adoption of farm mechanisation. In this context, establishing custom hiring or farm service centers facilitated use of farm machines in north-west India. Need for efficient but less costly agricultural tools and equipment suitable for small farmers coupled with government assistance in the form of subsidies, easy/soft credit availability, trainings and awareness will always remain there.

The paper contributors may focus on the following issues/themes for discussion:

- A detailed analysis on spatial and temporal use of rural labour may be undertaken using the NSSO data. The analysis will provide deep insights on inter-sectorial shift of labour in rural areas. The analysis may further explore the drivers of emerging shifts. The studies may test few hypotheses, such as (i) how economic growth is contributing the shifts in labour use? (ii) how non-farm wages, education and infrastructure development are responsible for labour use pattern? and (iii) how changing patterns of labour use is affecting agricultural wages?
- Seasonality in employment is the key characteristics of agriculture. The increase in seasonality of agricultural employment has led to frictional unemployment and under employment of labour in agriculture especially during lean months and unwarranted wage hikes during peak months. The gaps in availability and requirements of farm labour in different states/crops overtime and across the seasons (labour seasonality) needs to be analyzed to suitably augment the alternative sources of agro-based employment both within farm sector to make optimum/profitable use of available farm labour during the lean period and also to assess the need of farm mechanisation during labour- scarce months/seasons. To what extent the shift of rural population towards services sector, increasing urbanisation and migration in search of better opportunities, rise of rural entrepreneurs, etc. has resulted into the shortage of agricultural labour?
- MGNREGS wages are providing choice of work to casual labour in rural areas. How far employment provided under MGNREGA has resulted in agricultural labour scarcity? Which season, crops/farm operations are the most adversely affected, calling for their mechanical solutions? The extent of labour scarcity by crops/enterprises, seasons, regions, types of labour, farm operations, gender, rain-fed and irrigated areas, peri-urban and rural, seasonal/annual/ plantation crops etc. needs to be estimated. What is the

coping strategy practised by the farmers in the event of non-availability of labour? Is there any evidence of changing production pattern in the event of labour non-availability?

- In the context of growing agricultural labour scarcity, the specific crop(s) and farm operations in a particular agro-climatic region (area/location) and during specific month/season, needs to be identified to assess the nature and extent of various mechanical solutions required in Indian agriculture. The successful or otherwise, experiences of different existing/recently introduced farm machineries along with their impact on labour saving and productivities is required to be documented with empirical evidence. Is there any instance where farm mechanisation has resulted into unemployment/underemployment among workers in rural areas?
- Despite the availability of many labour saving devices like rice planters and cotton harvesters, these could not be successfully adopted for want of compatible mat type rice nursery and compact/synchronized cotton varieties. Such incompatibilities need to be highlighted, if any, for appropriate research and development efforts in terms of various crops – specific agronomic practices as well as evolving suitable new crop (s) varieties for mechanical – friendly operations.
- Uneven availability and adoption of farm mechanisation across location/farm sizes calls for the need to understand various factors/determinants responsible for such phenomenon. What may be the potential areas for mechanisation in labour-scarce as well as labour-abundant areas? How have the dynamics of land ownership affected the availability of agricultural labour and potential for mechanisation? Supply constraints of various agricultural machines in term of availability, quality standards, repairs/maintenance facilities etc. should also be studied for suitable infrastructural development.
- Estimation of future demand for mechanisation will be helpful for production/maintenance capacity building. The role of custom hiring system on co-operative basis/owned and operated by cooperative societies or private agro- service centres etc. in the adoption of farm mechanisation especially among small and marginal farmers needs to be evaluated. Can government assistance in the form of direct/indirect subsidies for the purchase of selective agricultural equipments/machineries, awareness creation and imparting requisite trainings, etc. be helpful for effective and balanced development of agricultural mechanisation in varied technological, agro-economical, sociological environments/ agro-climatic zone of the country?
- An analysis of historical trends of farm mechanisation across different regions and/or states may be undertaken in the context of changing farm wages in labor-scarce and labour-surplus regions. How organised sector is entering the farm mechanisation and how effective impact they are making in promoting farm mechanisation. It will also be interesting to develop an

inventory of government programs and policies to promote farm mechanisation and assess their implications on efficiency and employment. What sort of support is needed from the government to promote smallholder-friendly farm mechanisation will help to evolve future policies. Can the public – private partnership (PPP) model be supportive to promote inclusive farm mechanisation in the country?

These are some of the indicative issues/themes. Other dimensions on the farm mechanisation are also encouraged from the paper writers.

### SUBJECT III

#### SUBSIDIES IN AGRICULTURE AND THEIR IMPLICATIONS ON TRADE AND ENVIRONMENT\*

Indian government provides a whole host of subsidies to agriculture in the country. Agricultural subsidy has grown phenomenally over time and has averaged around 1.7% of the country's GDP during the last decade. A large part of this subsidy is in the form of input subsidy provided to fertilizer, irrigation, electricity and to a lesser extent credit and insurance. Indeed, the provision of input subsidies has been one of the cornerstones of the agricultural policy package that was instrumental in the rapid spread of the Green Revolution since the mid-1960s.

Over the years the amount of subsidy as well as the number of agricultural activities that receive subsidy has expanded drastically. Currently there are subsidies for several activities within agriculture, such as for transportation of seeds, capital subsidy for seed banks, investment subsidies for the construction of storage facilities, general and commodity-specific marketing subsidies including for exports, etc., to name just a few. Besides Central government subsidies, most states also provide subsidies to the sector such as for export promotion, agricultural research and extension, etc. The focus and relative importance of these subsidies have been varying over time.

The provision of these subsidies has attracted a fair share of research attention and has been a subject of policy debates for several years. In particular some of the large items such as input subsidy for fertilizer, irrigation and electricity have been studied by several researchers and research organisations including wings of the government. Many of these studies have focused on the macro level impacts of such subsidies on aggregate agricultural productivity, resource use efficiency, operational / administrative aspects of subsidy provision, farm size distribution of subsidy provision, their externalities on the environment such as on soil quality, water table, etc. In contrast, much of the output and marketing subsidies including for exports remain under-researched.

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The following are some issues that the paper writers could focus upon:

- Despite some well researched studies, there is still no comprehensive documentation of the various direct and indirect subsidies provided to agriculture in the country by the Central and State governments. Even the few available studies need to be updated with the latest available information. The evolution in the structure and amount of these subsidies over time needs to be studied in order to assess their costs and benefits.
- The effect of subsidies on agricultural productivity could be positive, neutral or negative, and is not straightforward. Further, these impacts could vary across particular crops, across geographies, and also over time. Quantifying these would be useful to assess the efficacy / desirability of these subsidies. Further, it would be pertinent to understand the channels – direct or indirect – through which subsidies affect agricultural productivity.
- Agricultural subsidies can affect resource allocation in several ways. Output subsidies, whether direct or in the form of a minimum support price over and above the market price, and input subsidies for fertilizer, irrigation, electricity, credit, insurance, etc., could affect the relative profitability of different crops and hence could be a factor affecting cropping pattern. Similarly, investment subsidies for agricultural infrastructure and capital equipment could affect investment decisions with attendant implications for agricultural development spatially and diversification across commodities. Large gaps remain in the current state of knowledge on the relationship between agricultural subsidies and resource allocation.
- Fertilizer subsidies were part of the policy package that helped promote Green Revolution. Over time it has become highly skewed in favour of nitrogenous fertilizers despite several attempts at reforming the subsidy regime to correct this imbalance across different types of nutrients. What are the environmental fall out of the large subsidy for nitrogenous fertilizer, in terms of soil health and productivity in different parts of the country? Which are the districts / states where the environmental problems have become acute or could turn so in the not so distant future? What is the impact of fertilizer subsidy on cropping pattern, and crop diversification towards high value commercial crops? What is the scope for subsidy reduction here without threatening food security in terms of a broader set of commodities that includes pulses, vegetables, fruits, and oilseeds and not just the two main cereals, rice and wheat? As the country is 100% dependent on imports for potassic fertilizers, it is susceptible to changes in their world market conditions and also the movement of the exchange rate. It is worth examining the policy options that could ensure a degree of stability in their availability in the country, which is a pre-condition for balanced use of various fertilizer types.
- Irrigation subsidy is one of the large items of input subsidy. What are its implications for water use efficiency in general in various states? Does irrigation

subsidy result in the (over)use of water? How do subsidies for surface water from large-scale irrigation projects compare with subsidies for micro-irrigation in terms of productivity levels and water use efficiency? Should the government subsidise “water” or “water conserving irrigation technologies”?

- A closely related issue is the subsidies for electricity that many states provide for agriculture. The experience of states such as Punjab and Haryana show that there is a strong relationship between power subsidies and (over)use of groundwater. What is the experience of other states that provide power subsidies? Is there a similar tendency for overuse of groundwater in these states as well? If not, what are the reasons? Is it due to some complementary measures that these states have taken to ensure groundwater is not overused? Or is it related to the cropping pattern prevailing in a state? Given that the cropping pattern itself may be influenced by other elements of government policy such as the relative efficacy of the system of MSP and assured public procurement, it also raises the issue of interaction amongst different elements of policies / subsidies and their implication for environment in general and groundwater use in particular. This is especially relevant in the case of subsidies provided for rice cultivation and sugar (and hence sugarcane) production that eventually cater to export markets.
- India does not provide direct export subsidies for individual commodities. However, agricultural exporters do receive several subsidies such as tax exemptions on profits, subsidies on domestic freight cost for specific commodities, credit subsidy, etc. What has been the impact of such subsidies in promoting exports of various commodities? Do the benefits outweigh the fiscal costs? Besides these indirect export subsidies, the government also has several programmes that aim to build export competitiveness such as those that help producers/exporters adhere to Sanitary and Phytosanitary standards, certification requirements, etc. The cost effectiveness of such programmes is by and large unknown. How do they compare with some of the indirect export subsidies mentioned above?

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**FIRST ANNOUNCEMENT**

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**Inter-Conference Symposium  
of  
International Association of  
Agricultural Economists (IAAE)  
on**



**Re-visiting National Agricultural Policy in the light of  
Globalisation Experience: The Indian Context  
(12-13 October 2014, Hyderabad, India),**

**organised jointly by**

**Indian Society of Agricultural Economics (ISAE)**

**And**

**Acharya N.G. Agricultural University (ANGRAU)**

**and supported by**

**International Association of Agricultural Economists (IAAE)**

Conference theme: Re-visiting National Agricultural Policy in the light of Globalisation Experience: The Indian Context

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India is the third largest producer of agricultural output in the World. Nearly two-thirds of India's population still derives their livelihoods from agricultural sector directly and indirectly. Thus, agriculture development is always a priority in the development policy in India. Most of the agricultural policies in India during the pre-1990s era were centered on production-oriented strategies. These policies were highly relevant until mid-eighties-as increase of food production was a primary development goal of the India's policy to reduce the dependency on other countries for food imports. The First to Fifth Five Years Plans (1951 to 1975) mainly focused on irrigation expansion, introduction of so-called 'green revolution' technologies especially modern crop varieties/hybrids, government's policy support for both input and output marketing, setting of big fertiliser plants for increasing domestic supplies of chemical fertilisers, nationalisation of commercial banks in order to increase the rural credit flow, setting up of Commission for Agricultural Costs and Prices, and setting up of Food Corporation of India, etc. mainly aimed at achieving rapid growth in food grain production in India. As a result of all these efforts, India's food economy has been transformed from a 'chronic deficit' stage to the 'self-reliance' stage by the mid-eighties, and reached the record of food surplus stage by the end of

the last century. The Indian farmers were appreciated across the world for their dramatic success in achieving green revolution, and it became a model for other Asian countries. The history of green revolution in India indicates that the farmers have capabilities to accelerate farm output with the available resources, if the government's policies are favourable as they were in the 1960s, 1970s and 1980s. The 1990s have witnessed a significant shift in the macroeconomic policy environment around the globe including in India. India signed WTO agreement (1995) in order to integrate with the global trade.

Vacillation in policies on farm subsidies, market reforms, liberalisation of farm input sector, trade liberalisation, etc. are some of the policy changes after mid-1990s. Agriculture's contribution to the overall Gross Domestic Product (GDP) of the country has fallen from about 30 per cent in 1990-91 to less than 15 per cent in 2011-12 indicating a shift from the traditional agrarian economy towards a service dominated one. During 12th plan, India's economic growth is aimed at to have a 9 percent which warrants 4 per cent growth in agriculture. An average household still spends half of its expenditure on food and food products (NSSO survey 2009-10) and thus meeting the food demand will be formidable, given the scenario that consumption is increasingly getting more diversified. The key to ensuring long-run food security lies in targeting cereals productivity to increase significantly faster than the growth in population. The upcoming challenges at national level remain to be : need for more investment in infrastructure, soil nutrient management in the situation of exponential growth in fertiliser subsidy, significant gap between the varieties released by the public sector institutions and the varieties adopted by the farmers, private sector research and seed industry focusing only on varieties and hybrids with massive markets, rain fed crops getting lesser research attention, and misgivings about transgenic food crops , under-funding of agricultural research, cultivars with stress tolerance to climate change, under performance of extension agencies, frequent failure in timely availability of quality seeds, inadequate fodder availability and poor access to animal health to support dairy industry, lesser success in linking small producers with markets and urgent need for improving the productivity of common pool resources (Planning Commission , Government of India, 2008).

Further, prices received by the farmers for their products have failed to keep pace with costs or the general price level and, as a consequence, profitability making farming an unviable proposition. On the supply side, no dramatic technological breakthrough has happened since green revolution period. With limited success in increasing water use efficiency in irrigated agriculture, rain fed area of 200 million hectares with largest concentration of poverty, remained way behind in terms of technology adoption (CRIDA, 2007). India's small - holder farmers are much less empowered to access crucial production resources despite many programs aimed at them (National Commission on Farmers, 2005). The natural resource base of Indian agriculture is becoming increasingly limited. Analysts have expressed concern for a secular decline in public investment in agriculture. Private investment in agriculture

is also increasing only in small increments. Despite a number of reforms introduced in agricultural marketing, the marketing efficiency has not significantly improved. Technological change has been the main engine of agricultural growth in India. The Total Factor Productivity (TFP) growth, which was the main driving force for overall growth of agricultural output during eighties in India, started slowing down in recent years (Bhushan, 2005). Despite the success of green revolution, India still houses one-fourth of the world's hungry and poor and 40 percent of the world's malnourished children and women (NAAS, 2009).

Indian agriculture has shown a fatigue and struggles to manage the new dynamics. The increasing divergence between the growth trends of the total economy and that of agriculture and allied sectors suggests an under performance by agriculture. And agricultural performance in India has also been quite volatile (CV 1.6 for the period 2000-01 to 2010-11 against 1.1 during 1992-93 to 1999-2000). While the Gross Capital Formation as percentage of agricultural GDP has improved substantially, there has not been a commensurate improvement in the rate of growth of the agriculture sector. The inconsistency in fertiliser subsidy policy has led to an imbalanced use of N, P and K. The expenditure on subsidies crowds out public investment in agriculture research, irrigation, rural roads and power. Inflation has become a persistent problem in recent years and higher prices of perishable agricultural commodities puts lot of pressure on their consumption by the low income families.

Public Private Partnership (PPP) in agricultural development is increasingly realised in recent years. This is apparent in initiative such as infusion of new technologies like BT cotton, hybrid seed technology in maize; in a mainstreaming of the fragmented small holders by integration of rural business/ service hubs (RBHs) at the back end and agro-processing industry and organised retailing at the front end. Successful examples like BT cotton, hybrid maize, pusa basmati rice, etc. suggest beneficial outcomes coming from public sector partnership with the private sector farmer groups and the like. The government has to play a more proactive role as coordinator, facilitator and also as a regulator in promoting PPP. Higher investment in basic infrastructure required for agricultural supply chain will attract private investment.

Future breakthrough technologies in agriculture will come increasingly from the private sector, and India's private sector has the strength to multiply those technologies and to reach millions of farmers (big and small) in the fastest possible way. There is a need to channelise these sources in an orderly manner, so that in the process, apart from the private sector profitability, the farming community is also benefited. This will assist in pushing Indian agriculture to a higher and more sustainable growth which would be the most powerful engine for poverty reduction.

The policy reforms of the 1990s more or less eliminated the bias against agriculture by lowering industrial tariffs and correcting for the overvalued exchange rates which led to an improvement in the terms of trade in favour of agriculture. This



was followed by a calibrated liberalisation of agri-exports and imports. As a result, Indian agriculture has increasingly been opened to global agriculture with the ratio of agricultural exports and imports as a per cent of agricultural GDP rising from 4.9 per cent in 1990-91 to 12.7 per cent in 18 State of Indian Agriculture in 2010-11. This is still low as compared to the share of India's total exports and imports as a percent of India's GDP. However, the share of agricultural exports in India's overall exports has been declining from 18.5 per cent in 1990-91 to 10.5 per cent in 2010-11. Bringing in reforms to streamline domestic markets and expanding the infrastructure and institutions to connect local markets with national and global markets, will go a long way in improving India's competitiveness and the benefits from trade liberalisation.

The primary goal of this proposed Inter-Conference Symposium is to facilitate an interaction among researchers and key stakeholders on agricultural policies in the context of globalisation. The new economic policy of India (1991) included three elements – Globalisation, Liberalisation and Privatisation. Globalisation integrates Indian economy with global economy through the reduction in import duties and export restrictions, promotion of foreign investments and permission for free flow of foreign technology and skills (Buggi *et al.*, 2001). In India, economic growth improved significantly in last two and half decades particularly in the post-reform period. India is considered as one of the fastest growing economies in the world. However, the problems of globalisation have not been seriously addressed by the government policies and strategies, especially with regard to agricultural sector. The experience of the economic reforms in the last 16 years indicate while there have been improvements in economic growth, foreign exchange, IT revolution, export growth etc., the income distribution has been unequal and only some sections of the population benefited more from higher growth and prosperity. We have problems of poverty, unemployment, inequalities in access to health and education and poor performance in agriculture sector.

One of the excluded sectors during reform period was agriculture which showed low growth and experienced more farmers' suicides due to various factors. The post-reform growth was led by services. Commodity sector growth (agriculture and industry) has not been higher in the post reform period as compared to that of 1980s. Particular worry is agricultural sector which showed lower than 2 per cent per annum in the last decade. There is disconnection between employment growth and GDP growth. In other words, employment is not generated in industry services where growth is high. On the other hand, GDP growth is low in agriculture where majority are employed.

Today, even after 60 years of independence agricultural sector bears 60 per cent of population with low earnings, while industry and services together bears 40 per cent with high incomes. Thus, some people argue that there has been lopsided approach to development in India in the last two decades. Governments are more interested in pleasing the corporate sector (e.g., SEZ policy) rather than helping agriculture sector, while the European Union is considering the release of additional

land for agriculture-set aside under 1992 regulation to control excess capacity. It is viewed by many that globalisation policies in the 1990s and beyond have created many challenges for agriculture in developing countries. Some of the consequences and impacts of globalisation are: exposure of domestic agriculture to international competition, growth of non-agricultural sector and its impact on demand for agricultural products, urban middle class life style changes including diets, rising food imports in developing countries, competitiveness of diversification of domestic production systems, vertical integration of the food supply chain.

Because of demographic pressure, there has been significant increase in small and marginal farm holdings. These farmers have to face the challenges of globalisation. Risk and uncertainty has also spread to marginal lands. The diversification of agriculture also raised concerns on food security. One of the paradoxes of Indian economy is that the decline in the share of agricultural workers in total workers has been slower as compared to the decline in the share of agriculture in GDP. As a result, the labour productivity in agriculture has increased only marginally while that of non-agricultural workers increased rapidly. The emerging trend towards urbanisation involved reduction of labour force in agriculture and contributes less to national income and a corresponding increase in the non-farm employment in rural and urban areas (Subramaniya, 2003).

The Human Development Index shows wide gap between the developed and developing countries. India stood 128 in the HDI value list of Human Development Report, 2007. More people are watching T.V, and talking on phone and communicating on line, but it is also true that India today faces huge backlogs of deprivation and inequality that leave huge disparities across the country. In the villages, farmers are not much aware of global economic system. Most of the food crops are converted into cash crops. As there is a shift from food crops to export crops, the prices of food items went on high, and the poor people could not buy from their meager income.

A section of policy makers argue that in a democratic set up, it is important that fruits of development are equitably distributed between regions and among the various echelons of the society (Bhargava and Dave, 2003). The development due to globalisation not only widens the gap between the rich and poor but also it promotes urbanisation and flow of rural poor to urban areas and diversion of potential cultivable land to urban activities. As a result the food production is slowed down and availability of food per capita also undergoes decline. Deaton (2003) opines that more than one fourth of the World's poor live in India. India's economic liberalisation in the early 1990s resulted in high rates of growth, whether it reduced the numbers of poor or benefit only increasingly wealthy urban elite is a question. The gap between rural and urban areas widened because of the vast differences in the levels of literacy, availability of living facilities such as water, drainage, housing, power, lighting, food and transport etc.

There is a school of thought viewing that due to globalisation, food items are being exported to India in the form of increased consumption of meat, western fast food, sodas and cool drinks, which may result in public health crisis as speculated by certain researchers. The rich biodiversity of India has yielded many healthy foods prepared from locally available organisms. But the marketing by MNCs with large advertisement campaigns lead the people to resort to their products (Mascarenhas, 2003).

CORE ISSUES TO BE CONSIDERED FOR DISCUSSION (FOR CONTRIBUTED PAPERS)

The nature and depth of policy issues presented above calls for more enlightened discussion so that the outcomes of discussion can be useful to closely look into the agricultural policy issues and go for corrections. With this in view, the following key issues and policy areas have been identified:

- Economic viability of farming in India as a consequence of policies pursued for the past two decades (Is farm profitability declining? Is an Indian farmer under distress today? What are the policy-instruments/factors affecting the farm profitability?)
- Role of frontier technologies such as biotechnology (including promotion of GM crops), nanotechnology, ICT, etc. in accelerating agricultural growth and Government's responsibility in formulating and pursuing clear cut and well defined technology policies
- Role of public support systems to improve productivity and incomes of farmers with emphasis on small and marginal farmers and dry land areas – past performance and future strategies
- Rural employment guarantee programmes such as MNREGA vs labour shortage in agriculture. How to address the policy conflict?
- Growing scarcities of land and water consequent to globalisation and expansion of the economy and strategies for management of these resources?
- Has investment made on infrastructure including irrigation, natural resource management, and research and extension delivered the benefits to the farmers adequately?
- Food security still a concern for India? Given further globalisation in the future, what should be the policies to ensure food security and also in the background of growing population?
- Has agricultural trade liberalisation a part of globalisation of affected terms of trade in agriculture and benefitted domestic agriculture? How far the reforms in import-export and currency/foreign exchange market policies impacted agriculture? And approach and strategies to resolve WTO related issues with particular reference to Indian agriculture
- What are the marketing issues affecting the agriculture growth? How to resolve varying responses from different States of India to agricultural market reforms

(such as revision of Agricultural Produce Marketing Act (APMC) and allowing Foreign Direct Investment (FDI) in multi- product retailing, etc.)

- Does current policy environment promote agro-industrialisation/agribusiness growth in India? Needed policy environment to support both private sector and PPP in order to promote agribusiness development to acquire more gains in the context of globalisation
- Farm subsidies (credit, fertiliser, water and product price support programmes) and their impact on agricultural development and farmers' quality of life and needed policy changes on farm subsidies (as farm subsidies considered as one of the causes for higher fiscal deficit)
- Agriculture policies for addressing increasing production and market risks and uncertainties faced by farmers, which occur more frequently due to climate change and volatility in global markets respectively
- Adequacy of public investment in Indian agriculture and approach to encourage increasing the rate of private sector investment

#### WHO ARE THE PARTICIPANTS?

The professionals of agricultural economics, agribusiness, policy analysis; and key policy makers—both from India and outside India- will be expected to attend and present their empirical work on core themes. It is expected that about 60 to 80 participants including keynote speakers, oral paper presenters and poster exhibitors will attend.

#### **Key Dates and Duration:**

- Deadline for submission of abstracts: 08 April 2014
- Announcement of decision on submitted abstracts: 10 June 2014
- Deadline for submission of full papers/posters of accepted abstracts: 20 August 2014
- Registration: Commences 05 September 2014

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## **FIRST ANNOUNCEMENT**

### **29th International Conference of Agricultural Economists 2015**

#### **Agriculture in an Interconnected World**

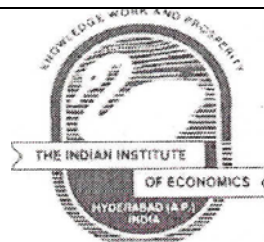
The theme for the 29th IAAE Conference in Milan, Italy (9-14, August 2015) is “Agriculture in an Interconnected World”. This theme is intended to capture one of the defining developments of our times—the widespread adoption of new communication technologies. Improved access to information appears to have greatly improved the performance of markets in many rural areas, especially in markets for perishable products. The emergence of money transfer and payment mechanisms, such as M-Pesa in Kenya, has potentially enormous implications for access to finance and payment mechanisms for a huge population of people currently without access to banks. There are also important implications for research and rural administration, with survey instruments going electronic, using instant data upload; and farms being measured and demarcated electronically using GPS.

Interpreted more broadly, this theme also embraces the wide range of other types of interconnection that are contributing to unprecedented changes in global agriculture, such as links between agricultural and energy markets through biofuels and inputs of fuel and fertilizer; links between agriculture and other uses of land; links between agriculture and other sectors as developing countries urbanize and labor moves out of agriculture; the supermarket revolution in developing countries; trade policy debates, both when prices are high and when they are low; the collective action problems associated with price volatility; international investment in agricultural land; links between scientific progress and productivity growth in agriculture; and competition between agriculture and other users of increasingly scarce water.

The tentative programme given below includes a mix of Plenary sessions, Invited panels, Symposia, and Contributed Papers (visual and oral); and Social Events. Donald MacLaren has joined the conference team to coordinate the selection the Contributed Papers. On Tuesday, August 11, we will have a session on agriculture in Italy—a sector with much greater diversity and relevance for other countries than is widely realized—followed by an outstanding range of trips into the wonderfully scenic region surrounding Milan. If one would like to delve more deeply into specific topics, the pre- and post-conference workshops provide excellent opportunities to do so. Some key dates for the conference are:

March 2014	Call for papers
August 1, 2014	Website open for submission of full papers
November 1, 2014	Paper submission deadline
February 1, 2015	Symposia proposals due
April 1, 2015	Acceptance of papers and proposals
August 9-14, 2015	ICAE Conference, Milan, Italy

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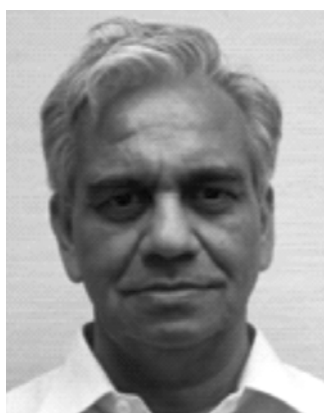
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