CDEIS FIRST ANNUAL REPORT
2012-13

CENTRE FOR DEVELOPMENT ECONOMICS
AND INNOVATION STUDIES (CDEIS),
PUNJABI UNIVERSITY, PATIALA
CONTENTS

Introduction 1

Academic Activities During 2012-13 2-72

• International Conferences
• Workshops

Research Projects 73

Public Lectures 74-85

Visiting Professor(s) 86

Research Outcome of the Team Members, 2012-13 87-92

Dissemination of Knowledge 93-108

INTRODUCTION

The Centre for Development Economics and Innovation Studies (CDEIS) has been established with generous financial support from the Ministry of Finance, Government of India at Punjabi University, Patiala with effect from 26 March, 2012. Punjabi University in its Syndicate meeting dated June 14, 2012 vide Para No. 46.10 approved the establishment of the CDEIS at Punjabi University, Patiala as a non-profit research organization. The main aim of the CDEIS is to conduct research and organize conferences/seminars/workshops and dissemination of knowledge. CDEIS’s purpose is also to develop network of researchers working in the areas of development process and policy making in the emerging economies. The Centre will focus on comparative studies that unravel the effects of science and technology flows between these countries and those that developed earlier. The Centre is striving to emerge as think tank in the areas of innovation and development policy.

The CDEIS is engaged in conducting research studies in the areas of national innovation system and innovation policies, organizes conferences and workshops as well as field surveys and training programmes. The CDEIS invites well known scholars from India and abroad as visiting Professors/Fellows and has also started invited lecture series with a aim of enhancing and strengthening the knowledge and research base of the faculty. The preliminary research work of the Centre is distributed in the form of Policy Papers and Discussion Papers.

Organization of the Centre

(i) Advisory Committee

Chairman: Vice-Chancellor, Punjabi University, Patiala
Coordinator: Professor Lakhwinder Singh
Members: Professor G.K. Chadha, South Asian University, New Delhi
          Professor K.J. Joseph, Centre for Development Studies, Trivandrum
          Professor Arup Mitra, Institute of Economic Growth, Delhi

(ii) Research Team

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<th>Name</th>
<th>Position</th>
<th>Department/Institute</th>
<th>University</th>
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ACADEMIC ACTIVITIES DURING 2012-13

- International Conferences
- Workshops
FIRST CDEIS-INDIALICS INTERNATIONAL CONFERENCE ON DEVELOPMENT AND INNOVATION IN THE EMERGING ECONOMIES

November 16-18, 2012

Organized by:

Centre for Development Economics and Innovation Studies,
Planning Commission Chair, Centre for South West Asia Study,
Punjabi University, Patiala
Programme for
First CDEIS-Indialics International Conference on
Development and Innovation in the Emerging Economies
(November 16-18, 2012)

Inaugural Session

November 16, 2012
Venue: Senate Hall

10.00 a.m. University Dhuni
10.05 a.m. Welcome Address – Prof. Inderjeet Singh
10.10 a.m. Introduction about Department – Prof. R.K. Bansal
10.20 a.m. About the Conference – Prof. Lakhwinder Singh
10.30 a.m. Inaugural Address – Dr. P. Banerjee, Director, NISTADS, New Delhi
11.00 a.m. Keynote Address – Prof. Mammo Muchie, TUF, South Africa and Member, GLOBELICS
11.30 a.m. Honouring the Guests (By Vice-Chancellor)
11.35 a.m. Presidential Address – Dr. Jaspal Singh, Vice-Chancellor
11.45 a.m. Vote of Thanks – Prof. S.S. Khehra, Dean, Academic Affairs

Tea (11.50 a.m. – 12.20 p.m.)

Technical Session I (12.20 noon - 1.50 p.m.) (Senate Hall)
   Dinesh Abrol, NISTADS, New Delhi
2. Innovation Inputs and Performance in Indian Banking
   Inderjeet Singh, Minaxi Bansal and Bhavna Chhabra, Punjabi University, Patiala
3. Technological Competitiveness and Public Policy Challenges: Issues in Measurement and Building Innovation Capabilities
   Piyush Verma and Hemant Sharma, Thapar University,

Lunch (1.50 p.m. - 2.50 p.m.)

Technical Session II (2.50 p.m. to 4.20 p.m.) (Senate Hall)
1. Innovation in Employment and Social Security: Indian Experience
   Surjit Singh, IDS, Jaipur
2. Return Migration and its Impact on Regional Innovation Systems; Evidence from India,
   Mohd. Imran Khan, CDS, Trivandrum
   H.S. Gill and Poorva Gill, HUDCO, Bhopal

Tea (4.20 p.m. – 4.30 p.m.)

Special Lecture I (4.30 p.m. to 5.30 p.m.) (Senate Hall)
Analyzing Innovation Eco-System in Developing Economies – Emerging Issues for Research in India
   Rakesh Basant, IIM, Ahmedabad

Special Lecture II (7.30 p.m. to 8.30 p.m.) Conference Dinner
Mind the Rhetorical Gap: Innovation Policy and the Challenges of Economic Development in Contemporary South Africa
   Rasigan Maharajh, Chief Director, IERI, TUT, South Africa
Technical Session III (9.00 a.m. - 10.30 a.m.) (Senate Hall)
1. Innovation for Development: Policy Trajectories and Reforms for Rural India
   Rajeshwari S. Raina, NISTADS, New Delhi
2. Mobilizing from Appropriate Technologies to Sustainable Technologies Based on
   Grassroots Innovations
   Binay Kumar Pattanaik, IIT, Kanpur
   India
   Rajeev Sharma and Gurpreet Singh, Santhigiri Research Foundation, Trivandrum

Panel Discussion (10.30 a.m. - 12.00 noon) : Innovations from South and Development of the
Emerging Economies
Chairperson: Inder Jit Singh, Joint Secretary, DST, New Delhi
Panelists: Rajeshwari Raina, NISTADS, New Delhi
           Rasigan Maharajh, IERI, TUT, South Africa
           Keun Lee, SNU, South Korea
           Maria Cecilia Vieira, Head, Science & Technology Section, Embassy of
           Brazil in India
           Binay Kumar Pattnaik, IIT Kanpur

Technical Session IV (12.00 noon - 1.30 p.m.) (Senate Hall)
1. Technology, Size of Firms and Sectoral Productivity: A Panel Data Study of Korean
   Firms
   Elias Sanidas, Jisun Lim and Otgonbat Ishdagva, SNU, South Korea
   Firms
   Buru Im and Keun Lee, SNU, South Korea
3. Exploring Relationship between Competitiveness and Marketing Innovation: A
   Resource Based View of International Brands in Emerging Markets
   Suraksha Gupta, Brunnel Business School, London

Lunch (1.30 p.m. - 2.30 p.m.)

Technical Session Va (2.30 p.m. - 4.00 p.m.) (Senate Hall)
1. Institutional Innovations for Agricultural Development in India: Imperative and
   Prospects
   Sukhpal Singh, IIM, Ahmedabad
2. Institutional Innovations and Black Pepper Cultivation in Kerala: An Exploration
   Sajitha A, CDS, Trivandrum
3. Diffusion of Agricultural Innovations in India: The Case of Bivoltine Hybrid Technology in
   South Indian Sericulture
   G.K. Rajesh, CONCEPT, Trivandrum

Technical Session Vb (2.30 p.m. - 4.00 p.m.) (Syndicate Room)
1. Determinants of ICT Diffusion and Implications for Policy in India: Theory and
   Empirical Estimation Based on Unit Level Data
   Pratap C. Mohanty, IIFT, New Delhi
2. Performance and System of Production: A Study of Plantation Sector in India
   Namrata Thapa, CDS, Trivandrum
3. Globalisation, Energy efficiency and Material Consumption in a Resource based
   Industry: A Case of India’s Pulp and Paper Industry 1980-81 to 2009-10
   Sandeep Kumar Kujur, CDS, Trivandrum
Special Lecture III (4.00 p.m. – 5.00 p.m.) (Senate Hall)
Knowledge and Detour for Sustained Catch-up beyond the Middle-Income Trap:
Neo-Schumpeterian Analysis at Firm, Sector and Country levels
Keun Lee, SNU, South Korea
November 18, 2012

Technical Session VI (9.00 a.m. - 10.30 a.m.) (Senate Hall)
Modes of Global Integration: Implications on Small Scale Industries Employment
Uma S., CDS, Trivandrum
1. Capital Goods Sector in India, 1990-91 to 2009-10
   Sanjaya Kumar Malik, CDS, Trivandrum
   Pradeep Kumar Choudhury, Delhi

Technical Session VII (10.30 a.m. - 12.00 noon) (Senate Hall)
1. Innovations and Inclusive Growth: A Case of Banking Industry in India
   Kiran Kumar Kakarlapudi
2. Fiscal Deficit-Economic Growth Nexus in India: A Cointegration Analysis
   Ranjan Kumar Mohanty, CSEP, JNU, New Delhi
3. Government Debt and Economic Growth in India
   Anirudha Barik, CSEP, JNU, New Delhi

Valedictory Session (12.00 noon – 1.30 p.m.) (Senate Hall)
Guest of Honour : S. Rana Gurjeet Singh, MLA and Former MP
Valedictory Address : K.J. Joseph, Professor, CDS, and Member, Globelics

Lunch (1.30 p.m. - 2.30 p.m.)
SUMMARY OF THE CONFERENCE PROCEEDINGS
(16-18 NOVEMBER, 2012)

Inaugural Session

The inaugural session of the Conference began with Prof. Inderjeet Singh welcoming the delegates and guests. The head of the Economics Department Prof. R.K. Bansal introduced the department and its sister concerns, the courses run by it, and provided information regarding the students and the faculty members of the department. The Conference theme was introduced by Prof. Lakhwinder Singh. He elaborated on the close connection between development and innovation, and stressed the need to understand how societies progress, in order to understand the process of economic development.

The Inaugural Address was delivered by Dr. P. Banerjee, Director, CSIR-NISTADS, New Delhi. His address was titled 'On a Few Issues Pertaining to Development and Innovation in Emerging Economies'. Dr. Banerjee considered development and innovation as more or less synonyms, as both were about challenging the current order and incumbent power. This is to say that development and innovation refer to powers of making rules, exercising control over rule implementation and in owning assets that are upwardly valued. The central focus of development and innovation would, thus, be rules and powers to make value, and finance to own valued assets.

Dr. Banerjee was of the view that the Schumpeterian idea that innovation as a change is effected by an entrepreneur, is out of place in the current context. He emphasized that development and innovations cannot be brought about without the assistance of state and transnational provided finance. He also stressed the importance of time period for emerging economies, and cautioned against blindly following other economies.

The inaugural address was followed by the Keynote address, which was delivered by Prof. Mammo Muchie from Institute for Economic Research on Innovation, Tshwane University of Technology, South Africa. His address was titled 'Locating Development Economics within a Unified Innovation System'. In his address he explained how a system of innovation that combines knowledge, learning, research, innovation, and capability building can provide an alternative framework of the study of development and underdevelopment. According to him, this can be done by consciously developing linkages and combinations between economic and non-economic structure and actors, formal theories and deepening evolutionary economic dynamics to include new thematic areas such as national economic integration in relation to reducing dependency on donors in different types of developing and transition economies.

He gave Nelson and Winter's explanation for formal and appreciative theory, according to which formal theory is a source of ideas for appreciative theory and vice-versa. According to Prof. Muchie, in general, drawing linkages or connection between these distinct forms of theorizing can enrich understanding of economic enquiry. But it is not clear how much significant interaction and learning takes place between the formal theory and appreciative theory with mutual gain to each other.
Prof. Muchie highlighted the Appreciative theory in this innovation system
genre which has produced such terms as the knowledge-economy framework, the
learning economy framework and with the Globelics initiative, a further development
has occurred. Globelics has combined together knowledge, innovation, learning and
capability building and suggested research applicable to the problems of development
and underdevelopment by translating innovation system into: 'learning, innovation
and capacity, capability and competence building system'. He pointed out that there
have been varieties in the presentation of systems of innovation perspectives since the
1980s. Theories on innovation and their use have gradually expanded their focus and
complexity to include the environment and industry in which firms operate. Its use
was explained in five major areas: (i) spatial; (ii) industry and technology specific;
(iii) in terms of innovation types; (iv) in terms of level of technology/innovation
complexity; and (v) in terms of economic and social objectives.

Integrating the concept of system of innovation with economic development,
Prof. Muchie opined that system of innovation helps to focus on knowledge and
learning activities among various actors and institutions that provide competitive
advantage in the long-term. The concept of innovation system captures the specific
interaction of ‘innovation-knowledge’ as the independent variable and spatial, sectoral
and institutional arrangements as the dependent variable in the context of the activities
and actions to bring about transformation and development. As a critique, the concept
of ‘system and innovation’ can be used by challenge ideas about wealth accumulation
based exclusively on static comparative advantage imparting development features to
given national economy and as a metaphor, it inculcates a mental attitude of ‘can do
it yourself’ by creating self-reliance.

Thus, development is driven by the intellectual achievements, discoveries,
inventions, transformations and progress that a nation has accumulated in its history
and is likely to improve the way it may be productively used especially when the
innovation system framework is applied increasingly to the problems of development
and underdevelopment. Prof. Muchie also dwelt on the African Development Agenda.
He stressed on the need to develop a unifying economic growth strategy that works
for Africa, and there is a need to open the door for theories that are grounded and
contextualized in African setting.

Prof. Muchie’s keynote address was followed by the Presidential Address
delivered by Dr. Jaspal Singh, Vice-Chancellor of Punjabi University, Patiala. He
elaborated on how industrial revolution gave birth to revolutionary innovations, but
the world economic order at maturity of industrial revolution has divided global
economy between developed and underdeveloped. He lamented that the innovative
system of development has undergone change which has generated accumulation
from ‘need based’ to ‘greed based’. Mother Earth has suffered in the process and now
it is the emerging economies which face a challenge in overcoming this crisis. He
said that development will take place in real terms only if the marginalized sections of
society are given proper representation in the development process.

Towards the end of the inaugural session, Prof. S.S. Khehra, Dean Academic
Affairs of the University proposed the vote of thanks.
The first technical session was chaired by Prof. Surjit Singh from IDS, Jaipur. Three papers were presented in this session. The first paper was presented by Dr. Dinesh Abrol, NISTADS-CSIR, New Delhi. In his paper titled 'Pro-poor Innovation: Making Critical Reflections on the Indian Experience', examined the experience of implementation of pro-poor innovation making schemes. Tracing the evolution of the implementation of pro-poor experiments in innovation making in India beginning 1950s, he also studied the impact of these efforts to improve rural livelihoods. He was of the view that though the state, public science and technology organizations and social movements strived hard to promote pro-poor innovation making, the success attained was limited. He presented three case studies of "politics of institution building in higher education" (The case of Radhakrishna Commission of Higher Education: 1948); the promotion of knowledge production in State sector R&D agencies (the case of CSIR); and the "innovation system building by social movements for pro-poor technology and implementation (assessment of KVIC and other rural development programmes). His analysis demonstrated that pro-poor innovation generation and diffusion in India has not been successful due to the fact that such innovation systems were constructed as a residual socio-technical system without ensuring their systemic competitiveness, rather than with the aim of achieving social justice and economic empowerment of the poor. Stressing on the need for tackling issues of diversity in demand, resource regeneration and skill enhancement, Abrol cautioned against putting too much confidence into the ability of the corporate sector.

The second paper, jointly authored by Prof. Inderjeet Singh, Ms. Minaxi Bansal, and Bhavna Chhabra, was presented by Ms. Minaxi. In their paper titled "Innovation Inputs and Performance in Indian Banking" they have analyzed the relation of innovation inputs and performance in Indian Banking for the period 1998 to 2010. Empirical prognostication of the relation has been done using the correlation regression and other techniques. Their study confirms that contribution of technology to banks’ performance has a differential behaviour. It contributes positively only to those banks where some preconditions conducive to performance are existing e.g. trained man power, size and scale of business. It shows that banks performance is related not just to its technological stance but to other areas of competencies.

The third paper was jointly authored by Dr. Piyush Verma and Hemant Sharma, and presented by Dr. Piyush on the theme "Technological Competitiveness and Public Policy Challenges: Issues in Measurement and Building Innovation Capabilities". In the present era of Globalization, increasing integration and rising competition have put a fair amount of pressure on emerging economies to build their technological and innovation capabilities in order to develop new technologies, new products, processes and also improve the ability to capably absorb and assimilate technologies which are developed in the advanced foreign nations. There are different routes varying from marketing mediated (trade, FDI, licensing and joint ventures) to non-market mediated (imitation, reverse engineering and publications like journals, data and patents) to transfer the technology. However, proper assimilation, absorption and adaptation are equally important for technological development and higher economic growth. The presenters broadly used two
approaches – Global Competitive Index (GCI) and Technology Achievement Index (TAI) in order to examine different phases of technological capability progression paths. GCI divides countries into three stages – Stage I (Factor driven), Stage-II (Efficiency driven), Stage-III (Innovation driven) and also captures dynamism in terms of explaining transition from stage-I to II and from State II to III, whereas TAI which assess the level of technological progress of the countries classifies them into four categories – leaders, potential leaders, dynamic adopters and marginalized nations. These two approaches together provide deep insights about the level of technological capability which is achieved by the various countries and further provides suitable policy interventions to develop technological competitiveness. The states and governments after examining the different phases of technological capability progression paths can suggest appropriate public policy by choosing among the various alternative approaches (National Innovation System, Triple-helix and Industrial clusters) for building technological and innovation capabilities. All the above approaches focus on building technological capabilities but differ in their respective actors and interdependence among them.

The session ended with a lively discussion in which a number of delegates participated and raised issues pertaining to the content of the presented papers. It was argued that there is a need to evolve new methods of measuring innovations and resolve the dilemma between new economy innovations and old economy innovations.

Technical Session II

The second technical session, chaired by Prof. M.S. Sidhu from PAU, Ludhiana had two presentations. The first paper in the session was presented by Prof. Surjit Singh. He presented a paper "Innovations: Finance, Employment and Social Security: An Outsiders' View". He emphasized the role of innovation in the modern society and explained its link with Finance, Employment and Social Security with the help of macro and micro level studies. Finance and Innovation was explained using three arguments: firstly, increasing disparities in income and development across countries; secondly, domestic firms engaging in more adaption and imitation of already created technologies by the foreign firms; and thirdly, competitive firms innovating more than the older firms. All these arguments have simply one answer and that is lack of incentives and R&D investments across countries, regions and firms. The presenter also explained the effect of innovation on employment particularly highlighting the effect of product and process innovation. Studies have shown that process innovation account for a smaller share of change in employment and product innovations are an important source of firm-level employment growth. The presenter also says that the social security systems (both individual and collective security) should be encouraged so as to promote initiatives for innovations. According to the presenter, government is already doing its work in this field but all in vain because even though the spending on the social services is high but system is fragmented and the coverage is poor. Precise labour laws and contracts that exhibit tolerance to failure are a must for a case like India. Thus, the presenter concludes in Kalecki's words that 'innovation effect is a development factor and thus contributes to the maintenance of the long-run upward trend'.
The second paper, jointly authored by H.S. Gill and Poorva Gill, was presented by H.S. Gill. In their paper on 'Energy, Technology, Development, Economics and Management', they discuss problems of electricity generation, at the levels of conceptualization, policy formulation and implementation level. Well established technologies of energy generation like use of bamboo, thorium etc. are not being implemented simply because decision making in favour of this technology and "aggressive application" is missing. Further, policies followed are not attractive from investment point of view, although potential of conventional energy sources is substantial to meet requirements. There are problems at the implementation level too. There are synchronization and coordination gaps because as many as five ministries in the central govt. deal with different components of energy sector and these results in overlaps, deficiencies and coordination failures. The paper also drew attention to the issue of energy conservation. The authors summed up by stressing on the need to develop new and sustainable energy areas, and translate innovations into realities.

In the session, issues were raised regarding factors behind unemployment, social security and sustainable development. It was argued that without employment, development cannot be sustainable. The paper on energy was discussed in the light of the centralized prescriptions, but local generation and accountability issues.

Special Lecture I : Rakesh Basant

The first day of the conference ended with two special lectures, the first of which was by Prof. Rakesh Basant from IIM, Ahmedabad. The lecture was chaired by Prof. Rasigan Maharajh. The lecture was titled 'Analyzing Innovation Eco-System in Developing Economies – Emerging Issues for Research in India'. Prof. Basant used National System of Innovation (NSI) as a starting framework of enquiry to identify gaps in context of developing countries. He opined that there is a need to conceptualize innovation policy differently, with sharper focus on linkages among NSI actors. More need to be done to understand the role of each NSI actor, and focus more on innovation driven by new enterprise. The NSI framework has not focused enough on new enterprise. Most NSI have 4 actors – Governments, Universities and Higher Education Institutions, Research Institutions, and Business Enterprises. The NSI research focus should be on linkages between and among the actors. The policy need is to ascertain ways of enhancing complementarities and support all kinds of innovations.

Discussing all the four actors, Prof. Basant also presented two case studies – that of IISc and National Chemical Laboratories, the former an autonomous institution and the latter a public sector laboratory. He concluded his lecture by raising some research agendas:

- How to ensure that complementarities among different policy instruments are realized?
- How to make higher education system innovation focused?
- What models of innovation based enterprise creation through UILs (University Industry Linkages) or incubators are appropriate?
- How to remove obstacles for new innovation driven enterprises?
- Can new enterprise creation, mentoring and funding be linked to the traditional entrepreneurial system?
The lecture was followed by concerns being raised regarding need for demarcation between pro-people research and private profit research, paying greater attention to institutional innovation, and drawing lessons from manufacturing innovations.

**Special Lecture II : Rasigan Maharajh**

The second special lecture was held during the conference dinner, and was delivered by Prof. Rasigan Maharajh which will chaired by Keun Lee from South Korea. He delivered a special lecture on 'Mind the Rhetorical Gap: Innovation Policy and the Challenges of Economic Development in Contemporary South Africa'. His paper is a response to the questions being raised about the quality of the transformation of South Africa into a non-racial, non sexist and united country especially after the massacre of mineworkers in Marikana in the North West province of the country. Maharajh traced the economic history of South Africa in the last two decades. He analyzed some of the recent policy developments mooted around the challenges of economic development and also dwelt upon the emerging challenges for further research into the continuing evolution of the South African political economy. The shared concerns of the BRICS group of countries in their quest for structural transformation and sustained economic development, were also touched upon in the lecture.

Maharajh argued that the transformation of South Africa’s Science, Technology and Innovations (STI) landscape provided enough evidence to capture the discourse of National System of Innovations (NSI) by vested institutional interests and utilizing it for a reformist agenda rather than to consider more radical solutions. This approach led to continuance of organization that existed under apartheid – reformed with employment equity targets being fulfilled, but with untransformed mandates and activities. Prof. Maharajh argued that the performance of the NSI must be primarily measured within the context of overall political economy, and South Africa's political economy remains largely untransformed. Although significant progress was achieved in the establishment of a united, non-racial, non-sexist and democratic political regime, inequality and impoverization still persist. Hence, there is need for more direct and explicit policy prescriptions and instruments. This can be done through building a better NSI by improving the performance of science and technology institutions, increasing investments and human resource development and ensuring access to R&D infrastructures.

**Technical Session III**

The third technical session was held on the second day of the Conference. The session was chaired by Prof. Pushpa Trivedi from IIT, Bombay. The first paper in this session was presented by Rajeshwari S. Raina. In her paper 'Innovation for Development: Policy Trajectories and Reform for Rural India', she argues that if innovation has to work for development in India, then it is imperative that decision makers find ways to enable institutional reform specifically oriented to rural employment and incomes. She was of the view that despite the employment rhetoric, policy frameworks and programmes, production investments and technological capacities have focused more on export-oriented capital intensive growth, than on labour intensive growth. She called for changes in the policy, production and
consumption components of the national innovations system to ensure relevant investment and production capacities, and consumption opportunities for the massive rural population. This can be achieved only through adequate policy and political support.

The second paper was presented by Prof. B.K. Pattnaik entitled "Mobilizing from Appropriate Technologies to Sustainable Technologies based on Grassroots Innovations". In his paper he acquaints us with the concept of "Appropriate Technology (AT)" and also the way it is used in developing as well as developed countries. 'AT' concept is used in the form of "Intermediate or low cost technology" to tackle problems like poverty, ill health, poor medical facilities and housing. On the other hand, it is used in the form of "Alternative Technologies" for tackling environmental issues and saving energy in the developed countries. Various thinkers and authors like M.K. Gandhi, EF Schumacher, J.C. Kumarappa and others tell us about the historical evolution of the "AT" concept in India. The paper included an empirical study of the social movement organization called "Honey Bee Network (HNB)" which does not show us the original discourse of 'AT', rather a shift in this discourse – towards "Sustainable Technologies". Main objectives of the HNB are: (i) to protect the intellectual property rights (IPR) of the Grassroot innovators, (ii) to add value to the goods based on traditional and local knowledge and (iii) to develop the entrepreneurial abilities of the innovators by training them and providing them financial support. This HNB operates through three network organizations (i) SRISTI (Society for Research Initiatives for sustainable technologies and institutions), (ii) GIAN (Grassroot Innovations Augmentation Network) which was established with a view to link innovators, investment and entrepreneurs (iii) NIF (National Innovation Fund) which was setup in February 2000, by Govt. of India (DST).

The author concluded from his study that "Appropriate Technology (AT)" in India has shown a shift towards "Sustainable Technologies" whereby many technologies developed by grassroot innovators have been successfully commercialized and patented. This concept of " Appropriateness" does not even work in agriculture today where the recognition of alternative sources and local knowledge in the small scale industries and rural technologies favour more the issue of "Sustainability" and "Environment Friendliness" rather than "Appropriateness". The focus of research in HBN has been shifted from "Appropriability" to "Sustainability". Now, what makes these technologies "Sustainable" is a new issue to be discussed in the present arena.

In the third presentation, Rajeev Sharma and Gurpeet Singh's paper entitled, "Agricultural technologies access and farmer household's welfare: Evidence from India" took up the issue of access to modern technologies and their impact on the welfare of farmer household's in different regions of India. Using logistic regression analysis, it was revealed that controlling for other household characteristics, the access of modern technology has a significant positive impact on consumption expenditure in rural India. According to presenter from policy point of view there is a need to take some institutional measures that help the small and marginal farmers to increase their earnings.
Panel Discussion

The third technical session was followed by a panel discussion on 'Innovations from South and Development of the Emerging Economies'. The discussion was chaired by Dr. Inderjit Singh, IAS, Joint Secretary, Department of Science and Technology, Govt. of India, New Delhi. Initiating the discussion, S. Inderjit Singh emphasized the role of innovative ideas, adding that such ideas are needed everywhere, even while dealing with labour. Science and technology has to play an important role if inclusive growth is desired. He lamented the fact that in India, it is more of 'jugaad' (improvisation) rather than innovation. However, the importance of innovation has been recognized and initiatives taken by government are proof enough. However, a lot remains to be done.

Dr. Rajeswari Raina was not in favour of imitating the west for solutions of problems that are peculiar to our country. She dwelt on the contribution made by the Department of Science and Technology (DST) for rural development and discussed how DST can help other departments learn. She stressed on South-South collaboration and opined that there is a lot of scope for engaging in such collaborations to help agriculture.

The third panelist, Dr. Rasigan Maharajh, talked about the emergence of BRICS countries, and how these has been asked to carry a large part of the burden of climate change. He thus emphasized the need to have a strong IBSA (India, Brazil, South Africa) trilateral agreement. He also pointed towards the importance of basing studies on local innovations and production system.

Prof. Keun Lee talked about the changing engines of growth in China and established the close link between big business and growth in China. In this context he dwelt upon the Beijing Consensus to Middle Income Trap (MIT) in China, and innovation capabilities and world class business as the check points for MIT in China.

Ms. Maria Cecilia Vieira from the Embassy of Brazil in India mainly elaborated on how Brazil has a leading company in innovation managed by the Department of Science and Technology, as the funds created for development which previously went into basic research, now go towards innovations. She also made a mention of the gaps and constraints facing the country, but ended on an optimistic not that we can always learn from the past and find new ways and solutions.

The last panelist, Prof. B.K. Pattnaik pointed out that globalization is a threat to our indigenous knowledge system and practices. He said that we have been aping the west because modern science and technology is a product of the west. He was of the view that caste based guilds protect our indigenous knowledge in India, but there is a need to document and patent our indigenous knowledge.

The panel discussion was followed by raising of issues, questions and concerns by other delegates. Questions were raised as to what BRICS can do to build human capital, how can we bring in our own values for the welfare of all – to alleviate hunger and poverty. It was also pointed out that our education system is divorced from grass root problems, and so 'Need for Innovation' should be included in school and college curriculums.
Technical Session IV

The session was chaired by Prof. Rakesh Basant, and three papers were presented in the session. The first paper was presented by Dr. Elias Sanidas, Jisum Lim and Otgonbat Ishdagva, entitled 'Technology, Size of Firms and Sectoral Productivity: A panel data study of Korean Firms'. In the paper they examined the role of technological innovations in the success story of Korea's economic growth. Technological innovations consist of two components: technical innovations (TTs) and organizational innovations (OIs). An analysis of Korean firms and sectors was carried out by using firm level panel data and sector-level data. The two models used -- fixed effects and generalized method of moments -- provided evidence that firm reorganization through OIs and TIs significantly improve the productivity of manufacturing firms and sectors in Korea. The sector level analysis carried out by them confirmed the gradual implementation of JIT/QC (just-in-time and quality control) in Korea in the last two decades. Overall, they examined the extensive data base to see the influence of the size of firms on productivity and all other factors such as technology, and arrived at the result that in general the size of firms is neutral to the influence of technology and all other factors on productivity.

The second paper was by Buru Im and Keun Lee, Seoul National University, South Korea, entitled "Catching Up VS Advanced Firm: A Comparative Analysis of Korean and American Firms". They conducted a comparative study of Korean and U.S companies and empirically examined the effects of determinants of firms' performance namely, growth, profitability and firm value, in the two countries. The study used financial data of firms which were taken as independent variables viz. size, debt ratio, R&D intensity, advertisement intensity, intangible asset ratio, current ratio and investment, for the period 1990-2007. The performance in terms of the three said determinants was compared and analyzed using regression analysis. The results of the study showed that average growth rate of firms in the 2000s did not show significant differences while in 1990s the average growth rate of Korean firms was significantly higher than that of U.S. firms. On the other hand, profitability and firm value of U.S. firms were higher than those of Korea in all periods but the gap showed a decreasing tendency. According to the presenter, these results showed that firms of Korea had been gradually changing their former tendency to pursue growth at the expense of profitability. Other performance indicators like sales growth rate, return on assets, return on sales, and Tobin's Q were individually regressed on the independent variables mentioned before to derive the different effects of these explanatory variables. In these regressions, R&D intensity and advertisement intensity variables were more effective to firms in Korea than in U.S. In addition, investment of Korean firms had significantly smaller effect than that of U.S. firms. According to the presenters, this could be linked to the differences like overall management capabilities or investment climates, and connected investment with performance. Thus, this study showed that factors of firm’s performance can have different impacts on firms in different countries.

Suraksha Gupta from Brunnel Business School, London (UK) presented a paper on "Exploring Relationship between Competiveness and Marketing Innovation: A Resource Based view of International brands in Emerging Markets". She conceptualized a model of marketing via virtue of competiveness. In the recent global
crisis, manufactures from established markets have faced downturn in their business and are looking towards outside territories especially emerging economies for establishing their business and activating higher growth. But international firms while operating outside their home country face many problems like difference in culture, competition in the emerging market and serving customers spread widely in the geographical territory, out of which the first issue is the most challenging to be addressed. In this context, she advocated a resource-based model where international and local firms by collaborating in business via sharing each other's resources can build their individual competitiveness and innovatively serve the market. Business relationship with local firms proves an important resource for international firms to collect local knowledge of market and understand specific cultural requirements of customers in an unknown market. On the other hand, foreign firms provide important resource to the local firms by offering their brand value and marketing facilities which helps local firms to maintain their competitiveness and also overcome the entrepreneurial challenges they face. Both local and international firms by using each other's resources competitively serve the consumers by innovatively marketing the product which is based on the local culture, thus, adding extra value to the product. The presenter summarized that international firms in association with the local firms succeed in creating brand value which caters to local needs, thus, helping international firms to become competitive manufacturer as well as local firms to become competitive seller of the product.

The session saw discussions regarding marketing strategies adopted by foreign firms, and FDI in retail in India.

**Technical Sessions Va and Vb**

The fifth technical session was held as two parallel sessions. In one session (Va) which was chaired by Prof. R.S. Sidhu from PAU, Ludhiana, in which three papers were presented.

Dr. Sukhpal Singh from IIM, Ahmedabad presented a paper "Institutional Innovation for Agricultural Development in India: Experience and Prospects". He highlighted the importance of institutional innovations in Indian agricultural framework which is dominated by large number of small farmers who face many problems like high transaction-cost, lack of market integration and interlocking of factors and output markets. The institutional innovations have come up in a big way to help small farmers overcome these problems by way of reducing transaction cost, managing risk, organizing them effectively and addressing their marketing problems. Prof. Sukhpal examined institutional innovations – both group and policy – in agricultural sector where these have helped small farmers in almost every possible way like providing farm inputs, processing their produce, marketing it and helping them to fetch attractive prices. He exemplified success stories of institutional innovations both in India and abroad. Some of the examples included MAHAGRAPEs in Maharashtra helping grape growers to export their grapes, turmeric cooperative FAPFO in Hoshiarpur district of Punjab providing farmers enormous benefits of this high value added crop, Kohinoor Food Ltd. (KFL) in Uttarakhand promoting organic Basmati rice and quality tea procurement centres in South India formed by SHGs of women. Apart from it, producer companies (PC) have come up via amendment of Companies Act, 1956 to overcome problems of traditional cooperatives. These producer companies
were first promoted in Maharashtra State. Some institutional innovations like Newly Generated Companies (NGC) have come up in USA and Canada. These aforementioned institutional innovations have strengthened small farmers in terms of linking them to market, organizing them effectively, providing them better return of their produce and making them internationally competitive. But APMC markets is still the biggest existing platform for large number of small farmers which needs to improve its cost effectively to help farmers in providing better share of their produce.

The second paper by A. Sajitha entitled "Institutional Innovations and Black Pepper Cultivation in Kerala: An Exploration" attempted to explore the impact of innovation at farm level on black pepper in the state. In agrarian economies like India in general and Kerala in particular, agriculture holds an important role in the process of economic development. Black pepper is one of the most traditional spice crops of India which has been produced and traded worldwide. However, with the emergence of competition from other pepper producing countries such as Vietnam, Brazil, Indonesia and Sri Lanka, India is missing out the opportunity to take advantage of the fast-growing international pepper market. A sustainable and dynamic approach towards the development of this sector becomes a major concern of government and the policy makers. The paper suggested that institutional intervention and better coordination among various agencies to provide the extension services and timely support pepper growers can go a long way in boasting the cultivation of pepper.

The third paper presented in this session was by G.K. Rajesh entitled "Diffusion of Agricultural Innovations in India: The Case of Bivoltine Hybrid Technology in South Indian Sericulture'. He discussed the difficulties encountered by the Indian silk industry. Due to low productivity, poor quality produce and resulting imports of silk, domestic sericulture has been adversely affected and led to considerable labour displacement. Adoption of Bivoltine hybrid silkworm has been provided as an answer to this problem, but again, bivoltine technology diffusion has been very slow in India. In this context, Rajesh took up an empirical study in the sericulture belt of Mandya district of Karnataka (India) and attempted to look into the factors determining the diffusion of bivoltine hybrid silkworm in India. The study found that age, education and availability of family labour discouraged bivoltine adoption, while farm size, credit, mitigation of perceived risk and uncertainty exert a positive influence. The study stressed the necessity for evolving more hybrids resistant to diseases, crop insurance schemes, improvement in the official extension system by capacity building and credit facilities on affordable collateral for sericulturists.

The second parallel session Vb was chaired by Dr. Rajeshwari Raina. Two papers were presented in this session. The first was by Pratap C. Mohanty. He presented a paper entitled “Determinants of ICT Diffusion and Implications for Policy in India: Theory and Empirical Estimation Based on Unit Level Data”. He highlighted the importance and potential of Information and Communication Technology (ICT) in transforming the economy especially the rural economy. According to him, lack of infrastructure and accessibility associated with the use of ICT creates additional hindrance for the poor to catch up and fail to take the benefit of ICT applications. The analysis was conducted using Rank/Probit Regression model approach and has tried to examine critically the mapping of ICT diffusion especially to highlight the
persisting gap of ICT use among rural and urban areas. The results of probit regression and marginal effect after probit have indicated that caste, size of the household, occupation, education, value of asset holding, monthly per capita expenditure (MPCE) on internet, local content, marriage and location of the house hold in rural or urban very significantly affected the use of computer and broadband service. Other factors like place and inherent network effect, sex, education, local content, age (young age), occupation and caste also had a dominant affect on ICT diffusion. Thus the gap between rural and urban has widened. It was suggested that firstly, a major effort should be made to transform the local spoken and written languages into universally used set of computer codes, fonts, and so on. Secondly, there is a need for operating systems and for useful software applications that are relevant to and that speak to the needs of the local people. Mohanty thus concluded by saying that there is no skepticism to the fact that the wealth created by a successful software industry could be shared by other sectors of the population, but so-called ‘market forces’ are not adequate to ensure this outcome. Instead, required are government policies, actions, and plans, along with the dedication of individuals, real stakeholders and enterprises that benefit from the IT boom, to make sure the wealth created through various channels could aid those who live ordinary lives.

Another paper was presented by Sandeep Kumar Kujur was entitled "Determinants of ICT Diffusion and Implications for Policy in India: Theory and Empirical Estimation Based on Unit Level Data”. He highlighted the importance and potential of Information and Communication Technology (ICT) in transforming the economy especially the rural economy. According to him, lack of infrastructure and accessibility associated with the use of ICT creates additional hindrance for the poor to catch up and fail to take the benefit of ICT applications. The analysis was conducted using Rank/Probit Regression model approach and has tried to examine critically the mapping of ICT diffusion especially to highlight the persisting gap of ICT use among rural and urban areas. The results of probit regression and marginal effect after probit indicated that caste, size of the household, occupation, education, value of asset holding, monthly per capita expenditure (MPCE) on internet, local content, marriage and location of the household in rural or urban areas significantly affected the use of computer and broadband service. Other factors like place and inherent network effect, sex, education, local content, age (young age), occupation and caste also had a dominant affect on ICT diffusion. Thus the gap between rural and urban has widened. It was suggested that firstly, a major effort should be made to transform the local spoken and written languages into universally used set of computer codes, fonts, and so on. Secondly, there is a need for operating systems and for useful software applications that are relevant to and that address the needs of the local people. Mohanty concluded by saying that there is no skepticism to the fact that the wealth created by a successful software industry could be shared by other sectors of the population, but so-called ‘market forces’ are not adequate to ensure this outcome. Government policies, actions, and plans, along with the dedication of individuals, real stakeholders and enterprises that benefit from the IT boom are needed to make sure that the wealth created through various channels could aid those who live ordinary lives.
Special Lecture III : Keun Lee

Prof. Keun Lee from Seoul National University, South Korea, delivered a special lecture on 'Knowledge and Detour for Sustained Catch-up beyond the Middle Income Trap: Neo-Schumpeterian Analysis at Firm, Sector and Country Levels'. The lecture was chaired by Prof. B.K. Patnaik.

Prof. Lee first traced the trend of catch up in countries like Korea, Taiwan, Malaysia during the 1960s, 70s, 80s and the 90s. His lecture focused on questions like what determines catch up growth, why it is easy to catch up in some sectors and not in others, and which corporate innovation system is a good fit for catching up. He took cycle time (speed of change in knowledge base of technology) as the key variable, and emphasized that to catch up, it is better to specialize in short cycle technology based sectors because knowledge becomes quickly obsolete. Prof. Lee pointed out that shorter cycle was leading to growth in Asian countries. Catching up firms tend to pursue sales growth by borrowing and investing more, while advanced firms pursue profitability. Prof. Lee cited the example of Korea and Taiwan, who have increased the level of self production by specializing in short cycle technologies. However, he admitted that the cycle time of Korea and Taiwan patents have been growing longer in recent times.

Prof. Lee concluded by advocating detour for latecomer countries. He mentioned three steps along the detour – design capabilities, targeting short cycle sectors, and leapfrogging into new/emerging technologies in short cycle.

The lecture was followed by questions being raised regarding lessons to be learnt for India, the need for good governance in catch up, and the possibility of carrying out our own path of development instead of catching up.

Technical Session VI

The sixth and last technical session was held on the third day of the conference. The session was chaired by Prof. Sukhpal Singh from IIM, Ahmedabad. Three papers were presented. The first paper presented by Pradeep K. Choudhury entitled "Technical Education and Labour Market: An Empirical Study of Engineering Graduates in Delhi", analyzed the labour market profile of final year engineering graduates in Delhi, taking a sample of 1178 students in the academic year 2008-09. He took six dimensions like the percentage of students getting job offers, waiting period, type of job, location of job, type of company, annual salary, household characteristics, etc. to analyze the labour market profile. Logit model was then applied to determine the employability of engineering graduates. His analysis emphasized the role of management of the institutions and courses of study on different labour market aspects of engineering education in Delhi.

Another paper was presented by Ranjan Kumar Mohanty entitled "Fiscal Deficit-Economic Growth Nexus in India: A Co-integration analysis". He studied the impact of fiscal deficit on the economic growth of India. The objective was to examine both the short run and long run relationship between the two by covering the time period from 1970-71 to 2011-12. The objectives of the study were examined using Unit root test (ADF and PP test), Johansen Co-integration test, Granger Causality test, and Vector Error correction Model (VECM) technique. Johansen
methodology confirmed the existence of long run relationship between GDP and selected factors namely: fiscal deficit held by the central government, gross domestic capital formation and employment in the public and organized private sectors. The findings indicated a negative and significant relationship between fiscal deficit and economic growth in the long run. The findings also revealed that the negative impact of post reform fiscal deficit on economic growth was more than the impact of pre-reform’s fiscal deficit. According to Mohanty, this is contrary to Keynesian theory, but in conformity with Neo-classical theory, which holds that fiscal deficits lead to a fall in the Gross Domestic Product. Thus, he suggested that the subsidies should be reduced and instead this money should be invested in health, education and infrastructure sectors such as power and roads etc., so that it enhances the productivity of both human and physical capital, which will go a long way in increasing the per capita income of the people.

The last paper was by Anirudha Barik entitled "Government debt and Economic Growth in India". It examines the potential indirect influence of public debt on economic growth through its impact on investment. The issue is empirically examined using an augmented Solow (1956) neoclassical model of economic growth that allows for both the direct and indirect effects of public debt on economic growth. Barik concluded that public debt appears to be positively related to both investment and output growth and thus has an indirect positive effect on economic growth through its positive influence on investment.

Valedictory Session

In the valedictory session, the valedictory address was delivered by Prof. K.J. Joseph from CDS, Thiruvanthapuram. The address was entitled "Innovation and Development in India: Changing Paradigms and Trajectories". Prof. Joseph highlighted the importance of science, technology and innovations for the development of the economy and also tried to capture the major shifts which have occurred in the technological paradigms especially after liberalization.

India is one of the pioneering countries in recognizing the importance of science and innovation in its development. This is well reflected in Science policy of 1958 which highlights the importance of science and technology (S&T) for industrialization. Prof. Joseph first explored the relationship between growth, innovation and development and secondly, he touched upon the issue of transforming those economies who got independence after World War II. For analyzing the first issue, he took up six heuristics frameworks – classical legacies, Schumpeterian paradigm, Arrovian legacy and endogenous growth model and technological capability approach and innovation system approach. Examining the second issue showed a major shift from inward oriented and trade restricting policies towards outward oriented and trade promoting policies, and the success of South Korea were specially mentioned. Regarding innovation capability building in new emerging countries NIC's, the speaker dealt with two broad issues. Firstly the issue dealing with the transfer of technology either via FDI or embodied technology or through imitation, the second issue related to building local technological capabilities which are adaptive in nature.
Prof. Joseph stated that the catching up strategies for the developing countries in the present globalized world are not the same and conducive in the way as these were in the earlier policy regimes. He took up the different periods in order to capture the technological paradigm shift occurred in India – phase I before 1990 and phase II after 1990. Phase I is characterized by policies focusing on achieving self-reliance in science and technology. Science Policy Resolution of 1958, Science and Technology Plan (1969-74) and Technology Policy Statement of 1983 highlights efforts to develop indigenous technology and building technological capabilities. SUSSEX manifesto, though not improved by UN council was immensely helpful in increasing R&D efforts of developing countries especially India. Various restrictions on foreign collaborations were imposed and FDI was allowed only in the core areas. However, the paradigm after shift 1990 was marked by increasing integration with the rest of the world in order to build technological capabilities and become internationally competitive. New Patent Act of 2005, New Science and Technology policy of 2003 emphasized developing S&T for higher and sustainable economic growth.

But the need of the hour as highlighted by Prof. Joseph is to develop NIS framework in the southern perspective where inclusive innovations assumes significant importance. In the developing countries, there is higher economic growth on the one hand and rising inequalities and poverty on the other. So, the policy makers should develop NIS framework in a way which must address the problems of the marginalized and excluded sections of the society. In this decade of innovation, efforts must be geared towards generating such NIS framework which provides inclusive innovations for inclusive growth of the society.

Prof. Joseph viewed innovation as a cheque given by society to the poor, but considered it unfortunate that this 'cheque' has bounced because of our inability to understand institutional constraints. However, he was optimistic that not all has been lost.
INTERNATIONAL CONFERENCE
ON
HUMAN DEVELOPMENT AND
KNOWLEDGE ECONOMY

February 19-20, 2013

Organized by:

Centre for Development Economics and Innovation Studies,
Planning Commission Chair, Centre for South West Asia Study,
Punjabi University, Patiala
Programme for
International Conference on
*Human Development and Knowledge Economy*
(February 19-20, 2013)

Inaugural Session

February 19, 2013

**Venue:** Senate Hall

9.00 a.m. Registration
9.30 a.m. Tea
10.00 a.m. University Dhuni
10.05 a.m. Welcome Address – Prof. Inderjeet Singh
10.10 a.m. Introduction about Department – Prof. R.K. Bansal
10.20 a.m. About the Conference – Prof. Lakhwinder Singh
10.30 a.m. Inaugural Address – Sh. Ashutosh Chadha, Director, Corporate Affairs South Asia, Intel Technology India Pvt Ltd. New Delhi
11.00 a.m. Keynote Address – Dr. Leonardo A. Lanzona, Jr., Professor of Economics and Director, Ateneo de Manila University, Philippines
11.40 a.m. Remarks of the Guest of Honour – Dr. A.D.N. Bajpai, Vice-Chancellor, H.P. University, Shimla
11.50 a.m. Presidential Address – Dr. Jaspal Singh, Vice-Chancellor
12.00 noon Vote of Thanks – Dr. Sukhwinder Singh, Professor, Centre for Research in Economic Change

*Rapporteur: Prof. Jaswinder Singh Brar and Niharika Sharma*

Special Tea (12.05 p.m. - 12.30 p.m.)

Special Lecture (12.30 p.m. - 1.30 p.m.)
*(Senate Hall)*

In Chair: Dr. Dipinder Singh, IAS and Prof. H.S. Shergill

Tilman Altenburg, German Development Institute, Bonn (Germany)
Industrial and Innovation Policy: Making It Work for Inclusive Human Development
*Rapporteur: Prof. Kesar Singh Bhangoo and Ms. Tejasavpreet Kaur*

Lunch (1.30 p.m. - 2.30 p.m.)

**Technical Session 1 (2.30 p.m. - 4.00 p.m.) Knowledge for Development**
*(Senate Hall)*

In Chair: Prof. Surjit Singh and Prof. R.S. Sidhu

1. Elias Sanidas, Seoul National University, South Korea
   How Knowledge Transformed into Economic Development: Some Fundamental Issues

   Acquisition of technological capabilities through the Clean Development Mechanism: Some Quantitative Explorations

3. Kamal Vatta, PAU, Ludhiana and Takahiro Sato, Kobe University, Japan
   Indian Labour Markets and Returns to Education, 1983 to 2009-10

4. Radhe Shyam Pradhan, Mahananda Chalise, Dilli Raj Sharma, Kamal Maiya Pradhan, and Rita Shrestha, Tribhuvan University, Kathmandu, Nepal
Knowledge Management and Organizational Performance: The Evidence from Nepalese Banking Sector

*Rapporteur: Dr. Parmod Kumar Aggarwal and Ms. Geetu Gupta*

Technical Session II (4.00 p.m. – 6.00 p.m.) organized by AAS, New Delhi
(Senate Hall)

Knowledge Economy and Inclusive Development in South Asia

In Chair: Prof. Reena Marwah and Prof. Upinder Sawhney
Discussant: Dr. N.S. Bist, HPU, Shimla

1. Rajeev Ranjan Roy, Assistant Editor, Daily Post, Chandigarh
   Knowledge Economy for Inclusive Development
2. Preeti Singh, Jesus and Merry College, New Delhi
   Modeling Knowledge and Human Development Through KPOs in India
3. Reena Marwah, ICSSR, New Delhi
   Gender empowerment and the Knowledge Economy: With Special Reference to India
4. Surjit Singh, IDC, Jaipur
   Knowledge Economy and Development: Some Perspectives from India

*Rapporteur: Dr. Parveen Bansal and Ms. Sunidhi Gupta*

February 20, 2013

Technical Session III-A (9.00 a.m. – 11.00 a.m.) Intellectual Capital
(Syndicate Room)

In Chair: Prof. G.M. Bhatt and Prof. Atvir Singh

1. Lindile L. Ndabeni, and Rasigan Maharaj, Tshwane University of Technology, Pretoria
   Tshwane, South Africa
   The Informal Sector and the Challenges of Development in South Africa
2. Fayza Z., University of Jammu (J&K)
   The Impact of Intellectual Capital on the Govt. Silk Factory, Rajbagh, Srinagar, J&K
3. Vani Aggarwal and Jyotsna Chowdhury, IIFT, New Delhi
   Intellectual Property Protection and Health Innovation: Concerns for India
4. Parkee M Bhatnagar and Ruma Mehta, Surya World University, Rajpur
   A Critical Review of the Initiatives Taken in India for the Acculturation of Agrarian Economy into Knowledge Economy
5. Rajni Saluja, St. Soldier College, Jalandhar
   Emergence of Knowledge Economy- A Comparative Study of RRICS Nations

*Rapporteur: Prof. Shakuntla Gupta and Ms. Swati*

Technical Session III-B (9.00 a.m. – 11.00 a.m.) Knowledge Economy and Economic Growth (Senate Hall)

In Chair: Prof. Neera Verma and Prof. Surinder Mor

1. Neeraj Kumar and Kuldeep Kaur, Guru Nanak Dev University, Amritsar
   Knowledge Economy and Economic Growth in India- An Analysis
2. Mandeep Singh & Kuldeep Kaur, Guru Nanak Dev University, Amritsar
   The Role of Knowledge Economy in India’s Structural Changes: A Post Reform Scenario
3. Gursharan Kaur and Paramjeet Kaur Dhindsa, Guru Nanak Dev University, Amritsar
   Knowledge Economy and Women Empowerment- A Case of SGSY
4. Atvir Singh, Choudhary Charan Singh University, Meerut and Bharat Bhushan, University of Delhi, Delhi
   Human Capital: The Road to Prosperity
5. Nipun Aggarwal and Pritpal Singh Bhullar, Surya School of Business Management, Rajpura
   Knowledge as Tool for the Economic Growth
6. A.S. Bhullar, PAU, Ludhiana
   Markets, Information Technology and Public Mind
   Rapporteur: Dr. Ramna Singla and Ms. Har Sandeep Kaur

Technical Session III-C (9.00 a.m. – 11.00 a.m.) Management of Knowledge Economy
(Seminar Room, Dept. of Eco)

In Chair: Prof. M.M. Goel and Prof. A.S. Bhullar

1. Maddhu Jasola and Ms Shivani Kapoor, Institute of Management, New Delhi
   Human Development Through Work Life Balance in Knowledge Economy
2. Arundeep Singh, Mr. Shayar Brar, Mr. Harwinder Singh, Baba Farid Group of Institutions, Bathinda
   Knowledge Management for Everyday Life
3. Jasraj Kaur and Ms. Kamaljeet Kaur, Punjabi University, Patiala
   Knowledge Diffusion Processes in the Knowledge Economy
4. Amanpreet Singh, Punjab Mandi Board
   Teacher Education & Human Capital - Some Qualitative Aspects
5. Gurjeet Kaur and Ms. Inderpreet Kaur Sethi, MIET, Mohri (Haryana)
   Knowledge Management: Issues and Challenges
6. Sangeeta Nagaich and Preeti Sharma, Punjabi University, Patiala
   Knowledge Management in Indian Industry – Case of Selected IT Companies
7. Manu Gupta, Thapar University, Patiala
   Effect of Social Capital on Quality of Work Life: An Empirical Study
   Rapporteur: Dr. Rupinder Singh Sodhi and Ms. Amandeep Kaur

Technical Session IV-A (11.00 a.m. – 12.45 p.m.) Processes of Knowledge Economy
(Senate Hall)

In Chair: Prof. Aradhna Aggarwal and Prof. B.S. Ghuman

1. Jaswinder Singh Brar and Sukhwinder Singh, Punjabi University, Patiala
   Uncovering Punjab's Higher Education: Issues Related to Expansion, Quality and Finances
2. Praveen Bansal, Rajasthan University, Jaipur
   Role of Tertiary Education in Knowledge Management for Economic Development
3. Surendar Mor, Mahila University, Khanpur Kalan, Sonepat (Haryana)
   Knowledge Management and Economic Development
4. Imtiyaz ul Haq, University of Kashmir, Srinagar (J&K)
   Transition to Knowledge Economy - Role of Education and Governance
5. Pooja Sharma, Saharanpur
   Intellectual Property Rights and Human Development
6. Meenu Jain, DAV College for Girls, Yamunanagar (Haryana)
   India as it Moves to be Knowledge based Economy
7. Surender Kumar Sharma, H.P. University, Shimla
   Knowledge as Tool for Economic Growth
8. Amit A. Joshi, Yamunanagar (Haryana)
   'Dynamic Education System: An Indispensable Provision for Knowledge Economy'
9. Priya Jindal
   Analytical Study of Human Resource Development and Its Impact on Banking Sector
   Rapporteur: Dr. Manjit Sharma and Ms. Pallavi Goyal
Technical Session IV-B (11.00 a.m. – 12.45 p.m.) Knowledge Economy Metrics
(Syndicate Room)
In Chair: Prof. Amarjit Singh Sethi and Prof. Elias Sanidas

1. Minakshi Garg and Bhavna Chabbra, S.D. College, Ludhiana
   Productivity Growth and Knowledge Spillovers: Evidence from Indian Private Banks

2. Anju Rani BPSMV Khanpur Kalan, Sonepat (Haryana) and Rupinder Sodhi, Punjabi University, Patiala
   Role of Service Sector in Economic Development of Indian Economy

3. Parmod Kumar, Punjabi University, Patiala, Anshu Lila, Jain Vishav Bhart University, Churu and Deepak Kumar, Punjabi University, Patiala
   Assessing Knowledge Assets through Intellectual Capital Measurement

4. Savita Bhagat and Sanjeev Gupta, Central University, Dharamshala (H.P.)
   Jobs in the Knowledge Economy- Not Inclusive for Women

5. Archana Chaudhary, Kurukshetra University, Kurukshetra
   Quality of Human Resources at RBI

6. Anmolpreet Kaur and Gurdeep Kaur
   WTO, Human Development and Knowledge Economy

7. Atvir Singh
   Role of Health and Nutrition and Knowledge Development

Rapporteur: Dr. Piyush Verma and Ms. Manjinder Kaur

Technical Session IV-C (11.00 a.m. – 12.45 p.m.) Allied Areas
(Seminar Room, Dept. of Eco)
In Chair: Prof. M.S. Sidhu and Prof. Imtiyaz ul Haq

1. Angrej Singh Gill, PURC, Kauni, Sri Muktsar Sahib
   Financing of University Education in India: An Analysis

2. Neena Malhotra and Pushpa Devi, GNDU, Amritsar
   Changing Pattern of Internal Migration and Capital Formation in India

3. Rakesh Kumar, Punjabi University, Regional Centre, Bathinda
   Employability: Need to Bridge Skill Gaps

4. Harmandeep Kaur and Parmjit K. Nanda, GNDU, Amritsar
   Knowledge Creation and Economic Growth in Developing Countries

5. Shyam K Fardale, Datta Meghe Institute of Engineering Technology, Wardha
   Training and Development Practices at Lloyds Steel Industries Ltd, Bhugaon, Wardha

6. Puneet Kaur and Kuldeep Kaur, GNDU, Amritsar
   The Knowledge Economy and Productivity per Employee: A Sectoral Analysis

7. Apar Singh and Karampal Singh, Punjabi University, Patiala
   HDI vis-a-vis CPI

Rapporteur: Prof. Sukhwinder Singh and Ms. Deepika

Valedictory Session (1.00 p.m. – 2.00 p.m.)
(Senate Hall)
In Chair: Prof. R.K. Bansal and Prof. Inderjeet Singh

Valedictory Address – Prof. Radhe Shyam Pradhan, Tribhuvan University, Kathmandu, Nepal
Vote of Thanks – Dr. Lakhwinder Singh, Coordinator, CDEIS, Punjabi University, Patiala

Rapporteur: Dr. Parmod Kumar Aggarwal and Ms. Parul Narula
SUMMARY OF THE CONFERENCE PROCEEDINGS
(19-20 FEBRUARY 2013)

Inaugural Session

Mr. Ashutosh Chadha, Director, Corporate Affairs South Asia, Intel Technology India Private Limited, New Delhi, while delivering the inaugural address expressed the deep concern that we are creating a generation of educated-unemployed and not employable educated. It need to be understood that the knowledge is highway to success and has emerged as a new currency. The competition is now global and very strong and stiff. Now individuals compete with other individuals across the globe. Innovations have changed the very growth process of national income. It is the education systems which have become engines of growth in the advanced countries. These were the words expressed by Mr. Chadha during the inaugural session of the two day International Conference on "Human Development and Knowledge Economy" today at Punjabi University, Patiala. He further said the quality of education is fundamental to reap the gains from the growth. The education impacts the growth through entrepreneurship and innovation. The economies moved from agrarian to industrial to financial and now to imagination ones. The interactive skills are required in the modern era to sustain and build new production systems. The nature of jobs is changing and people are performing lot many jobs. The quality for education is a big challenge. Technology for the sake of technology should not be the motive. Education system of the country must address the issues of equity, quality, social and market relevance of education imparted to the students. He emphasized that the knowledge has emerged as the new currency and highway to success.

Professor Leonardo A. Lanzona Jr. Manila University, Philippines in his Keynote Address emphasized the role of knowledge economy for human development. The world is moving towards a Knowledge-based economy in which knowledge is viewed as an engine of growth. But the author points that the contribution of knowledge economy on human development has been neglected. There are many ways in which the knowledge economy can improve human development like through research and development institutions that can make technological innovations, through information technology. But the author argues that differences between the old and new sets of work practices make the movement from old to the difficult and could result in productivity loses. Productivity changes resulting from knowledge economy, for instance, cannot be understood and implemented completely unless various forms of extension and training activities are established. The author in this presentation proposed the hypothesis that impact of knowledge economy on human development first begins in education quality. Apart from being educated, other factors that affect human development include, enjoying a long and healthy life, having access to resources that enable people to live in dignity, and being able to participate in decisions affecting the community. However, he highlighted the improvement of educational system as a key objective of knowledge economy. For measurement of the quality of education, he proposed the method used by Hanushek and Woessmann during 2010. They used cognitive skills, defined as a simple average of the mathematics and science scores over international tests, as a proxy for average educational performance of the whole labor force and an instrumental variable for education quality. The results showed that quantity of
schooling was statistically significantly related to economic growth in a specification that neglected education quality, but the association between years of schooling and growth turned insignificant. To the question of ‘How exactly does the increased cognitive skills results in higher quality?’, the author argued that knowledge economy could improve the quality of education through the emergence of more effective research institutions which can create and develop innovations. The author says that increased social investments have not always resulted in substantial economic growth mainly because of insufficient access to knowledge economy.

The speaker further highlighted certain factors that affect the quality education in a given framework in which education was considered a public good, which are, firstly, the quality of primary education received could be too low to justify further investments in higher education. Secondly, in the face of capital market imperfections, cash constraints prevented the households from using school services. Thirdly, the demand for higher education is conditioned by labor market policies that support higher returns for skilled workers. Fourthly, educational expenditures that do not respond adequately to economic changes are not expected to increase household’s demand for learning at school. Thus the author emphasized the need for educational reforms to react effectively to the technological and sectoral shifts arising from economic changes and arising from knowledge economy as well. The presentation highlighted certain findings from the Global Competitive Report and the World Economic Forum Report based on 2009 and 2010 surveys. The results of these showed that GDP per capita, internet access and quality of research institutes were positively correlated i.e. as the country develops; the accessibility to internet which is a measure of knowledge economy progress should be a precondition for improving the quality of research institutions. The quality of research institutions seemed to exceed the quality of education as the country increased its GDP per capita. This suggested that the research institutions may be necessary to improve the quality of education further especially after a country had reached a higher level of development.

He further argued that the source of growth changed over the period with the development of technology. The modes of production are becoming knowledge-intensive increasingly. The contribution of knowledge-economy to human development must be examined very carefully in order to make use of knowledge. The series of complementary technologies brings the maximum benefits. There may be productivity losses when we move from one sort of production systems to others. The human capital building institutions are very important in the present times. He emphasized that the greatest challenge is to build a good school education system. The quality of education is significantly related to the process of economic growth. Knowledge economy can affect the human development by impacting and enhancing the cognitive skills. The increase in expenditure alone on education will not solve the problem of quality of education. The complimentarity of technological gains to education gains do wonders in bringing highest level of human development. The demand for higher education is conditioned by the returns in the labour market. The quality of inputs in production process affect the productivity benefits in many ways. The quality of reforms could not be measured by traditional measures and presented various alternative ways and means to measure the success of reforms. He concluded that knowledge economy results in lower cost of producing skills, which can now be
more accessible. Certain evidence can be provided like the provision of online education by well known universities. But how can these programs work in an unequal scenario needs to be explored further.

Professor Inderjeet Singh, Department of Economics, Punjabi University Patiala has welcomed the guests. Prof. R.K. Bansal, Head, Department of Economics introduced the various guests and told about the organization of the conference. Prof. Lakhwinder Singh Gill introduced the theme of the Conference by highlighting the various dimensions of the emerging challenges of knowledge explosion and associated policy framework. Dr. Jaspal Singh, Vice Chancellor while presiding over the session argued that the distinction between information, knowledge and wisdom be understood clearly in orders to build a healthy, progressive and just society. Professor A. D. N. Bajpai, Vice Chancellor, Himachal Pradesh University, was the Guest of Honour. Professor Bajpai argued that India has vast pool of traditional knowledge which needs to be explored and used in the development of the society. Professor Sukhwinder Singh presented the vote of thanks.

Special Lecture: Tilman Altenburg

Altenburg Tilman, Professor, German Development Institute delivered a special lecture on “Industrial and Innovation Policy: Making it Work for Inclusive Human Development”, in the 'International Conference on Human Development and Knowledge Economy'.

Altenburg, in his paper examined and elaborated how to make industrial and innovation policies working for human development in the economic system. According to the changing concept and definition of industrial and innovation policies, government's measures and initiatives, or set of measures that help to change the existing structure are acceptable. These policies help in generating jobs, growth and the sustainability of the industry along with taking care of social responsibilities. The industrial and innovation policies mainly focus on two critical dimensions: firstly, how to design industrial and innovation policy for inclusive growth in developing countries? And secondly, what are the industrial and innovation policy requirements from the perspective of environment sustainability? Tilman suggested six specific industrial and innovation policy requirements for inclusive growth especially in developing countries; Focus on social inclusion, tackling structural heterogeneity, strengthening productive linkages, addressing latecomer situation, using remaining policy space wisely and dealing with hybrid institutions. The concept of inclusion innovation for developing countries calls for different set of policies like pro-poor targeting policies to overcome segregation of firm linkage policies, technology transfer and spillover, integration of Micro, Small and Medium Enterprises (MSME) and industrial policy, strategies to promote formalization, reduced administrative entry barriers for firms, enforcement of essential regulations and pro-poor sequencing of economic reforms.

The industrial and innovation policy challenges for sustainable development include; firstly, mixed objectives like economic and environmental targets, unprecedented urgency of low carbon transformation, systemic character of transformation, additional and more severe market failure and Low Carbon Industrial Policy (LCIP) requires stronger government intervention.
In the end, the lecture summarized that the role of industrial and innovation policy for sustainable development is essential and postponing action today will boost costs for future generations, internalize environmental costs including carbon prices and water prices. There is an urgent need to reduce number of exemptions and emphasis should be laid to phase out harmful subsidies that will affect our environment harmfully. Technology push policies, such as development of R&D and development of subsidy standards are very important and need urgent attention. Therefore, it is important to mobilize finances, create policy rents and develop predictable long term policy frameworks, so as to guarantee tariffs and investments. Further, there is high demand for governments to improve policy learning, and minimize political capture on industrial and innovation policies.

**Technical Session I: Knowledge for Development**

This technical session was Chaired by Prof. Surjit Singh, IDS, Jaipur. Professor Elias Sanidas from Seoul National University, South Korea in his paper "How knowledge is Transformed into Economic Development: Some Fundamental Issues" raised number of questions to expand knowledge and wisdom. Can we make the absolute statement that all human actions and their consequences have their deep root in some kind of knowledge? In particular, can we assert that all our economic life has its root in some kind of knowledge? More precisely, how are economic development, capital, technology, and other factors related to knowledge? How is knowledge transformed into economic development? How do history and institutions affect knowledge? The present paper endeavors to provide precise answers to these questions although we know beforehand that these answers are not easy to clearly pinpoint. We will first see what we know about knowledge in section 2. In section 3 we will relate knowledge to institutions and history. In section 4, we will link knowledge to capital and technology (innovations). In section 5 we will expand the concept of knowledge into the four fundamental processes of production.

There are four channels for knowledge and technology development through institutions:

i. Ability to generate: who, how, when, for how long, etc.

ii. Diffusion and tightness of: who and how many share knowledge and what is the culture of access? How is knowledge tested and selected?

iii. Mapping of propositional onto the set of techniques $\lambda$, for example via good engineering schools, compensation and incentives.

iv. Diffusion of innovation. This depends on losers and winners of old and new innovations, the distribution of income, and the importance of entrepreneur

In summary, the four vital PROBB constitute the fundamental elements of producing work: we need knowledge (POW) and rules (POC) in order to decide (POS) how much of each tangible factor of production is efficient to execute the desired work in an organized way (POM) in order to attain the objectives and mission of the firm (POS). If we only have rules, quantities of tangible factors, knowledge and decisions, work cannot take place unless there are the right movements of execution and effort. He concluded that this paper has attempted to shed some preliminary light into the role of knowledge in creating capital, technology, and hence generating
economic development. Although in standard economic analysis capital and technology have been considered to be fundamental in promoting growth, it has been elusive as to why and how they do so. The thesis endorsed here suggests that behind capital and technology the moving force is the concept and impact of knowledge. Individuals, firms, and societies are constructed around knowledge and indeed useful knowledge which in turn contains knowledge how and knowledge what. In addition, knowledge is both explicit and tacit. Furthermore, knowledge is path dependent on history and institutions. Thus, capital and technology are not only machines and equipment, but every aspect of useful knowledge as shown in the context of the processes of wisdom, strategies, movements, and contracts. It is the interplay of these four processes which transform knowledge into economic development, first on a micro basis and eventually on a macro basis. Entrepreneurs and everybody participating in the complex process of production have the volition to determine and evolve chaos into a negentropic system that promotes the four processes PROBB into capital and technology as defined in this paper. Individuals, firms, and societies differ amongst each other because the PROBB they generate differ.

Dr. Aradhna Aggarwal, in this paper, titled "Acquisition of Technological Capabilities through the Clean Development Mechanism (CDM): Some Quantitative Explorations" investigated the impact of CDM on technological capabilities of implementing firms in India using longitudinal data of 201 firms for the period 2001-2012. These firms have implemented CDM projects in the area of renewable energy in any year during 2003-2010. The analysis uses Difference-in-Difference techniques based on longitudinal data. It shows that the CDM has been incapable of encouraging local R&D efforts which could result in the transformation of energy systems in India. It has however succeeded in reducing firm level intensity of environment expenditures. It could be that firms seek to convert the challenges of meeting environment specific requirements into business opportunities. It is widely recognized that innovations and technological solutions are critical in effective global response to the climate change challenge. Achieving the global reduction of GHGs requires innovation to transform current technologies into cleaner and climate resilient technologies. But knowledge creation is largely concentrated in a few highly industrialized countries these countries constantly upgrade their knowledgebase while others in particular developing countries lag behind. Realising this, the UNFCCC (United Nations Framework Convention on Climate Change) which is the apex body formed in 1992 to provide solution to the growing problem on Climate Change under the guidance of IPCC (Intergovernmental Panel on Climate Change) mandates developed countries to take all practicable steps to promote, facilitate and finance, the transfer of environmentally sound technologies and know-how to developing countries. To effectively implement this mandate the Kyoto Protocol (KP) of the UNFCCC established the ‘Clean Development Mechanism’ (CDM) in 1997 which became operational in 2006. The CDM is a project-based mechanism, whereby eligible entities from developed countries may finance emission reduction projects in developing countries and use carbon credits generated by these projects to meet a portion of their greenhouse gas (GHG) reduction commitments under the protocol. Although technology transfer is not an explicit mandate of the mechanism, it is expected to facilitate technology transfer by financing emission reduction projects that use technologies currently not available in host countries.
In general, the transfer of a technology has three components – the first is acquisition/import of appropriate technology, the second is its adaptation and absorption and the third is its widespread diffusion. While most studies focus on the first, there is little analysis of the latter two which are crucial for technological learning and capability building. Our research essentially focuses on technological adaptation and absorption of technologies through CDM. It investigates the role of CDM in building absorptive capacity and technological learning in the Indian context. Central in our approach is the argument that a successful technology adoption requires recipients to have capabilities to assess the need, select, assimilate, adapt, and develop the appropriate technologies. More specifically the study distinguishes between technology acquisition/import and technological capabilities and deals with the impact of investment in CDM projects by host country firms on their technological capabilities. Technological capabilities are measured in terms of two quantitative variables: one, R&D expenditures incurred by host country firms; and, two, expenditures incurred on environment solutions by firms. Currently, the CDM is imperiled. Carbon prices in the CDM market have declined 70% in the past year alone and are projected to fall further signaling the potential death of this instrument. Policymakers and climate advocates alike increasingly question the continuing value of instruments like the CDM for various reasons. Our interviews with various stakeholders reveal that both governments and private investors are losing confidence in the CDM market. According to the CDM Policy Dialogue launched at the United Nations Climate Change Conference held in Durban, South Africa, “In the absence of new solutions, CDM is likely to remain the world’s foremost – and possibly sole – means of gaining the benefits of a global carbon market” (p.2). Since new solutions will take years to design and make operational, there is a strong need to analyze the impact of CDM on various stakeholders and strengthen it. The CDM Policy Dialogue commissioned a research study to examine the impact of CDM projects. The study based on interviews with stakeholders concludes that “the CDM is a valuable tool that – with appropriate reforms that are the subject of the remaining recommendations in this report – should be retained and scaled up to enhance the cost-effectiveness of, and to promote, global mitigation activities”. Against that background the present study is expected to provide useful insights on CDM benefits in terms of upgrading technological capabilities of firms in developing countries. The rest of the study is organized into nine sections. Finally, she said that EU-US list of manufactured environment goods concerning trade issues related through negotiations at the WTO (World Bank, 2008) which is broken into three categories: pollution management, cleaner technologies and products, and resource management group.

Dr. Kamal Vatta of Punjab Agriculture University, Ludhiana and Takahiro Sato of Japan presented paper entitled "Indian Labour Markets and Returns to Education, 1983 to 2009-10". They examined the trends in returns to education in light of the long-term economic growth in India during 1983 to 2009-10. It outlines various forms of inequality issues prevalent in Indian labour markets, with respect to the rural/urban areas, gender, caste and nature of work. The unit level data from 6 rounds of National Sample Survey during 1983, 1987-88, 1993-94, 1999-2000, 2004-05 and 2009-10 were used for this study. Wage function was estimated by using the
OLS method and the results were also compared to the median wage equation, which proved the consistency of these estimates. The casual wage markets for males provided incentives for higher education till some intermediate levels in the form of higher wage earnings than their illiterate or below primary educated counterparts but no additional advantage for secondary or graduate levels of education. Higher education could not translate into better wage earnings for female casual workers. The returns to all education levels were converging at low levels with the returns for secondary and graduate levels for urban casual male workers declining over time. There was a decline in the returns to secondary and graduate level of education for rural male regular workers with almost no change in the pattern of returns for urban male regular workers. The returns to education for graduation for female workers increased tremendously due to increased employment opportunities for better educated females in the India during the last decade of fast economic growth, led largely by the growth of the service sector. While there is need to enhance public investment in education for improving higher education opportunities in India, there is also a need to reorient rural education by focusing on imparting working skills between middle level of education and secondary levels. The education curriculum must ensure that higher education translates into better wage earnings for the unskilled or semi-skilled majority of the rural workforce in the long run.

Finally, they found that Indian labour markets show some peculiar characteristics as while the casual work is dominated largely by the illiterates or very less educated workers, the regular labour markets offer jobs to relatively better educated workers. The casual labour markets for male workers provided incentives for education till some intermediate levels of education in the form of higher wage earnings but not for higher education such as secondary or graduation. There was almost no advantage for having higher education for female casual workers in rural and urban areas, as it was not translating into higher wage earnings when compared to the illiterate or below primary educated workers. The returns to education were significantly positive for male workers and were higher for primary and middle levels of education. While the returns to secondary and graduate levels of education for urban casual male workers declined over time, these returns seemed to be converging at very low levels in recent times for all the levels of education. The wages for uneducated casual male wage workers in rural areas increased relatively faster than their educated counterparts, which needs further exploration into its reasons.

The returns to education for rural male regular workers increased monotonically with an increase in the level of education, though there was a decline in the returns to secondary and graduate level of education. With almost no change in the pattern for urban male regular workers, the returns differed considerably across different levels of education. The returns for female regular workers in rural and urban India increased tremendously over time. It may be due to increased employment opportunities for better educated females in the India during the last decade of fast economic growth, led largely by the growth of the service sector. The results reveal a significant impact of recent fast economic growth of Indian economy in the form increasing returns to higher levels of education. The growth has especially benefited the educated female workers by generating employment opportunities in the regular wage category. However, the benefits have not clearly trickled down to the educated female workers in casual wage work. While there is need to enhance public
investment in education for improving higher education opportunities in India, there is also need to reorient rural education which may include imparting some working skills between middle level of education and secondary levels. He believes that the reorientation of the education curriculum will translate into better rewards for the unskilled or semi-skilled majority of the rural workforce in the long run.

Prof. Dr. Radhe Shyam Pradhan, Dr. Mahananda Chalise, Dr. Dilli Raj Sharma Dr. Kamal Maiya Pradhan, & Rita Shrestha, (Tribhuvan University. Nepal), in their joint presentation on "Knowledge Management and Organizational Performance: The Evidence from Nepalese Banking Sector" told about the role of knowledge management in Nepalese economy. The study stated that KM has embraced in many organizations and requires a business case to justify expenditure on programs to implement knowledge management behaviors and practices or hardware and software solutions. This paper provides support for the importance of knowledge management to enhance innovation and performance of Nepalese banks. The main objective of the study is to provide important empirical evidence to support the role of knowledge management within Nepalese banks. Data were collected using a questionnaire survey of bank executives of seven private sector banks and three government sector banks. A total of 240 survey questionnaires were distributed and 180 were received which are usable (75 percent response rate). The sample was checked for response and non-response bias. Hypotheses were tested using structural equation modeling. The study revealed that knowledge management as a coordinating mechanism supports the view that Nepalese banks with a knowledge management capability will use resources more efficiently and so will be more innovative and perform better. As with most studies, it is important to replicate this study in different contexts in Nepalese setting. This paper is one of the first to find empirical support for the role of knowledge management within Nepalese banks.

This study examines the role of effective knowledge management of Nepalese banks in two ways. First, the paper examines the suggestion that effective knowledge management supports the conversion of all other resources into capabilities. Since capabilities underpin the long run survival of a bank, banks with effective knowledge management behaviors and practices are likely to make better use of resources and so will exhibit superior outcomes such as more organizational innovation and superior financial performance. Second, the paper examines the direct contribution of effective knowledge management to two outcomes of interest: innovation and performance. Knowledge management is presented in three parts: knowledge acquisition, knowledge dissemination and responsiveness to knowledge. While little guidance comes from the extant literature, this paper proposes a positive relationship between the three knowledge management components in Nepalese banking industry. That is, a firm with access to a greater pool of knowledge will have better-developed knowledge dissemination and responsiveness to knowledge behaviors and practices. Similarly, a firm with better-developed knowledge dissemination behaviors and practices will be more responsive to knowledge.

The data were obtained from a sample of 10 Nepalese banking undertakings with highest number of employees. They represent three banks from government sector and seven banks from private sector. The banks were selected on stratified sampling basis. This screening criterion was established on the basis that larger
organizations would require the existence of some processes to facilitate knowledge management. The primary data were collected by send and collection method. Respondents were sent structured questionnaire. At least 24 respondents within each bank were identified ranging from CEO to officers and asked them to complete the questionnaire, assuming that he or she would be in a position to comment on the flow of knowledge around the entire organization rather than the flow of knowledge within one or a few departments.

The useable questionnaires were received from 180 respondents leading to the response rate of 75 percent. The sample was slightly over-represented larger banks. Since there has been little empirical research on knowledge management practices reported in the extant literature in international context not in Nepalese context, it is difficult to know how industry classification or industry size might bias the results. The role of effective knowledge management as a coordinating mechanism was established by providing evidence that Nepalese banks with a propensity toward developing incremental innovations were more likely to have well-developed knowledge management behaviors and practices. One can assume that these Nepalese banks not only have a knowledge management capability but also effectively use other available resources. This result shows the role of knowledge management as a coordinating mechanism when developing incremental innovations in the firms.

However, there was not limited support for the view that an organization developing new to the world innovations had well-developed knowledge management behaviors and practices, nor was there conclusive evidence for the proposition that superior financial performance and knowledge management co-existed. It may be that a reliance on existing knowledge and existing processes to disseminate and respond to that knowledge may inhibit the development of new to the world innovations. For banks performance, it may be that there is perhaps too large a gap between the supporting role of knowledge management and banks performance as an outcome.

All three knowledge management components were found to have a direct effect on innovation, but only responsiveness to knowledge directly contributed to banks financial performance. The Knowledge-creating Company, present knowledge management as imperative for organizational innovation. Although, definition of knowledge management is more consistent with the knowledge dissemination component of the construct used in this paper, my results are important because they provide the first empirical support for the multiple conjectures that are made about the consequences of effective knowledge management. While disappointing that only responsiveness to knowledge directly affected banks performance, the findings can be explained by the large gap between non-market knowledge and banks performance. Once again, to have empirical evidence to add richness to the discussion of the consequences of effective knowledge management is an important outcome of this study.

Knowledge management has been hailed as a new discipline. Unfortunately, the interpretation of the construct knowledge management is often confused with the introduction of information technology as a solution to capture knowledge. This paper presents a broader concept of knowledge management in Nepalese banks by using sixteen knowledge management factors previously found to be characteristic of a firm effectively managing knowledge. The paper also provides evidence of the importance
of effective knowledge management in Nepalese settings. Therefore, Nepalese banks managers should consider programs to enhance the 16 knowledge management behaviors and practices since Nepalese banks that do effectively manage knowledge will be more innovative.

According to him, Nepalese banks effectively managing knowledge were also more innovative and performed better. The study also found knowledge management positively affected banks innovation and responsiveness to knowledge positively affected banks performance. One of the central tenets of this paper is that effective knowledge management enables good quality services to be extracted from other resources. Future research is required to firmly establish this assertion by further examining the supporting role of knowledge management in Nepalese organizations. Lastly, given the importance of knowledge management to knowledge-based societies, it is hoped that a stream of research will emerge that provides further confirmation of the results reported in this study and identifies other consequences, and of course antecedents, of effective knowledge management.

**Technical Session III-A: Intellectual Capital**

Lindile L. Ndabeni and Rasigan Maharajh in their paper "The Informal Sector and the Challenges of Development in South Africa highlighted the key characteristics of informal sector and its estimated size including its contribution to the economy, activities that occur in the sector, key drivers of the sector and key constraints facing informal sector enterprises. The results of the study reveal that there has been a revival of interest in the informal economy in South Africa largely due to the increased size of the informal sector and its contribution to the economy. The informal sector is observed to be demand driven with skills that are directly linked to the activities that are undertaken. The activities which dominate are the retail activities. However, the challenges facing the informal sector business are found to be linked to their support marketing, training in the form of book keeping, managerial skills and technical training.

Fayza Z. in the paper entitled the "Impact of Intellectual Capital on the Govt. Silk Factor, Rajbagh, Srinagar" explored the development of several conceptual measures and models regarding intellectual capital and its impact on business performance of J.K. Industries Ltd. with the help of selected sample of 50 employees. The final retained, subjective measures and optimal structural specification show a valid, reliable, significant and substantive casual link between dimensions of intellectual capital and organization's performance.

Vani Aggarwal and Jyotsna Chowdhury in their paper 'Intellectual Property Protection and Health Innovation: Concerns for India' examined the impact of intellectual Property Rights in health innovations in case of Indian Pharmaceutical sector in pre and post TRIPS era. The study endeavors to balance both the legal and economic aspects of health innovations and patent regime in India. The R&D expenditure of top 20 domestic Pharmaceutical industries has been analyzed to capture the impact of transition from process patent to product patent on health innovations in India. The findings of the study reveal that the regime change in the patent system has neither appear to have helped neither health innovations nor access to medicines at economically viable prices. In view of this, the researchers suggested
flexible patent regime and a targeted public sector R&D and Govt. support for innovations.

Parkee M. Bhatnagar and Ruma Mehta in their research paper entitled ‘A Critical Review of the Initiatives Taken in India for the Acculturation of Agrarian Economy into Knowledge Economy’ critically evaluated the various initiatives taken by the Govt. of India for the acculturation of agrarian economy into knowledge economy and concluded that rural economy especially agriculture sector may be able to improve its standard of living and performance in near future only through the use of ICT enabled services. In order to reap benefits of knowledge economy the researchers suggested improvement in education system, removal of language barriers, information system, human resource development centres, knowledge sources, R&D departments, rural finance etc.

Ms. Rajni Saluja's paper while using secondary data provides a descriptive view of the knowledge economy concepts for studying the differences in the performance of various BRICS economies of the world. The paper also gives the details of knowledge economy index and its components. The basic score card of knowledge economy approach was used to explain the difference among the BRICS nation on various pillars such as institutional regime, education etc. The policy recommendations were also made to strengthen the knowledge economy aspect of the nation.

Technical Session III-B: Knowledge Economy and Economic Growth

The third technical session was devoted to the Knowledge Economy and Economic Growth. This session was jointly chaired by Prof. Neera Verma and Prof. Surinder Mor. During this session five papers on Knowledge Economy, Economic Growth, Women Empowerment and other important areas of the theme has been presented.

Neeraj Kumar and Prof. Kuldip Kaur from GNDU, Amritsar in their paper “Knowledge Economy and Economic Growth in India- An Analysis”, presented that since last one decade, the world economy has been facing mounting challenges and changing at unprecedented rate. This wave of paradigm shift drives the exponential growth in emerging economies like India and China. In today’s competitive scenario, the role of knowledge has changed and knowledge plays a pivotal role in economic growth of any country. With the development of generalization of scientific knowledge, causal relations, the transformation of science into knowledge leads to inventions and drive the economies. The economic growth in India has been driven by the expansion of services that have been growing consistently faster than other sectors due to inclusion of knowledge in the service sector. It is argued that the pattern of Indian development has been a specific one and that the country may be able to skip the intermediate industrialization-led phase in the transformation of its economic structure.

Mandeep Singh and Prof. Kuldip Kaur from GNDU, Amritsar in their paper "The Role of Knowledge Economy in India's Structural Changes: A Post Reform Scenario" described that the Structural change in the economy is defined in this part as two disjoint phenomena: a) increase in the share of high and medium high tech sector's (combined with the emergence of new knowledge intensive sectors), and b)
increase the intensity of knowledge incorporated in more traditional sectors, including by the emergence of specific specialized sub-sectors. The gradual evolution towards a higher share of services in the economy is only part of the structural change, as economies around the world are increasingly injecting more knowledge in their activities. This knowledge accumulation can be measured both by the knowledge of the labour force in each sector and by the research intensity of each sector. Change is taking place at country level in R&D intensity in the manufacturing sector, and overall India is showing a structural change towards higher knowledge-intensity in the existing sectors, but with a smaller size of these sectors in the total value-added of the economy.

Gursharan Kaur and Prof. Paramjeet Kaur Dhindsa from GNDU, Amritsar in their paper, "Knowledge Economy and Women Empowerment- A Case of SGSY", described the impact of participation in Self Help Groups on the empowerment of women in the context of the great importance being given to the group approach while conceptualizing any programme for rural women. The study looks at various dimensions of empowerment – material, cognitive, perceptual and relational. Access to credit can help in expansion of material base of women by enabling them to start and expand small businesses, often accompanied by market access; the women also experienced 'Power within': feelings of freedom, strength, self identity and increases in levels of confidence and self-esteem. However, gender discrimination is most deeply entrenched in the family, evident in attitudes towards daughters in law, daughters, the gender based division of work, roles and responsibilities as well as the mind-set towards domestic violence and issues of ownership and inheritance of land. Besides, involvement in SHGs has enabled women to have a voice in the community affairs and they have been able to tackle problems such as a lack of drinking water and electricity, access to health services and children’s education.

Dr Atvir Singh in his paper, "Human Capital: The Road to Prosperity", describes the importance of human resource development in the overall development process, as it can be underlined by the mere fact that it is the human element that puts the inanimate factors of production together and, commands organizes and controls them though HRD as a stream of knowledge and research covers so many aspects like education & skill formation, health & nutrition, population control and planning and employment, to keep the analysis focused, the study covers only one aspect- that of education and skill formation. This paper seeks to identify the reasons why HRD in the current scenario assumes more significance than ever before.

Nipun Aggarwal and Pritpal Singh Bhullar in their paper, "Knowledge as Tool for the Economic Growth", describes how knowledge has been transforming into factor of production along with capital and labour. Knowledge economy has been growing by leaps over bounds because of globalization, changing taste of customers and technology innovation. Role of Tacit knowledge has been confined and scope of codified knowledge has been expanded in knowledge economies. Learning is a continuous process and through continuous learning, knowledge can be acquired. Firms implement such knowledge for innovation and continuous improvement of products and production processes. In today's world, Knowledge can be represented an important constituent of Economic growth and prosperity of country. Knowledge leads to long run earnings, high employment rate for any individual.
In the end, while commenting on the theme and papers the chairman stressed that the role of knowledge has changed and knowledge plays a pivotal role in economic growth of any country also described the importance of human resource development in the overall development process. Further, knowledge can be represented an important constituent of Economic growth and prosperity of country. Knowledge leads to long run earnings, high employment rate for any individual.

**Technical Session III-C: Management of Knowledge Economy**

The Technical Session III-C was chaired by Dr. M.M. Goel Professor, Department of Economics, Kurukshetra University and co-chaired by Dr. A.S. Bhullar from Panjab Agricultural University, Ludhiana. Dr. Rupinder Singh Sodhi, Assistant Professor [Economics] School of Social Sciences and Miss Amandeep Kaur, Research Scholar, Department of Economics, Punjabi University, Patiala acted as rapporteurs for this Technical Session. The first paper was presented by Maddhu Jasola and Ms Shivani Kapoor from the Institute of Management, New Delhi entitled as Human Development through Work Life Balance in Knowledge Economy. The main objective of this paper was to know whether the employees are aware and satisfied with life balance policies and whether the policies and practices present in the organization helps in bringing work life balance among the executives. The relevant data was collected both from primary and secondary sources in NCR [National Capital Region] on a sample of 100 respondents. The paper concluded that executives have become aware of WLB [Work Life Balance] policies through the organization portal, notice boards, internal circulars and organization magazines. Most of the employees were found to be satisfied with their organization as it has provided them with various facilities which helps in having a better personal and professional life balance.

The second paper was a joint presentation of Mr. Arundeep Singh, Mr. Shayar Brar and Mr. Harwinder Singh, all from Baba Farid Group of Institutions, Bathinda entitled as Knowledge Management for Everyday Life. The paper concentrated upon how knowledge management acts as a motivation and to make aware about the knowledge management system to employees at workplace. After an elaborate theoretical debate, the paper concluded that the decision on whether or not an organization should outsource a part of their business is a complicated one, and should not be taken lightly. Searching for short-term cost savings is not a bad idea, but choosing outsourcing based solely on cost reduction or tactical problems is a short-term solution and will undermine a company's potential for long-term success. Finally, once a decision has been made to outsource aspects of a business, specific knowledge management strategies can be implemented that will maximize the benefits that are available from a decentralized business model.

The third paper was jointly presented by Dr. Jasraj Kaur Assistant Professor and Ms Kamaljeet Kaur, Research Scholar from the Department of Education and Community Services, Punjabi University, Patiala. The title of their paper was Knowledge Diffusion Processes in the Knowledge Economy. The paper deals with theory of diffusion of information and knowledge as a basis for development. The purpose of the paper is to examine how, why and with what intensity is spreading new knowledge, skills, innovation and technological changes in the knowledge economy. On the basis of given empirical evidence the paper concluded that diffusion of
knowledge is an important aspect of economic development. It is object of many theoretical and empirical studies. There are many models describing spread of knowledge not only in economy, but also in a firm. Diffusion of knowledge or new technology is a complex process and depends on several factors i.e., the size of company, willingness to learning, electivity of communication and personal capacity.

The forth paper presentation entitled as Teacher Education and Human Capital-Some Qualitative Aspects by Mr. Amanpreet Singh who is currently serving with Panjab Mandi Board generated lot of interest among the participants. The main focus of the paper was on how teacher education can play a pivotal role in knowledge economy particularly in a developing country like India. The teacher education is an instrument for inculcating healthy personal and social attitudes towards education and development. The paper reveals that unfortunately today a large number of Teacher Training Colleges and even Universities are providing sub-standard and poor quality education. The Universities also have an obligation to protect post-graduation education from politicization that is perhaps what prompted our founding fathers to grant autonomous status to these. The paper suggested the integrated approach for developing teacher education system in India. Dr. M.M. Goel, Chairperson called for some introspection. He was of the view that teachers are not honouring their profession. He suggested some spiritual input to teachers to raise their quality of educational standards. Dr. A.S. Bhullar termed the present situation as a collective failure.

The fifth paper entitled as Knowledge Management: Issues and Challenges was jointly presented by Ms. Gurjeet Kaur and Ms. Inderpreet Kaur of Department of Business Management, MIET, Mohri, Kurukshetra. The paper provides a study on the issues and challenges that are interwoven with knowledge management with a view to improve organization performance and raising its rate of growth. The prime focus of the paper was on the concept of knowledge, meaning of knowledge management, issues of knowledge management and major challenges of knowledge management. The paper concluded that implementing a complete knowledge management system is no small feat, however, the results can be impressive and risks can be minimized by taking a phased approach that gives beneficial returns at each step. Throughout the life of a knowledge management project, leadership needs to constantly emphasize the quality and value of knowledge management. Workers must learn to collaborate and contributors and users of the knowledge management system need incentives to encourage these activities and keep the system vital. The paper also emphasized upon the crucial role that technology can play in enabling knowledge management methodologies and processes.

The sixth paper was jointly presented by Dr. Sangeeta Nagaich, Assistant Professor, Department of Economics, Punjabi University, Patiala and Ms. Preeti Sharma, Senior Lecturer, Chandigarh Business School, Landran on the topic Knowledge Management in Indian Industry-Case of Selected IT Companies. In this paper, they made an attempt to investigate the knowledge management practices in some of leading software companies of India. In order to study their knowledge management system the leading software selected IT companies are Infosys, Wipro Infotech and Patni Computers which incidentally is India’s sixth largest software services exporter. The study concluded that the IT industry is resource-oriented and it
becomes quite important to ensure that knowledge in the minds of resources is safeguarded. It is found that while 26 per cent of knowledge in the average organization is stored on paper and 20 per cent digitally, an amazing 42 per cent is stored in employees' heads. IT organization’s major assets are not plants, buildings, or expensive machines, but its intellectual capital. The major problem with intellectual capital is that it has legs and walks home every day. At the same rate, experience walks out the door, inexperience walks in the door. Whether or not many IT organizations admit it, they face the challenge of sustaining the level of competence needed to win contracts and fulfil undertakings.

The last paper of this session was presented by Ms. Manu Gupta, a Research Scholar from Thapar University, Patiala. The title of her paper was Effect of Social Capital on Quality of Work life :An Empirical study. Her paper demonstrated the relationship between social capital and quality of work life. The study has been conducted on randomly selected 112 employees of National Fertilizers Limited, Bathinda [Punjab]. The data is analyzed using SPSS statistical software, Karl Pearson’s correlation and regression analysis. The study concludes that social capital has a positive relationship with quality of work life. Thus, manufacturing organizations employees can engage in sustained efforts to increase their social capital and thereby experience better quality of work life. Manufacturing Organizations can also encourage and provide a favourable environment to achieve this. This will ultimately lead to superior performance of their employees and excellent quality of work life.

Dr. M.M. Goel, Chairperson endorsed the view that relationship management can lead to good quality of life. He put forth the example of Nestle Chairman who used to mix up with his workers just to develop personal rapport with them. In the end Dr. M.M. Goel, Chairperson presented a compact copy of Bhagwat Gita to all the paper presenters for developing their spiritual knowledge which, according to him, is the basis of all other social activities. Dr. A.S. Bhullar, Co-chairperson thanked the organizers for providing them with an opportunity to conduct the Technical Session. He also acknowledged the contributions made by all the participants and rapporteurs.

Technical Session IV-A: Processes of Knowledge Economy

This technical session has the sub-theme of 'Process of Knowledge Economy' and is chaired by Dr. Lindile L. Ndabeni from South Africa and co-chaired by Professor Jaswinder Singh Brar.

Professor Jaswinder Singh Brar and Prof. Sukhwinder Singh in their jointed prepared paper in titled as "Uncovering Punjab's Higher Education: Issues Related to Expansion, Quality and Finances" highlighted that quality and administration of education is largely ignored in developing countries. This is the most neglected area. Share of national income in education has declined from 3 per cent to 2 per cent and budgetary allocation which was 24 per cent in 1970, now declined to 12 per cent in Punjab. The biggest challenge is in education field and its quality. Rather pre-primary, primary education is in crisis. In USA Obama declared that if emphasis is not on education than USA would loose its edge. No doubt in Punjab we have improved on some issue like dropout rate but exclusion is very very serious issue in education.
Second paper was presented by Praveen Sharma from Rajasthan University, Jaipur. In her paper 'Role of Tertiary Education in Knowledge Management for Economic Development' she highlighted following points: Kothari Commission opened 6 per cent of GNP on education but we are spending less than 3 per cent which is very less compared to developing and developed countries. She criticized the continuity Macnily system of education. This system is the one of the reasons of 'Brain-Drain'. The paper gives stress on development of curriculum according to needs of masses. There is need to decode the agenda of IMF and WTO. Privatization and commercialization of education must be checked. We should not run after numbers because it is quality which matters. In USA, Japan and China have developed world class institutions and research but India failed miserably in this front. Even single university in India does not come in the list of top 200 universities of the world.

Third paper was presented by Surendar Mor from Mahila University, Khanpur Kalan, Sonepat (Haryana) entitled 'Knowledge Management and Economic Development' study on Milk Plant in Haryana'. Knowledge is intangible and like a light. Knowledge provides competitive advantage. Knowledge is overtaking capital and labour as the key economic resource in advanced economies. Information Technology (IT) is used to store data of supplier and customers etc. Two dimensions of IT are used:

(i) Dimension and characteristic of IT. Multiple Regression mode and gradual stepwise multiple regression models are used. Questionnaire composed to 50 questions and IT is independent variable knowledge creation.

(ii) Dependent Variable.

It is concluded that IT is creating knowledge.

Meenu Jain from DAV College for Girls, Yamunanagar (Haryana) in her paper 'India as it Moves to be Knowledge based Economy' said that Knowledge is not new concept and mentioned in Kautilya but in colonial era information hub change and become domain elite and rich class. The role of knowledge economy has taken great importance as compared to natural resources. Efficient utilization of knowledge can create comprehensive wealth for nation and can increase the range of products and services and is a key point in social transformation. Service and technology are core area as spearhead toward knowledge economy. She discussed economic trends to be knowledge base. HDI our rank is 134th and is behind many developing countries. She discussed that pillar of knowledge economy are skilled population, infrastructure, innovation system. This paper has taken into account position of India with developing and developed world show our pathetic condition, but also discussed stronger point of Indian economy. She categorically discussed state sponsored schemes and projects for the SC/ST, women and weaker and marginal sections of the society. How to create an efficient innovation system in India is well discussed point for strengthening the pillar of knowledge economy. India should continue to do. India is in a position to take advantage of IT revolution. The potential for India is great and challenges are many.
Surender Kumar Sharma, H.P. University, Shimla presented paper on 'Knowledge as Tool for Economic Growth'. According to him teacher is a national builder and is a role model for students and society. In this transitional society role of teacher is more challenging. Quality and knowledge of teacher has deep impact on students. Education does not mean only got to school but real education starts from cradle and ends up with grave. Education is not only means but also ends in itself. Good teacher must be of higher character, knowledge seeker and motivator.

Pooja Choudhary, in his paper titled 'Nature, Growth and Structure of Technical Employment in India's Knowledge Economy since Economic Reforms: The Case of ICT sectors' stated that both the global world and ICT development reinforce each other. During post reform period significant development in IT industry India has made contribution to world of IT. e.g. Infosys and Wipro. It has created demand for skilled labour at various levels of specialization. Number of engineering graduate has increased many times. Employment in Hardware segment, regional distribution of IT workers in India states and distribution of occupation of workers in various categories is discussed. There is need to improve efficiency and need to set up committee from industries and education sector for proper implementation of the policies.

Amit A. Joshi, 'Dynamic Education System: An Indispensable Provision for Knowledge Economy'. In his paper he focused on pillars of knowledge economy. paper discussed skilled gap created by IIT v/s graduates from colleges and universities. He discussed state education Board, CBSE and ICSE are different boards and discussed teaching practices and outcome on skill of students. There are real learning processes in state boards and CBSE and emphasized problem related learning. At the end he suggested some pragmatic solutions.

Pooja Sharma from Sharanpur presented a paper entitled 'Intellectual Property Rights and Human Development'. The paper discussed role of various endogenous and other models in human development. These models increase the efficiency and key factor in social and economic transformation. Structural transformation results in state of industry and service sector. IPR includes arts, social and cultural areas. TRIP includes compulsory licensing and tough rulings are there. There is mutual relationship between IP and development.

Priya Jindal presented a paper entitled, 'Analytical study of Human Resource Development and Its Impact on Banking Sector'. Banking sector has undergone changes since last decade w.r.t. to organizational set up functioning and competition etc. Concept of Human Resources and productivity employability are well discussed. Management of HR is critical area where one country can get edge over other. Bank can pay important role in overall development. Better inputs of employers, productivity and efficiency ultimately results in higher profits. Foreign banks have high business and have high profits as compared to private banks.

**Technical Session IV-B : Knowledge Economy Metrics**

This session was chaired by Prof. Amarjit Singh Sethi, Guru Nanak Dev University, Amritsar and Prof. Elias Sanidas, Seoul National University, South Korea.
Minakshi Garg and Bhavna Chhabra in their paper titled 'Productivity Growth and Knowledge Spillovers: Evidence from Indian Private Banks' empirically investigated the role of IT in banking industry. It is based on elaborate research design collects data from 10 private sector banks. The technology index based on technological parameters tests the hypothesis whether IT adoption impacts the productivity and performance of banks. The paper also highlights the difference among old private sector and new private sector banks in productivity and performance. The paper concludes on the note that initially IT adoption helped to increase productivity and performance but later on the effect weakens. The IT investment per se does not lead to increase in performance rather how IT is leveraged by the bank matters.

Anju Rani in her paper 'Role of Service Sector in the Human Development of Indian Economy' examined the causality between human development and economic growth by focusing on the role of service sector at aggregated and disaggregated level. The indicators with time series data studied are life expectancy literacy rate and GDP share of service sector and community services. Another objective has been to analyze it across the gender (i.e. male and female). Conclusion highlights that there is correlation between economic and human development at aggregated and disaggregated level and policy recommendations are also made.

Dr. Parmod Kumar in his paper 'Assessing Knowledge Assets thorough Intellectual Capital Measurement' studied the Knowledge assets of banks for IC management by using BONTIS framework. The focus is on examining the relationship between IC management and performance of banks based on survey data comprising 166 banks employees. The BONTIS model provides the basic taxonomy of IC-structural, human and customer capital. Using step wise regression analysis the paper puts forward a high relationship between intellectual capital and its components.

Savita Bhagat in her paper 'Jobs in the Knowledge-Not Inclusive for Women' focused on the argument that women educational institutions are working more on casual and contractual jobs. With a discussion on history of higher education, the new perceptions about education are also discussed. By examining the data of few states – Haryana, the argument is supported that less regular jobs with good remuneration are very limited and further the privatization of education in the country have led to a situation where there are limited avenues for women teachers to negotiate for their rights and such a situation is a hindrance in achieving the objectives of a knowledge economy.

Anmolpreet Kaur and Gurdeep Kaur, in their joint paper 'WTO, Human Development and Knowledge Economy' discussed the transition of trade regime from GATT to WTO and forward. The human development is linked with knowledge economy by linking the HRM strategies adopted by prominent MNC's such as Google etc. The paper making use of Knowledge Economy index also compares inter country variations as well.

Archana Chourdhry's paper titled as 'Quality of Human Resources at RBI' analysis the human resources at RBI using fast data, it highlights the fact that with Information technology adoption the number of employees with RBI has reduced.
The paper provides description on the organizational structure and functions of RBI along with new initiatives to improve the quality of human resource at RBI by adopting proactive requirement measures to make staff competent and technology to literate staff.

Prof. Atvir Singh in his paper on 'Role of Health and Nutrition and Knowledge Development' investigates the issues of rural and urban inequalities across the states in India. It has listed 30 concomitants leading to health and nutrition inequalities and using a panel data for fixed and random effect modeling for regression analysis, the paper also identifies the poverty reducing factors in the human development index. The recommendations are also made to reduce the structural distortions in the economy such as rural industrialization.

All the papers were discussed rigorously by the active participation of all the participants/paper presenters, session chair and co-chair and also the learned audience. The papers were critically evaluated and suggestions were made to improve the presented work along with providing suggestions for future research. The paper presenters were also appreciated for their work and effort.

**Technical Session-IV-C: Allied Areas**

This session was chaired by Professor M. S. Sidhu, Head, Department of Economics and Sociology, Punjab Agricultural University, Ludhiana. It was co-chaired by Professor Imtiyaz ul Haq of University of Kashmir (Jammu and Kashmir). In this session, seven papers were presented and discussed.

Dr. Angrej Singh Gill, in his paper titled ‘Financing of University Education in India: An Analysis’, exhibits the importance of higher education in knowledge society. His study examined the flow of financial resources to the public funded university institutions, i.e., Central and State Universities for 2010-11. Broad picture of the income and expenditure of these universities as well as of the source-wise break-up of the income into three broad categories- government grants, student fees & funds and other sources were presented. The study selected a sample of 20% of the universities in India and divided these into five different regions of the country - Northern, Western, Southern, Eastern and North-Eastern through stratified random sampling. Findings revealed that the income and expenditure of an average university in a country was Rs 4180 lac and Rs 4469 lac in 2010-11 respectively, thus showing a budgetary deficit of Rs 288.92 lac. All these universities located in four regions showed budgetary deficits except the North-Eastern region. Examining income on per-student basis, the fact reveals that the per-student level of income and expenditure in average university in India was Rs 19916 and Rs 21395 respectively, thus accounting for a per-student budgetary deficit of Rs 1479. This per-student deficit is also found in all regions except the North-Eastern region. Further, per-student income in a Central University was Rs 63985 which is 4.51 times greater than the income in a state-university Rs 14179. Thus, per-student income level varies with the type of university. Further, source-wise break-up of income of an average university for overall India and across all regions shows that out of the Rs 4180 lac income, government grants contributed Rs 2558 lac (61.19%), students' fees and funds constituted Rs 1150 lac (27.51%) and other sources made contribution of Rs 472 (11.30%). The contribution of government grants was the highest in the Northern
region, i.e., Rs. 3994.48 lac, followed by the Western region (Rs 3162 lac) and the Southern region (Rs 2556 lac). In the case of Central Universities, government grants constitute 90% of their income compared to 54.45% in the case of state universities. On the other hand, students' fees and funds in an average Central University is 1/9th of the fees and funds in an average State University. Therefore, the Central Universities are dependent upon government grants and the State Universities are relying more on students' fees and funds. Per-student government grants are also more in the Central Universities (Rs 58200) compared to the State Universities (Rs 7717). The author concludes that most of the universities in the country suffer more from budgetary deficits due to lack of proper financial support. He calls for adequate public resources to these universities to enable them to compete in the knowledge economy and there is a need to ensure inclusion of every section of society in higher education, especially SC/ST students.

Professor Neena Malhotra and Ms. Pushpa Devi of Guru Nanak Dev University, Amritsar examined the role of changing pattern of internal migration as a source of capital formation in India. The study also analysed the migration rates in different states of India and major causes behind it. Analysis is done on the basis of three NSSO Rounds- 49th, 55th and 64th in 1993, 2000 and 2008 respectively. Findings of the study revealed a rising trend in urbanization level in the country which indicated migration of population from rural to urban areas. Urban population has increased from 25.7% to 31.2% during 1991-2011 in the country. Migration rates have increased both in the rural and urban areas from 20.9% to 26.1% and 31.6% to 35.4% respectively during 1983 to 2007-08. This rise in migration rate is mainly due to rise in female migration rates as it has increased from 35.1% to 47.7% in rural areas and 36.6% to 45.6% in urban areas during the same time-period whereas the male migration has shown the downward trend. Further, Migration stream in India based on 64th NSSO round in 2007-08 shows that rural-to-rural migration is most dominant stream accounting for 61.7% of total internal migrants, followed by rural-to-urban migration constituting 19.5% of internal migrants. Whereas the urban-to-urban migration stream shares 13.1% and urban-to-rural migration accounts for only 5.7% migrants. However, male migrants show different pattern where rural-to-urban migration dominates accounting for 39% of total internal male migrants and rural-to-rural migration shares 70% of total internal female migrants. Analysis of reasons for migration in 2007-08 shows that marriage is the major reason for rural as well as female migrants in all states during all time-periods. 90.2% of rural and 60.8% of urban female migrants migrated only due to marriage in 2007-08. Whereas male migration is mainly due to employment related reasons accounting for 28.6% of rural and 55.7% of urban male migrants during same period. Distribution of migrants by occupation before and after migration shows that large number of male and female migrants in the rural and urban areas are found to be engaged in work-force. Migration has therefore raised labor-force participation and reduced unemployment. Lastly, net migration rates for major states in India shows that it is the highest in Maharashtra (41), followed by Haryana (35), Gujarat (16) and Punjab (13).

Dr. Rakesh Kumar’s paper on ‘Employability: Need to Bridge the Skill Gaps’ pointed out the lack of employability skills among Indian technocrats and professionals. The present paper highlighted the importance of employability skills for professionals and consequently suggests measures to bridge the skill-gap. The
mushrooming growth of technical education institutes have produced large number of professionals and have responded well to the increased demand for them in the market. But these professionals are unable to get decent jobs in the market due to lack of practical skills. Educational institutes are mainly held responsible for the skill-gap existing among them. Large disparities exist between the kind of skills taught to them at institutes and what is demanded in the market. The study suggested that soft skills should be imparted to the engineers because the impartation of the same leads to improvement in the professional skills also. Both the technical institutes and employers can help to bridge the skill-gap by cooperating with each other. Active participation of the employers should be sought in formation of course designs and to modify the old courses. Similarly, technical education institutes should develop employability-skills as an explicit part of their academic learning. Pedagogical style should be changed in favour of students to enable them to tackle the problems independently. Lastly, the alumnae should be consulted to know about the present day industry requirements and accordingly impart the skills to professionals.

Ms. Harmandeep Kaur and Professor Paramjit Kaur Nanda of Guru Nanak Dev University, in their joint paper titled ‘Knowledge Creation and Economic Growth in Developing Countries’ highlighted the role of knowledge in the economic growth of 62 developing countries for the period 1991 and 2007. It examined the nature, extent and variations across various indicators of knowledge creation and also the impacts of these indicators on economic growth. Economic growth is defined in terms of real GDP per capita at current prices and six indicators of knowledge creation are: - trade as a percentage of GDP (T/GDP), net FDI as a percentage of GDP (FDI/GDP), number of televisions per thousand people (TV\textsubscript{1000}), telephone density defined as number of telephones available per hundred people (TEL\textsubscript{den}), daily newspapers per thousand people (NEWS\textsubscript{1000}) and secondary education enrollment ratio (SEC\textsubscript{enroll}). Empirical analysis reveal that coefficient of variation decreased in all these variables in 2007 except for the real GDP\textsubscript{pc} and NEWS\textsubscript{1000} compared to 1991. Further, regression results reveal that two variables, namely, T/GDP and FDI/GDP has negative impact on economic growth, whereas the other four variables affect economic growth positively in 1991 as well as 2007. The authors concluded that although these two variables of knowledge creation had negative impact on economic growth, but these were positively correlated with communication infrastructure and education variables. So, in order to realize the benefits of trade and FDI, the government must formulate policies and create business environment which is conducive for realizing the potential of trade.

Shyam K. Fardale’s study on ‘Training and Development Practices at Lloyds Steel Industries Ltd, Bhugaon, Wardha’ throws light on the training and development (T&D) practices adopted at Lloyds Steel industries Ltd, Bhugaon, Wardha (Oridha). The study endeavored to indentify the training needs of employees and examined the impact of various training programs on their performance. Sample of 50 employees was taken from Lloyds Steel industries through random sampling method. The data were collected through the primary as well as secondary method. Findings exhibit that majority of the employees are satisfied with the training practices of the organization. 64 % of employees preferred individual assessment and requirements for training. Infrastructural facilities used for training are also satisfactory. Large number of employee preferred on-the-job as well as off-the-job training programs. In the case of
on-the-job training, coaching method is preferred whereas conference discussion method was preferred for off-the-job training. 64% respondents believe that training programs are beneficial both for organization and employees. 80% employees feel that their performance level is improved after training. The author finally suggests that (i) environment for training programs should be very friendly to attract large number of employees for training; and (ii) more technical training programs should be organized for technical people. Feedback from trainees must be taken and should be implemented for the next time.

Ms. Puneet Kaur and Professor Kuldip Kaur from Punjab School of Economics, Guru Nanak Dev University, Amritsar presented a joint paper titled as ‘The Knowledge Economy and Productivity Per Employee: A Sectoral Analysis. The study examined the relationship between number of colleges with professional education and GDP, productivity per employee in each sector of the economy and per capita income of country for 1990-2000 to 2007-08. Out of these four factors, professional education is conceived as a first pillar of knowledge economy which is here taken as a proxy for knowledge economy. Results of lagged correlation show the significant and positive relationship between GDP and number of colleges for professional education. A strong positive relation also exists between productivity per employee in each sector (except mining and quarrying) and number of colleges for professional education. Here, lagged correlation coefficient was the highest (0.97) for the sub-sector ‘financing, insurance, real estate and business services’, followed by ‘industry sector’ (0.94) and ‘manufacturing sub-sector’ (0.94) whereas it is quite low for the ‘agriculture and allied activities’ (0.80). Lagged regression between productivity per employee in each sector and number of colleges for professional education also shows the significant and positive relationship. The regression coefficient was the highest for industry sector (0.94), followed by the service sector (0.93) and the agriculture sector (0.80). Lagged regression between per capita income and number of colleges for professional education showed that 1% increase in professional education raises per capita income by 0.91 in the country. The study indicates that there is significant positive impact of professional education on the productivity of employees. Human resource development strategies like continuous learning, innovations and improvement in the quality of education should be adopted to further enhance the productivity level of workers.

Dr. Apar Singh and Mr. Karampal Singh, School of Management Studies, Punjabi University, Patiala, in their joint paper titled ‘HDI vis-à-vis CPI’, build a relationship between the Human Development Index (HDI) and Corruption Perceptions Index (CPI) across counties. The paper compares the countries ranked in the UNDP’s HDI measured through three equally weighted components, i.e., health component measured as a long and healthy life, knowledge measured in terms of average years of education and a decent standard of living measured in terms of wealth with the Corruption Perceptions Index (CPI) scores and ranks the countries according to the perception of corruption in the public sector. The research aimed at to find if there was any significant correlation between the corruption perception/s and human development indices across world countries. The information on HDI and CPI for different countries for different preceding years was collected from the secondary sources. Only those countries which figured in both the lists were subjected to the analysis. The final data showed that there were 171 countries having the information
on both the scales. The data was sorted out on the yearly basis to make a paired comparison table across these countries. The study found out very high positive correlation coefficient above 0.7 between the HDI and CPI for different years across these countries. The study also suggested some measures to raise the HDI and reduce the corruption in these countries.

Valedictory Session

The Valedictory session was chaired by Prof. R.K.Bansal, Head, Department of Economics, Punjabi University, Patiala and Prof. Inderjeet Singh.

Prof. Radhe Shyam Pradhan from Nepal gave valedictory address. He thanked the organizers for carefully selecting the theme of the Conference. Punjabi University came up with this theme and predicted that this Conference will motivate other universities. He said that abilities and capabilities to develop a knowledge economy required quality research. He agreed that Arthshastra rightly reflected in Punjabi University by economics department. He had a good time with all of us. He thanked for grand hospital ability and they are going back by carrying sweet and rich memories. In his valedictory address, he said that Nepalese economy has poor infrastructure as compare to India. But he added that our economy has ample scope if the countries like India invest in the sectors such as hydro power, education, health, automobile industry etc. He further revealed that

Knowledge management has recently emerged as a new discipline in its own right way. The Nepaleses are probably still developing its theoretical home. An understanding of why firms exist and how resource allocation decisions are made within firms has been a central theme in economic theory. However, decisions about internal processes are burdened with a considerable degree of uncertainty since decision makers often do not have full information about action. This may be because either full information is unavailable or the information is asymmetrically distributed. Having accepted the importance of effective knowledge management, it is disappointing to note that there is little guidance in the extant literature as to what effective knowledge management really means and even less guidance as to what the quantifiable outcomes of effective knowledge management might be.

He addresses deficiencies of Nepal economy in two ways. First, a richer understanding of contribution can be explained by integrating knowledge management into the resource-based view of the firm. Second, seeing knowledge management in a supporting role may limit any acceptance of its importance. Therefore, empirical evidence as to the consequences of effective knowledge management is also required. Knowledge management has been hailed as a new discipline. Unfortunately, the interpretation of the construct knowledge management is often confused with the introduction of information technology as a solution to capture knowledge. The importance of knowledge management to knowledge-based societies will emerge as effective knowledge management asset. Finally, Prof. Lakhwinder Gill, Coordinator, CDEIS thanked all delegates from India and foreign delegates, office bearers and university authorities.
ONE DAY
WORKSHOP
ON
CHALLENGES BEFORE ECONOMIC DEVELOPMENT IN PUNJAB
MAY 3, 2012

Organized by:
Centre for Development Economics and Innovation Studies and Planning Commission Chair, Punjabi University, Patiala
SUMMARY OF THE WORKSHOP PROCEEDINGS

Inaugural Session

One day workshop on the theme 'Challenges before Economic Development in Punjab' was started with the welcome address by Prof. Inderjeet Singh. Prof. Inderjeet Singh while welcoming the dignitaries and workshop participants argued that Punjab has now acquired the dubious reputation of being the number one state in health ailments, substance abuse and many more socio-economic problems. The economy suffered heavily on account of the social and political turmoil, and is yet to recover. Politically, the state is more or less of the nature of a 'feudal sultanat'. The system requires change.

The theme of Conference was introduced by Professor Lakhwinder Singh. The workshop is jointly organized by the Centre for Development Economics and Innovation Studies and Planning Commission Chair, Punjabi University Patiala. Dr. Lakhwinder Singh said that Punjab at present stands at fifth position in terms of per capita income in the country. The gap between per capita incomes of Haryana and that of Punjab has increased so much. This is really a point of worry. The state leadership now-a-days take more interest in protecting the interests of private business rather than that of the public. The rule base policy is now substituted with discretionary policy. The state has been pushed to a serious chaos with the privatization and discretionary policies. Punjab at this point of time is desperately seeking a package from the Centre government. Two types of packages have been sought by the state leadership, i.e. security package and development packages. The tax erosion is very big issue in Punjab. There is need to rationalize the subsidy regime also. The national monetary policy has been adversely affecting the states like Punjab. It must be understood that the problem of Punjab economy are that of the national economy. Therefore the centre must come forward with the solutions to the problems being faced by the state.

Professor B.S. Ghuman, Dean, Faculty of Arts, Panjab University, Chandigarh in his Inaugural Address has focused upon the problems and challenges being faced by the Punjab economy. The driver of growth during earlier phases was commercialized agriculture. He emphasized that the Punjab being the agriculture-centered state could not reap the benefits of new economic policy. He suggested many points of intervention to attain ten per cent rate of growth, which he insists is possible. The manufacturing and service sector can become new drivers of growth. The better Indo-Pak trade can be a new goldmine of growth for the state of Punjab. The declining agriculture sector and fragile manufacturing sector has become a big problem for the Punjab. The industry and agriculture developed in isolation to each other and had weak mutual linkages. He lamented that even the branded food items are coming to state from other states. The need is to set up special economic zones by land pooling. The uninterrupted electricity supply is very essential to develop industry. The need is to attract fresh capital both domestic and foreign. The need of hour is to establish Punjab Investment and Industrial Promotion Board. The single window at present is not working properly. In fact, there are many windows within the single window. The E-Governance model of clearances will work better. The assigning of top priority to social sector is very much needed. The demographic
dividend needs to be nurtured very sensibly to reap the benefits of high proportion of youth population.

He further said that the need is to properly accredit the schools, colleges and other institutions in the state. The need is to develop quality physical infrastructure in the state. Every budget must have fresh taxes. Tax-free budget is not a complete budget. The centrally sponsored schemes should be used properly. The rural economy must be diversified. The Punjab state must produce quality education to make the youth employable. The growth centered model has played havoc with the state. Let us control the pollution by putting industries under an autonomous board. The right to services act has made things better. The need is to create the advisory council of social scientists to Chief Minister.

Dr. Jaspal Singh, Vice-Chancellor, Punjabi University in his presidential remarks has said that the recent phase of globalization has changed the very drivers and course of economic growth. The need is to develop the network of researchers and other thinking minds to develop a research agenda to advise the policy makers and implementers. The country must be made truly federal. The globalization is not providing answers to the problems of common man. The concept of welfare state should not be lost under new policies. Prof. R.K. Bansal, Head, Department of Economics, presented the Vote of Thanks.

**First Technical Session**

Prof. Upinder Sawhney from Panjab University, Chandigarh dwelt upon the indicators of fiscal distress in the state of Punjab. The poor state of fiscal management is revealed from the fact that revenue receipts in 2010-11 were less than Fiscal Consolidation Roadmap Fiscal liabilities were Rs. 74778 crores in 2010-11. The share of non-tax revenue has halved. Share of development expenditure has remained stagnant at 45-48 per cent. Capital expenditure on social and economic services reduced to 6.22 per cent in 2010-11. Nearly 92 per cent of losses are in Punjab State Power Corporation Ltd. alone. There has been no or little transfer of funds to Guarantee Redemption Fund and local bodies, but a widespread frivolous expenditure on 'Sangat Darshans' continues. A way ahead was suggested in terms of fiscal reforms, with no place for populism. It was suggested that tax revenue as well as non tax revenue be increased. Reduction of subsidies, mainly in the power sector was recommended. Reduction of debt, and not using borrowed funds for debt servicing was suggested. Effective utilization of centrally allocated funds and transfer of funds to ULBs and PRIs as per constitutional requirements was emphasized.

Prof. A.S. Sethi, Punjab School of Economics, Guru Nanak Dev University, Amritsar expressed his opinion on the theme 'Estimation of Fixed Capital Stock: A Comparative Analysis of Punjab and Haryana'. Capital stock was estimated through Perpetual Inventory Method (PIM). He has examined the relationship between capital stock and economic development of the states of Punjab and Haryana. Capital stock has grown in a decelerating manner in Punjab, whereas this is not the case with Haryana. Slowdown of capital stock pace has reduced the capacity of the state to increase GSDP of Punjab. In Punjab the kinked growth rate has become negative for electricity, gas and water supply. As policy measure, he suggested that emphasis be laid on road and transport infrastructure, assured electricity supply, and strengthening
overall capital investment. A strong will on the part of the government is needed to reorient investment planning towards development policies. A rational provision of subsidies is also called for.

Director, Prof. Surjit Singh stressed on bringing structural changes in Punjab economy, and pointed out total obsession with a high growth rate (10 per cent) is not justified, as even the Western countries do not have such a high growth rate. Instead, it is more important that growth percolates down to the lowest level and there is no wastage of resources. There is a need to prioritize sectors – health and education, for instance. It is significant to realize that political indifference in Punjab hampers growth. Accountability is necessary. The example of other states can teach Punjab some lessons in fiscal responsibility.

Prof. Satish Verma Punjab School of Economics, Guru Nanak Dev University, Amritsar emphasized that although monetary policy is outside the purview of states, but it needs to be realized that monetary policy has differentiating real effects across various states. One way in which this can happen is the industry mix of the state. Interest rate impacts will be more in the case of small scale industries. Monetary policy shocks cannot be borne by small scale industries and since interest rate impacts are more in small scale sector, this has a direct adverse impact on employment. Punjab has a large number of small scale industries. Manufacturing and construction in particular are interest sensitive sectors. And, share of interest sensitive sectors has gone up in the recent years. This means that monetary policy is affecting the state. Hence, there is an urgent need that monetary policy takes account of regional perspectives too, and not be uniform for every state. It also needs to be kept in mind that interest rate impact is much more in recession than in boom period.

Second Technical Session

This session was chaired by Professor Upinder Sahney of Panjab University, Chandigarh and co-chaired by Professor M.S. Sidhu of Punjab Agricultural University, Ludhiana. Elaborating his views on the agenda of development, Professor R.S. Ghuman highlighted the Punjab’s contribution in providing food security to the national economy. However, its geo-political situation is putting brakes or limits to future growth of Punjab economy because the big industries are not being established in the state. On the other hand, populism of providing free electricity, free water, no new tax, no octroi, etc. were on the agenda of state government. He states that the state government, by providing free electricity/water to the farmers, has snatched away the facilities of providing quality education and health care from the people living in rural areas. He also welcomed the initiatives taken by the central government to promote Indo-Pak trade through Wagha border. Punjab state lacks investment climate because of sky-rocketing land prices, energy shortage, political climate, etc. Even the domestic capital is shying to start new ventures in the state or in the process of shifted away to the other states like Himachal Pradesh, Gujarat, Haryana, etc. Moreover, there is no data with the state government, how many industrial units have been shifted from the state to other states, how many NRIs are willing to invest in the state, etc. To put the Punjab economy on the re-railing path, he suggested that there is need to: (i) build a political consensus on the future development agenda to be followed in the state; (ii) strengthen the institutional delivery mechanism of state; (iii) develop peoples’ cooperatives in every walk of life in the state; (iv) emphasize upon
corruption-free and good governance in the state; and (v) sensitize the state bureaucracy to adopt people-centric approach in the state.

Based upon her arguments on the primary survey of farmers located in the four border districts of Punjab, Professor Gian Kaur from Guru Nanak Dev University, Amritsar discussed the problems of rural credit as well as rural society. She found that the literacy rate across the farmers is very much low, indicating their dependence on others for routine day-to-day work. Wheat-paddy rotation being dominant cropping pattern in these districts has played havoc with the groundwater resources in the state. Drug abuse is another problem faced the youth living in these areas. Moreover, changing disease pattern in rural areas where the cancers, HIV, hypertension, heart disease, etc. ruling the roster. Farmers are found to be fulfilled most of their credit needs, instead of the institutional sources, mostly from the non-institutional sources. And, these non-institutional sources exploited the poor farmers maximally. To solve these problems, state invention is urgently needed by enhancing credit to farmers on easy terms and regulating the policy of lending money by the commission agents. Also, awareness level of farmers is increased.

Professor R.S. Sidhu of Punjab Agricultural University, Ludhiana stated that a deceleration in the growth rate of Punjab economy seems to be a natural phenomenon. This is largely due to that its agriculture sector has already reached a plateau because of low public investment in state’s agriculture sector and no new technological breakthrough in recent past. The present cropping pattern, particularly the paddy cultivation has already stressed upon the state’s ecology, soil health and scarce groundwater resources. He favoured a multi-pronged strategy to development the agriculture sector in the state which consists of (i) raising public investment in agricultural research and development; (ii) subsidizing power only to the small and marginal farmers; reduction of area under paddy as well as reducing water-use pattern in the paddy by adopting new technology. He also favoured the promotion of agro-industries in the state.

Professor Sukhpal Singh from Punjab Agriculture University, Ludhiana spoke about the rising debt among the farmers in the state. He stated that more than 90 percent of farmers in the state have outstanding loans. Majority of loans arranged by the farmers are from the non-institutional sources, where a reckless exploitation of the poor farmers is a rule. Over the time period, this situation led to de-peasantization of farmers in the state. Quoting his field studies, he informed that about 40 percent of state’s small and marginal farmers have either left the occupation already or in the process of leaving it; 18 percent of such farmers sold their land and another 11 percent sold a part of their land holdings. He also pointed out about an aggressive behaviour of commission agents belonged to the Jat Sikh castes in grabbing such farmers’ land. About the suicides in rural Punjab, he opines that nearly three-fifth suicides were from the side of farmers and the rest from the agricultural labour classes. Those who committing suicides, three-fourth farmers mentioned debt related causes. To improve upon the living conditions of farmers, he suggested that the activities of commission agents be regulated in the state; steps be taken to improve skill and education levels of rural communities; develop alternate market channels to increase viability of farming occupation.
Professor Sukhwinder Singh and Professor J.S. Brar in their jointly prepared research study analyzed “how the Punjab state looks after her poor”. Tracing the rich legacy of starting pro-poor schemes, the study concentrated on the working of Pensionary Benefits, NREGS, RSBY and Atta-Dal schemes. The paper highlighted that, with the exceptions of state’s sponsored old age pension and subsidized food (Atta-Dal) schemes, all other schemes are operating at very low and sub-standard levels. For example, NREGS having so many advantages for the poor, however, its implementation in Punjab is subject to many weaknesses like the administration apathy, lack of political will, upper castes’ dominance of village polity, illiteracy among beneficiaries, etc. In fact, the programme has been implemented in an adhoc manner. The social audit and vigilance committees do not exist in the state. In spite of a large gap between the number of job cards families and those actually getting employment, no one has been paid unemployment allowance. On pensionary front, the state has granted these benefits with wider coverage much before the central government favoured such schemes. For instance, pensions for old age (1964), widows/destitute women (1968), orphaned/dependent children (1968) and disabled persons (1982) – whereas the central schemes (pensions for old age, 1995 and widow/disabled persons, 2009) were of recent origin. Further, under the democratic pressures, number of pensioners doubled from 9.29 lakh in 2002-03 to 18.03 lakh in 2009-10 (covering 7.4 per cent of state population) and led to creation of Dedicated Social Security Fund since 2005. Another pro-poor scheme operating much below the expectations is the RSBY as more than two-fifth BPL families were not issued Smart Cards during 2008-09 and 2009-10.

However, state’s flagship programme (Atta-Dal Scheme) is functioning very well with least pilferages. It showed whereas the state has political interests/gains (e.g., old age pension and Atta-Dal schemes), such schemes are showing better performance compared to the centrally sponsored schemes (e.g., NREGA, RSBY) where the performance is much below due to many reasons. It showed that the Punjab state did not show full enthusiasm to take full advantage of the centrally funded schemes. Partly, this is explained by general level of apathy and indifferent attitude of state bureaucracy towards all government programmes. Partly, it is attributed to lack of political-will as shown by the prevailing power structure in the state.

For better implementation of such schemes, people’s involvement especially those of beneficiaries is of utmost importance. The system of setting up of vigilance committees at village level, social auditing mechanism and educating the PRIs and ULBs’ elected representatives will enhance the utility of these schemes. For getting better results, training of elected representatives of these bodies is also essential. The state and district administration need to be toned up where performance is below the state average. Capacity building of state apparatus is enhanced for better implementation. Utmost transparency and accountability in selecting beneficiaries is another essential condition. There in need to strengthen civil society movements in the state, especially in the rural areas. Above all, good governance is the hallmark of success of any scheme and socially aware sections of society should become more active to ensure a better implementation of these schemes.
ONE DAY

WORKSHOP

ON

AGRARIAN DISTRESS AND RURAL SUICIDES

August 31, 2012

Organized by:

Centre for Development Economics and Innovation Studies and Planning Commission Chair, Punjabi University, Patiala
Programme for National Workshop on "Agrarian Distress and Rural Suicides"

31 August 2012

Inaugural Session (Senate Hall)

University Dhuni: 10.00 a.m. – 10.15 a.m.
Welcome Address by Prof. Inderjeet Singh: 10.05 a.m. – 10.15 a.m.
Theme Introduction by Prof. Lakhwinder Singh: 10.15 a.m. – 10.25 a.m.
Key-note Address by Prof. G.K. Chadha: 10.25 a.m. - 11.05 a.m.
President, South Asian University, New Delhi
Presidential Address by Dr. Jaspal Singh: 11.05 a.m. – 11.25 a.m.
Vice-Chancellor, Punjabi University
Vote of Thanks by Prof. R.K. Bansal: 11.25 a.m. – 11.35 a.m.

Technical Session I (Syndicate Room)

Paper I Dr. K.N. Nair, Santhigiri Research Foundation
Alleviating Agrarian Distress: Insights from Resurvey of Three Villages in Kerala

Paper II Dr. Neelima Deshmukh, Director, Centre for Women's Studies and Development, RTM Nagpur University, Nagpur
Agrarian Crises Faced by the Farmers of Vidarbha with Special Reference to its Cotton Growers

Paper III Rajeshwari S. Raina, CSIR, New Delhi
Science and the Signs of Agrarian Distress: Putting an End to the Supply Syndrome

Lunch (University Guest House): 1.30 p.m. – 2.00 p.m.

Technical Session II (Syndicate Room)

Paper I Dr. Sucha Singh Gill
Director General, CRRID, Chandigarh
Agrarian Distress and Farmers' Suicides

Paper II Dr. Sukhpal Singh and Dr. R.S. Sidhu
PAU, Ludhiana
Agrarian Crisis and Farmers' Suicides in Punjab

Paper III Dr. Lakhwinder Singh, Dr. Kesar Singh Bhangoo and Rakesh Kumar
University, Patiala
Agrarian Distress in Punjab: A Case Study of Farmer's and Agricultural Labourer's

Tea: 3.30 p.m. – 3.45 p.m.

Technical Session III (Syndicate Room)

Round Table Discussion

3.45 p.m. – 5.15 p.m.
SUMMARY OF THE WORKSHOP PROCEEDINGS

Inaugural Session

The Workshop on "Agrarian Distress and Rural Suicides" was organized by Centre for Development Economics and Innovation Studies in collaboration with Planning Commission Chair and Centre for South West Asia Study, Punjabi University, Patiala. Professor Inderjeet Singh delivered the Welcome Address in the Inaugural Session of the Workshop. The theme of the workshop was introduced by Professor Lakhwinder Singh, Coordinator, Centre for Development Economics and Innovation Studies, Punjabi University, Patiala. He has stated that India has emerged as the epicentre of suicides in the global economy. The suicides in rural India are the result of marginalization of rural economy and rural people of India. The Centre as well as the State governments are tackling the agrarian marginalization as a security problem rather than uneven growth of the economy. He further stated that the aim of this workshop is to bring intellectuals from all the parts of country to discuss the issue in threadbare and suggest policy for evolving alternative strategy for peaceful economic development of the society and polity.

'Farmers' suicides are the precise and most critical manifestation of the ever rising level of rural distress in the country. It is the result of long drawn neglect of the agriculture and rural sectors by the policy planners at the various levels.' This was stated by Professor G.K. Chadha, President, South Asia University, New Delhi and former member Prime Minister Economic Advisory Council and former Vice Chancellor, Jawaharlal Nehru University, New Delhi while delivering the key note address at the inaugural session of the one day national workshop. He further elaborated that it is a very serious matter to examine why India is among the top countries in the world so far as farmers' suicides are concerned. When in advanced countries a suicide takes place it becomes a social issue apart from family issue. The issue of suicides can be looked at from different angles and it has many dimensions though the economic dimension is the most serious one. The economic policy has much to do with the problem of rising level of suicides. The common property resources have been grossly mismanaged and disturbed by the rising levels of commercialization and are going out of the hands of village community. The community support to needy has been drying up in the society. The practice of acquiring of agriculture land has played a crucial joke on Indian society. The acquiring of fertile land from farmers is a serious concern.

The proportion of workers in agriculture has not declined as the share of agriculture in the national income has declined. The Indian policy makers have not prepared the people to move out of agriculture in a systematic manner. The gap between the income of the people in agriculture and non-agriculture has increased too much. The deliberate attempt to promote other sectors has marginalized the agriculture sector. The lack of breakthrough in irrigation technology is a big constraint in the development of agriculture within the country. The state has failed to internalize the benefits of technological breakthrough occurred elsewhere. The research apparatus in the country could not provide the reliable alternative cropping systems. The farmers like to opt out of agriculture because of it is unviable. The loss of dynamism of agriculture sector has generated a specific type of rural distress. The
agriculture labour, marginal and small farmers have been bypassed by even the non-farming sector also. The distribution of education is highly uneven which too has not benefitted the marginalized sectors. The suicides have been the result of large number of such forces operating in the system. The issue needs to be addressed on priority basis. The seminar was presided over by Dr. Jaspal Singh, Vice-Chancellor, Punjabi University, Patiala. Professor Romesh Kumar Bansal presented the vote of thanks.

**First Technical Session**

The first technical session of the workshop was chaired by Prof. S.S. Gill from Centre for Research in Rural and Industrial Development, Chandigarh, and co-chaired by Prof. R.S. Sidhu from Punjab Agricultural University, Ludhiana. The session opened with the chairperson's observations that incidence of suicides has been high in states where farming is either commercial or dry. Rural suicides are a multidisciplinary phenomenon and there was a need to go beyond economic reasons to find a solution to the problem.

The first paper entitled 'Alleviating Agrarian Distress: Insights from Re-Survey of Three Villages in Kerala' was presented by Prof. K.N. Nair, Vice-Chairman, Santhigiri Research Foundation. Prof. Nair raised the issue of the ineffectiveness of policy and institutional interventions in providing relief to the farming and rural households. Insights into this issue were provided by a survey conducted in three villages in Kerala in 2004-05, and a re-survey of the same villages in 2010-11. Three aspects – the impact of (a) debt relief measures of the central and state (Kerala) governments, (b) self-help groups (SHGs), and (c) the Rural Employment Guarantee Schemes, on the farming and rural households – were covered in the paper. Prof. Nair's study found that although the debt relief schemes led to a decline in the percentage of households with debt, this decline was not uniform across size group of land holdings. He cited a number of reasons for this restricted reach of schemes. An interesting observation of the paper was the declining importance of informal credit agencies and the increasing role of SHGs. The SHG movement in Kerala, according to Prof. Nair, enhanced the flow of credit to households and had considerable impact as social capital, but failed to generate income and employment opportunities. The Mahatama Gandhi National Rural Employment Guarantee Scheme (MNREGS) also operated much below its potential and failed in terms of the number of days of employment generated. Prof. Nair concluded by stressing on the need to redesign the schemes to suit local conditions, and the role that local panchayats can play in this redesigning.

The second paper in the session was presented by Dr. Rajeshwari S. Raina from CSIR-NISTADS, New Delhi. Her paper was on 'Science and the Signs of Agrarian Distress: Putting an End to the Supply Syndrome'. She contended that the organized agricultural science and technology (S&T) establishment seemed to have a "guaranteed immunity" to agrarian distress. Agricultural science is organized in a way that it is indifferent to the signs of rural distress. She argued that the supply syndrome that affects public and private sector S&T deprives the natural and social sciences of the capacity to understand and analyze the context of and changes in the farm sector. She lamented the fact that in sharp contrast to the massive input subsidies, investment in agricultural S&T to generate relevant knowledge and technologies for agriculture is miniscule. She took up two cases – the rainfed...
Anantapur tract in Andhra Pradesh, and the irrigated tracts of Punjab and Haryana – to illustrate and analyze the relationship between farming communities and S&T. She was of the view that agriculture survived on two policy planks of output price support and input subsidies, and recommended stepping out of the paradigm of supply driven centralized agricultural S&T. Decentralized S&T organizations along with local governments could relate to and define farm level distress and provide solutions to alleviate this distress, according to her.

In the third paper 'Farmers' Suicides Amidst Prosperity: Retrospective Analysis of Punjab', Dr. Surendra Singh Mor from Chaudhary Devi Lal University, Sirsa analyzed farmers’ suicides in five blocks of Mansa district in Punjab. He took up various parameters like source of income, expenditure, loans and its utilization for different categories of victim farmers and found that dependency burden, non-availability of credit, as well as litigation were the most important causes of farmers’ suicides. His policy recommendations included provision of timely credit, alternative employment opportunities, fast track mechanisms to resolve disputes, and establishment of SHGs.

In the discussion that followed the presentation of papers, Prof. R.S. Sidhu pointed out that debt relief measures have been inequitable across regions and farmers. Institutional credit had not made much impact on growth, and the funds-strapped agricultural science institutes have not been able to alleviate the prevailing distress. Prof. Manjit Singh from Panjab University, Chandigarh, Dr. Baldev S. Shergill, S. Ajmer Singh Gill of Bhartiya Kisan Union, and many others, including social activists also expressed their concern regarding the agrarian distress, unsuitable policy measures, the need to understand the agrarian economy and its problems, and political apathy in resolving the agrarian crisis.

**Second Technical Session**

This session was chaired by Professor K.N. Nair, Centre for Development Studies, Trivanthrupuram and co-chaired by Professor (Mrs.) Rajeshwari S Raina, NISTAD, New Delhi. Professor Sucha Singh Gill, Director General, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh, in his paper, titled as ‘Agrarian Distress and Farmers’ Suicides’ discussed the genesis of agrarian crisis and emerging suicides among farmers in India and across the states. He talked about the decreasing share of agriculture in the India’s national income. Presently, just $\frac{1}{6}$ or $\frac{1}{7}$ share of national income has been produced in the agricultural sector, whereas more than one-half of India’s labour force (53 percent) was found to be engaged in this sector. Another weak point of India’s agriculture sector is the inequalities in the distribution of land holdings, followed by the income as well as consumption pattern of farmers. He also stated that the data collected by the NSSO reported underestimation of these inequalities in the consumption pattern because the rural rich classes do not give proper data on their consumption pattern. Thus, as the result of these inequalities, income levels of the rich people are very high, but people suffer from poverty at the lower level. While quoting the reasons for the distress in agriculture sector, he stated that (i) agriculture by nature is prone to distress because it is very much affected by the natural factors like the weather, floods, cyclical fluctuations, etc. On the other hand, the production in industrial sector is not affected by natural factors; (ii) the distress in agriculture is also caused by the market forces.
As the agriculture has become capital intensive, farmers have to acquire inputs at higher costs because prices of these inputs are not under any regulation. And, when the farmers brought their crops in the market, the prices of most of their crops, except the wheat, paddy, etc., are often crashed leading the losses to farmers.

Professor Gill sited statistics to show that rate of suicides among farmers has increased. He also stated that, according to 55th Round of NSSO except the four states in India, in all other states, land holdings below 5 acres of land are not considered to be viable. Thus, he opined that in such a situation, nothing can be done except debt relief to the farmers. He mentioned that the debt on the farmers, crop failures and economic stress are the main causes for farmers’ suicides. He briefly reviewed the some of the historical happenings to the agriculture since the 1880s. At that time, the Britishers introduced the land revenue system which had shifted the workforce from the agricultural to non-agricultural sector. But, after that three acts: (i) Punjab’s Debtors Protection Act, 1936; (ii) The Punjab Restitution of Mortgaged Lands Act, 1938; and (iii) The Punjab Registration of Money Lender’s Act were enacted, but none of these acts were implemented in Punjab. With the passage of time, agrarian relations in Punjab have also changed at fast speed. Collective consciousness across village society as well as farmers is greatly reduced and there arises the differences. Farmers have been divided into two classes: the rich and the poor. And, the rich farmers become commission agents, transporters, etc. and some of them become political leaders and got seats in the State Legislative Assembly, Parliament, Boards etc., but these farmers do not support the poor farmers. He also stated that in last 20 years, large strata of such people which represent rural India do not depend on the agriculture as their income source. Thus, there is a power imbalance or there is no commonality of interest between the rural people and those who represent the rural areas.

In the end, Professor Gill suggested that suicides among farmers are avoidable. This would require preventive and remedial measures to avoid agrarian stress on one hand and relief plus rehabilitation of victim families on the other. The past experience of more than a decade and half shows that in spite of more than 2.32 lakh farmers committed suicides (during 1997-2010) in India, yet no effective measures have been initiated at national or state levels. This shows that the ruling elites pay only lip sympathy for the victims without taking effective measure to prevent this phenomenon and provide relief and rehabilitation measures for the victim families. Further, he also suggested that indebtedness of poor farmers must be reduced. There is need to pass a law for debt redemption among farmers. At the same times, identified victim families need to be provided with compensation and rehabilitation package. In fact, the poor farmers need to be given a comprehensive social security as suggested by the National Commission for Enterprises in Unorganized Sector (NCEUS) 2007. Within agriculture sector, efforts should be made for group cultivation (may be cooperative farming) for small and marginal farmers along with taking up of marketing and processing activities by these cooperatives. Rural education and health has to be put on the rails. The children from rural areas must be given quality education and make them to access skills at affordable costs enabling to take up jobs in modern sectors outside the agriculture. The country needs proper education and employment policy in a coordinated manner. This is possible only if the poor farmers unite with other struggling poor and vulnerable in the society.
Dr. Sukhpal Singh and R. S. Sidhu of Punjab Agriculture University, Ludhiana, in their jointly prepared paper titled as ‘Agrarian Crisis and Farmers’ Suicides in Punjab’ discussed this problem specific to Punjab economy. They identified four major issues of Punjab’s agricultural development: First, the agricultural employment in Punjab in last four decades has been declined consistently and there has been a positive change in the structure of workforce in the state as it is clear from the figures, i.e., the percent share of cultivators in 1971, 1981, 1991 and 2001 was 62.88 %, 58.3 %, 55.27 % and 37.81 % respectively and share of agricultural labour was 20.11 %, 22.17 %, 23.83 %, 13.55 % respectively. Second, real net farm income accrual to the farmers in Punjab is also declining. Third, the share of agriculture and allied activities in the GSDP of Punjab has also been declined. Fourth, de-peasantization in the agriculture of Punjab has come in existence after the dominance of globalization process in the state.

Quoting the facts, they opined that about 37 percent of farmers in India wanted to leave the agriculture. In Punjab, the number of operational holdings decreased from 11.17 lakh in 1990-91 to 10.03 lakh in 2004-05 and number of marginal/small farmers decreased significantly from 5 lakh in 1991 to 3.18 lakh in 2005; showing nearly two lakh small/marginal farmers shifted from the farming activity during last 15 years. Another study of 40 villages found that many farmers have already left farming as the occupation and who left farming joined mainly low paid occupations. Interestingly, 11 percent of such farmers sold a part of their land, while 36 percent even sold their total land. After that, they stated the reasons due to which farmers left agriculture such as low income, division of land, indebtedness, land rent being more than income, etc. They also stated that after leaving the agricultural occupation, majority of the marginal/small farmers became either as the agricultural labourers or started the low paid self employed jobs. Surprisingly, none of the large farmers after leaving the agriculture has become labourer, instead of that, they become commission agents.

While discussing the debt burden, authors stated that burden of debt on Punjab’s peasantry is increasing - Rs. 5,700 crores in 1997, of which 53.44 per cent was from the non-institutional sources (Shergill, 1998); Rs. 9,886 crores , of which 58.13 per cent share was of non-institutional sources (Singh and Toor, 2003); Rs. 21,064 in 2005-06, of which 38 per cent was from the non-institutional sources (Kaur and Kingra, 2007); and Rs. 30,394 crores in 2007-08, of which 43.36 per cent was of the non-institutional sources (Shergill, 2010). Overall, 88.83 percent farmers in Punjab estimated to be in indebtedness. A census survey of three districts of Punjab (Bathinda, Sangrur and Mansa) found 2489 farmers, mostly of young age 20-40 years, committed suicides during 2000-2010 - 6.25 per thousand cultivators. Around 75 percent of suicides belonged to the marginal/small farmers. And, a small proportion of suicide victims (7.3 percent) came from large size farm households (more than 10 acres land). Further, 1887 suicide cases (nearly 76 per cent) were found to happen due to indebtedness. Per acre debt was as high as Rs 1.51 lakh in such victims and average debt on suicide victim households was Rs 3.20 lakh compared to the annual income of Rs. 62610.

After discussing all these issues, authors suggested that there is a need to strengthen the socio-economic conditions of farming community. Long term policy measures should be initiated through which farm incomes can be raised on sustainable
basis. Therefore, large investments should be made for the development of health, education and social sectors in the state. The government should exercise a strong check on the illegal activities of non-institutional credit agencies and enhance the flow of institutional credit among the farmers. The easy repayment facilities with low rates of simple interest will help reduce mounting debt burden on Punjab peasantry. Chinese model of employment where surplus rural labour force marginal and small farmers, instead of working full-time, do farming as part-time vocation appears to be the answer. Similarly, cooperative farming can also provide some employment to small farmers. The problem of suicides in farming community shall have to be tackled in a holistic way. Education and awareness among farmers shall have to be created so that drug addiction and unproductive expenditure can be checked. Crop insurance programme shall have to be strengthened so that remunerative compensation to the farmers can be given in case of crop failure. Government and social institutions should be made pro-active in addressing economic distress of farmers during the period of economic squeeze arising out of market uncertainties or bare necessities of life. All these measures will be helpful for solving the economic problems of agricultural workforce which, in turn, become the driving force to pull the Punjab state out of crisis.

The third paper was jointly prepared by Dr. Lakhwinder Singh, Dr. Kesar Singh Bhangoo and Mr. Rakesh Kumar of Punjabi University, Patiala. They stated that agriculture is the most important sector of the Punjab economy and the main cause of the agrarian distress in Punjab is the agrarian transitions witnessed in the state a long ago. As capitalist agriculture transformation has taken place, agriculture has undergone the structural changes which have increased the vulnerability of farmers to the markets. Marginalization of the agriculture has also weakened the farmers. The study was based on the primary survey conducted in 3 districts of Punjab - Bathinda, Mansa and Sangrur – which are the most distressed districts of Punjab and where number of farmers committed suicides is unusually very high. The findings of the survey reiterated that mostly, the young farmers were the victims of suicides. The farmers committed suicides were found to be indebted towards the both institutional and non-institutional sources of credit. And, the deceased groups of farmers were heavily indebted towards the non-formal groups as compared to controlled groups. Moreover, small farmers are mainly the victims of the debt burden and their share in the outstanding debt was 90 percent.

The authors also have given some suggestions to decrease the agrarian distress in Punjab. They stated that there should be a cap on the interest rate on the debt taken by the farmers. If the farmer is unable to pay the debt at the committed time, the commission agents should transfer the debt to the co-operative banks. There is also a need to organize the farmers’ debt relief fund. To tackle these problems they give the valuable suggestions like development of agricultural infrastructure, strengthening of social support system, institutional reforms, etc.

The fourth paper was presented by Dr. Neelima Deshmukh, Department of Public Administration & Local Govt., RTM Nagpur University, Nagpur. She has taken the perspective of public administration to study the problem of suicides among the cotton growers in the region of Vidarbah (Maharashtra State). According to her, the Vidarbah region comprises of 11 districts of the state where the maximum number
of suicides among the cotton growers was reported in Maharashtra. She stated that 52 cotton growers committed suicides in 2001 and number of such suicides was 1054 in 2009 and 720 in 2010. While analyzing the causes of suicides, she stated multiple factors behind farmers’ suicides like lack of institutional finance, indebtedness, natural factor, spurious deeds/chemical fertilizers, lack of good governance, mismatch between expected and actual yield of cotton crop, soil degradation, psychological stress, etc.

After stating the causes of farmers’ suicides, she has discussed the problems faced by the cotton growers during the sale of cotton in the domestic market. The main problems, she quoted, were: (i) the cotton is not sold at the right time, hence not fetch good price; (ii) farmers do not get the right price of their crops due to the partial grading system; (iii) farmers have to sell their crops in local market due to lack of proper transportation; (iv) cotton seeds are expensive, many times are spurious; (v) the presence of Chukara System in this region under which the payments for production sold are made in instalments; and (vi) cost of inputs used is much more than the selling of cotton. While closing her viewpoint, she has given some suggestions to solve the problems of cotton growers in Vidarbha region. The suggestions, she gave are: cotton procurement scheme of Maharashtra should be revamped, full proof grading system or judging the quality of cotton should be adopted, co-operative farming should be encouraged, cotton based industries should be developed, timely relief from Prime Minister Relief Fund Package should be released, non-farm employment should be encouraged, farming should be connected to the other allied activities, steps must be taken to improve the quality of soil, women empowerment through Kerala’s Kutumbshree be strengthened in the region, etc.

Third Technical Session

The last technical session of wider and intensive workshop was completely devoted to round table discussions and debate with the aim to allow participation of the delegates. The session was chaired by Prof H.S. Shergill and Prof M.S. Sidhu. The floor was opened for debate by Prof Shergill with his remarks on the problem of agrarian crisis and farmers’ suicide. He submitted that it is very difficult to pin point the social causes of farmers’ suicide due to complexity of the problem, however, the phenomenon of indebtedness among farmers is definitely a cause of concern. In order to obviate the problem of indebtedness some practical measures need to be suggested for policy makers. In this regard, he suggested some important changes in the practices related to money lending wherein it should be ensured that interest levied on loan does not exceed the basic amount of borrowed money. Moreover, the interest imposed on the loan should be simple and not compound. He suggested moving of loan related cases out of the jurisdiction of civil courts. He also suggested that in case any farmer defaults in repaying the loan within a span of three years, his case should be transferred to the nearby rural bank. He also mooted the idea of setting up a ‘farmer-debt-relief-fund’ in Punjab to help farmers come out of their indebtedness.

Prof Shergill’s comments were followed by Prof Toor’s observations regarding the status of subsidies in Punjab agriculture. His analysis of input subsidies
in agriculture in the state highlighted the highly skewed nature of their extent, distribution and impact. His analysis focused on the subsidy offered on electricity, fertilizers and diesel - the three main commodities related to agriculture. He brought to light the fact that share of Punjab in total subsidies is on decline but the subsidy policy of the state clearly favours the rich farmers while it aggravates the problem of the small and marginal farmers. The total share of subsidies reaching the marginal farmers hardly approaches 3% of the total subsidies. He emphasised the fact that the most deserving section of the farmers is the least benefitted by the current subsidy policy of the state. The already existing problems of water contamination, declining water tables, skewed access to electricity and heavy machinery compounds the problems of the poor and marginal farmers.

Prof Manjit Singh on the other hand identified declining community networks and cooperation as the main factors explaining the distress in rural India today. He ruminated the fact that when market joins people it divides them too. The massive growth of market forces has resulted in qualitative shift in social life where land, cattle and even social relationships have become increasingly commercialised. Commoditisation of almost every aspect of life is causing the loss of social, cultural and spiritual capital of the people. The unfortunate part is that those who are entrusted the task of formulating policies for others have their own vested interests which dominate their policy decisions.

Social activist Sukhdev Singh Kokarikalan also participated in the discussion and shared his views based on his field experiences. He lamented the fact that the current state of affairs in the state policy is highly favourable to the big landlord and serves the interest of that segment of farmers only. He cited a recent case of special investment plan announced by the state government whereby an amount around 1 lakh crore rupees was announced by the Punjab Govt as additional agricultural loan for the growth of agriculture. However, the actual disbursement of the loan reveals that the majority of the promised money is diverted to finance manufacturers of big agricultural machinery like tractors, tubewells etc. and for those companies which are developing infrastructure in the state. Such diversion of money for non-agricultural purposes in the name of agrarian support has disappointed the farmers who were hoping some financial support from the state to tide over their losses. He also reiterated the issue of unequal distribution of taxes and subsidies that has resulted in furthering the already widening distance between the rich and the poor farmers in rural India. He highlighted how in the name of serving the agricultural sector, the govt is basically watching the interest of the big companies and the big landlords only. He cited the case of liquor factories in the state enjoying subsidies to the tune of Rs 500 crores and of big land lords who are the actual beneficiaries of agriculture related subsidies as they alone can make use of big machineries which are subsidised by the state. He stressed the need for an egalitarian model of development where the redistribution of land should be done and the Land Ceiling Act be implemented
sincerely. The employment base be widened and over mechanization be discouraged as it has massively added to distress in agrarian society where the incidence of crime has risen alarmingly in the recent past.

The last participant was Sardar Sudarshan Singh, another activist - farmer who emphasised the need to have basic land reforms in the state. He stressed upon the need to discuss the plight of agricultural labourer as well while discussing the agrarian distress as they form one of the most neglected and marginalised sections of rural society. He shared his scepticism regarding the new model of development which clearly favoured the big land lords who in fact form a miniscule share of rural population. He appealed to the academicians to adopt a critical attitude towards the state policies. He also suggested increasing the ambit of taxation in the state to generate more revenues and reduce the economic burden on the poor farmers.

The debate was finally summed up by Prof M.S.Sidhu who too shared the concern with the previous speakers regarding the marginalisation of the marginal farmers. He stressed that majority of the farmers in Punjab are small farmers and therefore the technology promoted in agriculture should be the one that is better able to safeguard the interests of these small farmers.
Workshop
On
Research Capacity Building: Innovation for Inclusive Development

November 15-18, 2012

Organized by:
Centre for Development Economics and Innovation Studies,
Punjabi University, Patiala
and
SIID Project, Centre for Policy Research, New Delhi
**Workshop**

on

**Research Capacity Building: Innovation for Inclusive Development**

**(November 15-18, 2012)**

**PROGRAMME SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Venue</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 15, 2012</td>
<td>7.30 p.m. to 8.00 p.m.</td>
<td>University Guest House</td>
<td>Induction Session Chair: Prof. Rajeshwari S. Raina, NISTADS, New Delhi</td>
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<td>November 16, 2012</td>
<td>8.30 a.m. to 9.30 a.m.</td>
<td>Syndicate Room</td>
<td>Lecture to Doctoral Students by Prof. Pushpa Trivedu and Prof. Rajeshwari S. Raina</td>
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<td></td>
<td>4.30 p.m. to 5.30 p.m.</td>
<td>Senate Hall</td>
<td>Special Lecture by Prof. Rakesh Basant</td>
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<td></td>
<td>5.30 p.m. to 6.30 p.m.</td>
<td>Syndicate Room</td>
<td>Lecture by Prof. K.J. Joseph</td>
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<tr>
<td>November 17, 2012</td>
<td>8.00 a.m. to 9.00 a.m.</td>
<td>Syndicate Room</td>
<td>Lecture by Prof. Inderjeet Singh</td>
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<td></td>
<td>5.00 p.m. to 6.00 p.m.</td>
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<td>Lecture by Prof. Rasigan Maharaj</td>
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<tr>
<td>November 18, 2012</td>
<td>8.00 a.m. to 9.00 a.m.</td>
<td>Syndicate Room</td>
<td>Lecture by Prof. Mammo Muchie</td>
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<td></td>
<td>2.30 p.m. to 5.00 p.m.</td>
<td></td>
<td>Lecture by Prof. Rajeshwari S. Raina</td>
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SUMMARY OF THE WORKSHOP PROCEEDINGS

Centre for Development Economics and Innovation Studies, Punjabi University Patiala and SIID Project, Centre for Policy Research, New Delhi jointly organised a four day Workshop during International Conference on “Development and Innovation in the Emerging Economies”, November 15-18, 2012, for young faculty members in universities and PhD students. The workshop, “Research Capacity Building: Innovation for Inclusive Development” was meant to build research capacities in innovation for inclusive development. There were 15 students who participated in the workshop, each having submitted (in Oct. 2012) a short write-up about their research topics and their interest understanding the innovation systems approach to the organizers. The workshop focused on four major areas i.e., Conceptualising the Innovation Systems Framework and Inclusive Development, Identifying Institutions and Institutional Change for Inclusive Innovation, Decentralised Innovation Capacities, Disciplines and Trans-disciplinary questions in Innovation for Inclusive Development.

Induction Session: Induction session of the workshop was chaired by Prof. Rajeswari S. Raina, NISTADS, New Delhi, Prof. K.J.Joseph, CDS, Thiruvananthapuram, Prof. Parthasarathy Banerjee, Director, NISTADS, New Delhi, and Prof. Mammo Muchie, Tswahne University. This session began with a brief introduction to the innovation systems framework and the current concerns about inclusive development in India. The faculty adopted a method of reaching out to the students through their own research topics; using each topic as an empirical case where they could relate the innovation systems framework and analytical categories to their own chosen topics. During this session young faculty members and PhD students from CDS Thiruvananthapuram, JNU New Delhi, Thappar University, and Punjabi University, Patiala explained their research topics and research problems to the experts. The major research and PhD topics discussed in this session were Overseas migration, Mid-day meal evaluation, Child labour in India, Performance of MGNREGA, Industrial growth in India, Choice of Post graduate courses, India’s Services Exports, Performance of modern Banking System and R&D in agriculture. The experts interacted with the participants in the workshop highlighting how the innovation systems framework and questions of inclusion/exclusion figured in each of these topics. Several questions were posed by the students on the development economics theories and conceptual issues like market structure, aggregate demand, labour and disguised/un-employment, etc., which the faculty answered. Specifically, in each case, the faculty helped them relate these questions to the domains and actors relevant to each innovation system. The Mid-day meal is indeed a social innovation that the state has introduced with the dual purpose of addressing school drop-outs and malnutrition; the innovation systems framework helps us see the ways in which the schematization of this innovation into the existing structures and ways of working of the state and its interactions with the communities are evident in different contexts, and analyse how different performance indicators are expressed and where the effectiveness can be enhanced with changes in technologies (in this case the structures of the scheme, or the contents of the meal) and institutions (the ways of working of each actor in the innovation system). Similar issues related to the above broad areas of research were discussed; the students felt enlightened and benefited from the remarks.
of the experts. The experts also provided a reading list that the students could use to understand their own research topics within an innovation systems framework, relate to the functional reality of the actors involved in each innovation system, and the ways in which evidence of exclusion and expectations about inclusion are factored into each intervention.

**Second Session**: The second session of the workshop was conducted by Prof. Pushpa Trivedi and Prof. Rajeswari S. Raina. During this session students explained research methodology problems of their topics to the experts. Prof. Pushpa Trivedi talked about research design and methodological issues of the manufacturing sector. While Prof. Rajeshwari Raina elaborated basic and fundamental research methodology issues in agriculture sector and innovations for inclusive agriculture development. The students and scholars were also asked to read the literature – in development economics with an eye to identify where and how possible exclusions take place, and how the innovation systems framework can help identify these. The students were asked specific questions to see if they are able to find answers to their research methodology problems related to their research topics.

**Special Lecture**: During the special lecture on “Analyzing Innovation Eco-System in Developing Economies – Emerging Issues for Research in India”, Prof. Rakesh Basant from IIM, Ahmedabad raised issues regarding innovations and ecosystem especially in developing and emerging economies. Prof. Basant critically analysed the emerging research questions of ecosystem and innovations in the changing economic scenario of the emerging economies of the world. During the evening the student’s interacted with Dr. Basant and other scholars, discussing innovation ecosystems and the institutional constraints that emerging economies face.

**Third Session**: Next session of the workshop was conducted by Prof. K.J. Joseph from CDS, Thrivananthapuram. During this session Prof. Joseph discussed the issue of search of spaces of social exclusion in innovation systems: the case of plantation agriculture in India. Prof. Joseph highlighted and stressed that for achieving inclusive development the underlying system of innovation has to be oriented towards inclusive development. The relationships between the national innovation system, the sectoral and regional innovation systems and the ways in which the exclusion evident in the innovation system components in each case could affect the actions and outcomes in different contexts were discussed. After the lecture PhD students raised relevant issues and Prof. Joseph addressed all the queries and shared his experiences with the research students.

**Fourth Session**: In the next session of the workshop Prof. Inderjeet Singh from Punjabi University Patiala discussed about Innovation Inputs and Performance in Indian Banking. Prof. Singh emphasised on the role of information and communication technology and its effect on the productivity of the modern banking sector of India. In this discourse, the complex nature of the relationship between IT investment and performance of the modern banking sector has been stylized and modelled empirically. PhD students participated and raised queries which have been addressed by Prof. Inderjeet Singh in the end of the session.

**Fifth Session**: During the next session of the workshop, Prof. Rasigan Maharajah from Tshwane University of Technology, South Africa delivered lecture on
Developing Sustainably and the Emergence of a New Productive Paradigm. Prof. Rasigan Maharajh discussed about the creation of a new unified and planned global community in response to increasing evidence of environmental degradation. Further, Prof. Rasigan Maharajh emphasised that such progressive collaborations also advance the possibilities of developing a global planning regime with the authority and legitimacy to control the proliferation of environmentally detrimental activities whilst incentivising positive change.

**Sixth Session:** Next session of the workshop was conducted by Prof. Mammo Muchie, SARCHI, NRF /DST Research Chair Holder, Tshwane University of Technology, Pretoria, South Africa, Director, Research Centre on Development Studies, Aalborg University, Denmark and Senior Research Associate, SLPMTD, Oxford University, UK. Prof. Mammo Muchie talked about the developmental and innovation issues in the emerging economies and the problems and challenges of development and underdevelopment faced by emerging economies. Prof. Muchie emphasised the need for innovation systems studies in developing countries where there are several persistent challenges. He illustrated some key relationships between the state and society, between public sector science and transnational corporations or global S&T systems, between national and state or local governments, that influence the behaviour and effectiveness of innovation system actors. That Africa and India had much to learn from each other, and the ways in which some of the questions that the students were working on (say, agricultural R&D, international trade, inter-state differences in industrial performance, banking sector reforms, etc.) could be asked in the African contexts too were discussed. This session gave the students an idea about how international comparisons were possible, and the different historical patterns that shaped innovation systems in different contexts.

**Seventh session:** The concluding session of the four day workshop on “Research Capacity Building: Innovation for Inclusive Development” was led by Prof. Rajeswari Raina. She discussed the issues of innovation for development and reform for rural India. At the national level there is attention to innovation – it is now a clear winner within the development discourse in all emerging economies. She suggested that for students who wish to engage with the innovation systems framework, it is important to recognize and be able to delineate how innovation (the generation, access to, and utilisation of knowledge towards socially progressive and economically profitable ends) system components are structured and how they function. Since innovation, happens only when both technological and institutional changes occur, and when several actors with shared interests, competencies, and causal understanding are linked to work together, the analysis must help us understand the technological and institutional changes in each component of the system. When issues of exclusion – the evidence and nature and magnitude of exclusion are introduced into the innovation systems framework, the institutional constraints to innovation are almost automatically revealed in the evidence of exclusion itself. The ways to present this evidence of exclusion, and explain the inclusion or inclusive innovation being planned or implemented (by a state-led or community-led coalition of innovation system actors) was discussed. In this last session of the workshop PhD students and young faculty members of the different universities discussed their problems – especially questions of data and information on some of these institutional aspects of innovation, with the experts.
The organisers, Centre for Development Economics and Innovation Studies, Punjabi University Patiala and SIID Project- Centre for Policy Research, New Delhi, thanked the resource persons and PhD scholars for successful completion of the workshop and thanked everybody who contributed to the cause. CDEIS will function as a conduit to ensure that the students continue their interaction with the faculty who participated and contributed generously to the workshop.
# RESEARCH PROJECTS OF THE STUDY TEAM

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Author/s</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Inderjeet Singh, Dr. Lakhwinder Singh and Dr. Parmod Kumar Aggarwal</td>
<td>Economic and Financial Consequences of Cancer from Patient’s Family Perspective: A Case Study of Punjab</td>
</tr>
<tr>
<td>2.</td>
<td>Dr. Anita Gill</td>
<td>Interlinked Informal Agrarian Credit Markets</td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Sukhwinder Singh and Dr. Kesar Singh Bhangoo</td>
<td>Functioning of Contingent Social Security Schemes in Punjab</td>
</tr>
<tr>
<td>4.</td>
<td>Dr. Jaswinder Singh Brar</td>
<td>Public Spending on Elementary Education in Punjab: A Multi-dimensional Analysis</td>
</tr>
</tbody>
</table>
The CDEIS initiated Public Lecture Series during the year 2012-13. The following prominent economists from India and abroad delivered public lectures in the University.

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of the Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1, 2012</td>
<td>Dr. M. Govinda Rao, Director, National Institute of Public Finance and Policy, New Delhi and Member, Economic Advisory Council to the Prime Minister of India</td>
<td>Finances of State Governments and Developmental Efforts</td>
</tr>
<tr>
<td>October 22, 2012</td>
<td>Professor Nanak C. Kakwani, Ex-Director and Chief Economist, United Nations Development Program (UNDP), International Poverty Centre, Brazil and Professor (Retd.) in New South Wales University, Australia</td>
<td>Defining and Evaluating Poverty in Multiple Contexts and Experiences</td>
</tr>
<tr>
<td>October 25, 2012</td>
<td>Professor Sukhpal Singh, Indian Institute of Management, Ahmedabad</td>
<td>Benefits of FDI in Multi-brand Retail Trade in India: Myths and Reality</td>
</tr>
<tr>
<td>January 17, 2013</td>
<td>Professor Sanjit S. Dhami, University of Leicester, Leicester, UK.</td>
<td>Behavioral Economics Emerging a New Area of Study</td>
</tr>
</tbody>
</table>
M. Govinda Rao’s Lecture on Finances of State Governments and Developmental Efforts

August 1, 2012

Organized by:

Centre for Development Economics and Innovation Studies and Planning Commission Chair, Punjabi University, Patiala
BRIEF REPORT

On the invitation of Centre for Development Economics and Innovation Studies (CDEIS), Punjabi University, Patiala, Dr. M. Govinda Rao, Director, Institute of Public Finance and Policy, New Delhi and Member, Economic Advisory Committee Council to Prime Minister of India delivered a special lecture on the theme ‘Finances of State Governments and Development Efforts’ on August 03, 2012 in the University Syndicate Room. The lecture was presided over by Professor S.S. Khehra, Dean, Academic Affairs and acting Vice-Chancellor, Punjabi University. Dr. Inderjeet Singh while welcoming the Chief Guest and other participants argued that there is urgency to attend deteriorating fiscal health of the Punjab economy. The fiscal imbalance has also damaged the environmental health of the economy of the state of Punjab. Professor Lakhwinder Singh, Coordinator of the CDEIS introduced the speaker.

In a thought provoking presentation, Dr. M. Govinda Rao elaborated the role of the state/government to promote various economic activities in desired direction for ensuring equality in the distribution of income. Another major argument that he builds in favour of state intervention in economic activities was basically revolving around assisting the markets so that these can function effectively and efficiently. He stated that, in Indian federal set-up, the central government has been playing a predominant role in the stabilization and redistribution policies. Though the sub-national (state) governments in India play very strategic role in the implementation of various policies, but their roles are limited in the absence of abundance of finances at their command. He discussed the role of various Finance Commissions in the stabilization of state finances from time to time. However, these allocations are not enough compared to the mounting needs of states, and there is need to rebalance these allocations both at the central and state levels to give more focus and boost to the development agenda.

Regarding India’s economic growth performance, he stated that Indian economy has achieved a major breakthrough by enhancing the growth rate from the Hindu growth rate to Dancing Elephant growth rate. More specifically, Indian economy grew at the rate of 3.5 per cent per annum during 1950-80 (Hindu growth rate), 5.8 per cent per annum during 1981-2000 and 7.7 per cent per annum during 2001-10 (Dancing Elephant growth rate). However, the growth rates across the major Indian states remained uneven. And, such uneven growth rates have led to rising disparities in the income of people across the states as proved by the rising coefficient of variation in the per capita GSDP over the time period. During this high growth period, Punjab economy witnessed slow growth rates during the last three decades, i.e., 2.56 per cent per annum during 1980-81 to 1993-94, 2.49 per cent per annum during 1994-95 to 2002-03 and 6.17 per cent per annum during 2003.04 to 2009-10. These growth rates are much below the national averages, what to speak of making comparison with the fast growing Indian states like Haryana, Gujarat, Maharashtra, etc. Elaborating the causes of slow growth rates in Punjab economy, he stated that growth of any region is largely dependent on the level of investment, quality of institutions and technological progress. However, Punjab lacks all these parameters, instead of these; the state has become victim of competitive populism. Moreover, Punjab entered the deficit syndrome where the mounting interest payments, rising
salary bill of state employees due to frequent pay revisions and tax free budgets are ruling the roust. Since today’s borrowings are tomorrow’s taxes, the state is facing a peculiar problem regarding the credibility of state government. Distorted subsidies also contributed the fiscal crisis of state government.

He opined that during 2001-02 and in few subsequent years, both the central and state governments faced a serious fiscal imbalances in the revenue generation compared to their expenditures. After the four-five time lags, the fiscal situation in most of the states remained satisfactory except the states like Kerala, Punjab and West Bengal. And, the Thirteenth Finance Commission of India recommended a special adjustment path to solve these states’ precarious fiscal position. Taking the case of Punjab, he argued that Punjab’s finances are not in a good shape. Punjab state can regain its past glory in development process only when it puts its fiscal health in order. He highlighted that the growth trends in development expenditures across all other states found to be doubled during the 2000s when compared the 1990s, but Punjab has become a laggard state on the count of lower development expenditure both in the 1990s and 2000s. Further, all those states who incurred most of their development expenditure on the education services, health services and required infrastructure are found to be better performing states in India. Clearly, the correlation coefficient between the per capita GSDP and development expenditure found to be very high and positive across all fast growing states. It indicates that all states must spend more and more money efficiently on these services to achieve high growth path.

He suggested that states like Punjab must take corrective steps to raise investment levels in the economy, raise the efficiency of institutional service delivery system and increase the tax efforts to finance rising need of development expenditure. He recommends that user charges must be levied in Punjab on most of the services provided by the state government. Moreover, the competitive populism must be discarded at the earliest. He stated that, in future, transfer of resources from the central government will come with accountability or matching grants or both. There is a strong need to phase out the implicit and explicit subsidies to put the Punjab economy on the high growth path. He also lauded the tax efforts made by the other states compared to Punjab since the 2000-01.

He suggested that there is need to reorient fiscal policy towards development agenda in the states like Punjab. And, to accelerate the growth in a sustained manner, Punjab requires substantial increase in development expenditures and ensuring its efficient spending towards achieving outcomes – peoples’ welfare. He also cautioned that heavy dependence on the private sector to provide public services to may not work everywhere. He stated that in Punjab, there is need to create fiscal space for spending more on developmental heads compared to non-development heads. To finance the rising development expenditures in Punjab, he suggested that (i) new/old taxes must be levied/enhanced; (ii) user charges must be levied who use these services, (iii) competitive populism must be shunned, and (iv) steps must be taken to reduce unproductive expenditures. Moreover, the transfer of funds from the central government also calls for reforms. Seeing it a difficult path he states whether the states including Punjab are prepared to take these bold steps.
Professor Lakhwinder Singh, Professor Kesar Singh, Professor S.S. Khehra and Mr. Surinder Singh Riar participated in the discussion. In the end, Professor R.K. Bansal, Head Department of Economics proposed the vote of thanks.
PUBLIC LECTURE-II

Professor Nanak C. Kakwani's Lecture on Defining and Evaluating Poverty in Multiple Contexts and Experiences

October 22, 2012

Organized by:

Centre for Development Economics and Innovation Studies, Planning Commission Chair, Centre for South West Asia Study, Punjabi University, Patiala
BRIEF REPORT

Professor Nanak C. Kakwani, Ex-Director and Chief Economist, United Nations Development Program (UNDP), International Poverty Centre, Brazil and Professor (Retd.) in New South Wales University, Australia, delivered a special lecture on October 22, 2012 in the Department of Economics, jointly organized by the Centre for Development Economics and Innovation Studies, Planning Commission Chair and Centre for South-West Asia Study on the theme Defining and Evaluating Poverty in Multiple Contexts and Experiences.

Professor Kakwani argued that the most important thing related to the poverty studies is the methodology of evaluation. The different countries have been using diverse type of policies and programs of social protection. The anti-poverty programs involve direct cash transfers, generalized subsidies and pro-poor policies. The direct cash transfer programmes are more popular in the advanced countries. In Latin America, there are conditional cash transfers to the poor households like child study vouchers, the purpose of which are to reduce not only the current poverty of such households, but also their future poverty by providing education to their wards. Some countries use the ‘food voucher’ to provide the basic consumption of necessities. But, the efficiency of all these programmes depends upon the administrative efficiency of the system. He stated that the implementation of various social protection programmes is very efficient in South Korea.

He also pointed out that the administrative cost of designing and handling of the targeting policies is very high. The need is to evolve a pro-poor policy index. The perfect targeting can be achieved by giving proportionately more to the comparatively more poor persons and households. In Russia, number of welfare programs is very large. The poverty-gap and severity of poverty norms are very useful in making an assessment of the situation. In Vietnam, the health programs are not running with full efficiency. The public schools were found to be more pro-poor than that of the private schools. But, it is also important to note that in some cases, the higher you go on the education ladder their will be less representation of the poor persons even in the public schools. There has been strong variation among the countries so far the student targeting is concerned. It is to be noted that the universalization of subsidies is a very costly proposition to which India has been trying to shift. It also becomes financially and materially unsustainable particularly when the growth rate decelerates he cautions. The lecture was followed by discussion in which Professors Inderjeet Singh, Kesar Singh Bhangoo, Lakhwinder Singh, Jaswinder Singh Brar, Sukhwinder Singh and R.K. Bansal participated. Many students raised questions and interacted with Professor Nanak Kakwani.
PUBLIC LECTURE-III

Professor Sukhpal Singh's Lecture on

Benefits of FDI in Multi-brand Retail Trade in India: Myths and Reality

October 25, 2012

Organized by:

Centre for Development Economics and Innovation Studies,
Planning Commission Chair, Centre for South West Asia Study,
Punjabi University, Patiala
BRIEF REPORT

Dr. Sukhpal Singh, Professor, Indian Institute of Management (IIM), Ahmadabad, today delivered a very thought provoking lecture on Benefits of FDI in Multi-brand Retail Trade in India: Myths and Reality in the Syndicate Hall of the Punjabi University, Patiala on 25.10.2012. The lecture was jointly organized by the Centre for Development Economics and Innovation Studies, Planning Commission Chair, and Centre for South-West Asia Study, Punjabi University, Patiala. Dr. Singh by using empirical evidence from large number of countries highlighted the crucial aspects of the entry of FDI in multi-brand retail. He said that the benefits from the FDI in multi-brand retail have been much exaggerated by the vested interests without providing any empirical evidence thereof. He said that without proper and effective policy framework, FDI cannot benefit the farmers, consumers, and other stakeholders. He told that big buyers do not guarantee better prices to the small producers as the level of prices depends upon the relative bargaining power. The system of contract farming has been reduced to 'contact farming' which in no way suits to the interests of the farmers and state agriculture. The big companies are not interested in any sort of written agreement with the farmers. He further said that even the data related to food wastage under the existing system has been manipulated in order to build a case for the entry of FDI into retail. There is a difference between value loss and physical wastage. One must understand that the food wastage is also very high in rich countries where these types of companies have decisive say in the decision making.

It is to be understood that the FDI in multi-brand retail is keen to enter the country in order to sell goods to our citizens and not to make our agriculture profitable or solve our problems. The just announced policy in no way suits to the small producers and it is full of gaps. The small and medium enterprises definition has been substituted with the word small industry. The policy of self-certification by the big business is subject to misuse by such suppliers. The super markets create small amount of employment per unit of capital invested. There is no evidence available which suggests that the entry of super markets results into lower prices to the consumers. There is every possibility that the foreign big retailers will like to purchase the existing domestic retailers instead of making any net investment in the country as most of the domestic players are in net loss. The small holder has no place in the proposed business of the FDI because the big business likes to purchase in large volume which the small holder cannot supply. The high risk and high investment agriculture which the FDI in retail is going to create do not suit the small producer. The big companies purchase only the high quality produce of the farmers. The farmers are left in the lurch so far other quality of produce is concerned and ultimately ends up in overall loss. It is important to note that in advanced countries, where the food business is handled by the big companies, the share of farmers in the final price paid up by the consumer decreased over the period. The various government agencies are presenting different things about the FDI in retail which reflects the lack of clarity about the FDI on the part of the government bodies.

The lecture was presided over by Mr. Ramesh Vinayak, the Resident Editor of the Hindustan Times. Mr. Vinayak in his presidential remarks emphasized that there
is strong need to organize such type of high quality lecture in order to make an objective assessment of the situation. He further argued that FDI is inevitable but it must be properly regulated so that the country can draw the maximum benefits. Professor Romesh Kumar Bansal, Head, Department of Economics welcomed the audience. Dr. Lakhwinder Singh Gill introduced the theme of the lecture and Professor Inderjeet Singh presented the vote of thanks. Those who participated in the discussion include Professor Kesar Singh Bhangoo, Dr. Ran Singh, Dr. Dhreej Kumar, farmer activists and students.
PUBLIC LECTURE-IV

Professor Sanjit S. Dhami's Lecture on

Behavioral Economics: Emerging a New Area of Study

January 17, 2013

Organized by:

Centre for Development Economics and Innovation Studies,
Planning Commission Chair,
Punjabi University, Patiala
BRIEF REPORT

Professor Sanjit S. Dhami, University of Leicester, U.K., a leading scholar of Behavioral Economics delivered a special lecture on the various aspects of behavioral economics; an emerging area of study at the global level, in the Syndicate Hall of Punjabi University, Patiala. He strongly argued that the current economics taught all over the world countries is known as the mainstream economics or neo-classical economics. It could not explain the various intricacies of human behavior which is influenced by the factors other than money alone. The human beings are not that much selfish as has been conceptualized by the mainstream economics. Actually, the human behavior is extremely complex and is determined by plethora of factors. The neo-classical economics borrowed mainly from the Physics and ultimately ended up as a science completely out of touch with ground reality. The experimental insights of Psychology are very important to understand the economic behavior of humans. The empirical evidence coming out from psychological, anthropological and other social sciences does not support the mainstream economic theory and its various formulations. In fact, the empirical evidence rejects the expected utility theorem of mainstream economics which has been used by mainstream economics to understand the risk and uncertainty framework. The hot and cold experiment of Psychology states that human’s response is very much to change in their immediate situations and starting point of any activity. The human behavior is altogether different in situations of loss and gains.

Most of the people chose the safe options in life instead of the riskier ones. It is very important to note that the losses bite more than that of gains which provides the base to understand the prospectus theory; a sub-discipline of behavioral economics. In order to prove his points he presented very interesting case studies such as shortage of taxis in New York city during a rainy day, payment of taxes by persons, equity-premium puzzle, supply of public goods, voluntary cooperation, etc. Evidence shows that people have social preferences over immediate monetary preferences which induce people to participate in various economic activities. Humans’ behavior is, in fact, the mix of selfishness, altruistic, enviousness and other traits. The human behavior is much sensitive to conditional cooperation. The problem of free-riding is very crucial in the supply of public goods, where people like to enjoy the public good without contributing to it. Humans have inherent intrinsic reciprocity. He told that neuro-economics is proving very useful in understanding the hitherto unexplained economic phenomenon. It is very important to understand that the immediate gratification leads to the problem of self control, which could be understood by hyperbolic discounting method. Very small changes in framing of rules could enhance people’s participation in various government policies and programs. The humans instead of following very mechanical calculations depend upon the rules of thumb in order to reach at various decisions in life. He recommended the introducing of a course on behavioral economics in the various courses of economics.

On this the CDIES coordinator Prof. Lakhwinder Singh introduced the main speaker and Prof. Sukhwinder Singh, Prof. Inderjit Singh, Prof Jaswinder Singh Brar and Prof. Kesar Singh Bhangoo participated in the discussion. Others who participate in discussion were Professor O.P. Miglani, Dr. Tarika Sandhu, Dr. Birinderpal Singh and Ms. Swati. The lecture was presided over by Professor B.S. Sandhu, Dean, Social Sciences, Punjabi University, Patiala. Professor Romesh Kumar Bansal, Head, Department of Economics, Punjabi University, Patiala thanks the participants and Professor Dhami.
VISITING PROFESSOR(S)

The CDEIS invites prominent economists from India and abroad as Visiting Professors for strengthening the research efforts of the Centre. Professor Keun Lee, School of Economics, Seoul National University, Seoul, South Korea visited the Centre and interacted with the students and the Research Team of the Centre. During his visit, the CDEIS and School of Economics, Seoul National University established collaboration and decided to jointly hold an International Conference in October 2013 in Seoul, South Korea.

Duration of the Visit: 15 November to 25 November 2012

Dr. Keun Lee is the director of the Center for Economic Catch-up, and a professor of economics at the Seoul National University. He holds a Ph.D. degree from the University of California, Berkeley. He was a consultant at the World Bank, lecturer at the University of Aberdeen, Scotland, and a research fellow at the East West Center, Hawaii. His main research topic is economics of catch-up with focus on the role of business groups, corporate governance and growth, industrial policy, innovation and technology policy, and system transition, in context of Korea, China, and other Asian economies.

RESEARCH OUTCOME OF THE TEAM MEMBERS, 2012-13

Prof. Lakhwinder Singh


(viii) Economic Growth and Crisis of Rural Economy of India, January 21, 2013, Lecture Delivered at *Refresher Course for University and College Teachers*, Organized by the Department of Economics in collaboration with UGC Academic Staff College, Kurukshetra University, Kurukshetra.

(ix) Current Inflationary Pressure on Indian Economy: Theory, Evidence and Policy, January 21, 2013, Lecture delivered at *Refresher Course for University and College Teachers* organized by Department of Economics in collaboration with UGC Academic Staff College, Kurukshetra University, Kurukshetra.

Prof. Inderjeet Singh

(i) *Irrigation System in Indian Punjab*, Joint Project of Observer Research Foundation (ORF), India and Lahore University of Management Sciences (LUMS), Lahore, 2012.


(iii) *Re-Imaging the Indus*, Project Publication of Joint Indo-Pakistan Project of Observer Research Foundation and Lahore University of Management Sciences, 2012.


“Emerging Structure of Rajasthan Economy in India”, Working/Online Paper on Social Science Research Network (SSRN) and Munich Personal RePEc Archives (MPRA), 2012.


Prof. Anita Gill


Attended: International Conference on '(Re) Building Punjab: Political Economy, Society and Values'; University of California, Santa Cruz (USA), March 29-30, 2013.


Financial Inclusion', Lecture delivered in the Refresher Course on the theme 'Recent Advances in Economics and Business: An Indian Perspective' organized by Department of Economics, Kurukshetra University, Kurukshetra, January 21, 2013.

(vii) 'Internlined Informal Agrarian Credit Markets' (Research Project sponsored by CDEIS, Punjabi University, Patiala, 2012). [Principal Investigator]

(viii) 'Farmers' Suicides in Punjab' (sponsored by UGC), 2012-13 [Co-investigator]

Prof. Sukhwinder Singh


Prof. Kesar Singh Bhangoo

Irrigation System in Indian Punjab, Joint Project of Observer Research Foundation (ORF), India and Lahore University of Management Sciences (LUMS), Lahore, 2012 (with Prof. Inderjit Singh).


Session Chair in the National Seminar on "Punjab Economy: Opportunities and Challenges", 13-02-2013, DAV, College Chandigarh.

Prof. Jaswinder Singh Brar


(v) Functioning of NREGA and Social Security Schemes in Punjab, Sponsored by Centre for Development Studies, Thiravananthapuram, (with Prof. Sucha Singh Gill and Prof. Sukhwinder Singh) (Rs.3.50 Lakh), 2012.


(x)  *Overseas Punjabi Diaspora, Engagement Modes and Rural Development: Case of Doaba Region of Indian Punjab*, Paper Presented at Workshop on Diaspora and Development: South Asian Diaspora Engagement in South Asia, organized by Institute for South Asian Studies, National University of Singapore, Singapore, 27-28 September, 2012


**Dr. Parmod Kumar Aggarwal**


(v)  Participated in International Conference on *Development and Innovations in the Emerging Economies*, organized by CDEIS and Department of Economics, Punjabi University, Patiala, Nov. 16-18, 2012.

(vi)  Participated in workshop on *Challenges before Economic Development in Punjab* organized by CDEIS and Department of Economics, Punjabi University, Patiala, May, 3, 2012.


DISSEMINATION OF KNOWLEDGE

One of the objectives of the CDEIS is to disseminate the knowledge generated by the Centre and other participants in the activities of the Centre. The Centre has organized Conferences, Workshops and Public Lectures. During these academic activities, high intellectual input was generated and disseminated through press. The press clippings are as follows:
Pbi varsity to set up economics research centre

HT Correspondent

Patiala: Punjabi University here will set up Centre for Development Economics and Innovation Studies (CDEIS) on its campus with an initial grant of Rs 20 lakh sanctioned in the Union Budget.

The department of economic affairs under the union finance ministry has approved the setting up of the centre, which aims to develop a network of researchers working on development and formulation of policies in emerging economies.

This is the first time that the union finance ministry has sanctioned such a centre in the country.

Prof Lakhwinder Singh Gill of the department of economics in the university has been made the in-charge of this centre.

The centre will focus on comparative studies to study the effects of science and technology exchange between countries and those that developed earlier," said Prof Gill.

The Centre will conduct research studies, organise conferences and workshops as well as field surveys and training programmes. It will also promote dialogue between researchers working in various departments of the university and those in other institutes in the country and abroad.

The CDEIS has proposed to invite as visiting fellows, well-known scholars from reputed universities and institutions in India and abroad.

"According to the union government's plan, this research centre would be made a centre of excellence. To study the economics of the state, this centre will play a vital role," said Prof Gill.

According to economics experts such centres play an instrumental role in studying economies of Asian countries like South Korea and Japan and are a guiding force in development.
‘Rationalise taxes, subsidies’

Hindustan Times, May 5, 2012

Rule-based policies have been substituted with discretion-based policies aimed at protecting the interests of big business houses.

The economist who took part in a workshop on the theme “Challenges before economic development in Punjab” at Punjab University on Friday criticised the government’s policies tilted in favour of private businesses rather than the public, saying this did not augur well for Punjab’s economy.

“Rule-based policies have been substituted with discretion-based policies in terms of per capita income and the gap between the per capita incomes of Haryana and Punjab has increased sharply,” said Prof Lakhwinder Singh, coordinator of the Centre for Development Economics and Innovation Studies at Punjab University, which organised the workshop in association with the Planning Commission Chair of the university.

“The economists said Punjab has slipped to the fifth position in terms of per capita income and the gap between the per capita incomes of Haryana and Punjab has increased sharply.”

“Tax evasion is a big issue in Punjab. The state has lost out on a lot of revenue because of it. There is a need to rationalise subsidies as well. Such populist measures have worsened the economy. There must be some riders on subsidies,” suggested BS Ghuman of Punjab University, Chandigarh. He said the national monetary policy had been adversely affecting states like Punjab and it must be understood that the problems of the Punjab economy were the same as that of the national economy.

“The driver of growth during earlier phases was commercialised agriculture. But being an agriculture-dominated economy, Punjab could not reap the benefits of the new economic policies. In this scenario, the manufacturing and service sectors can become new engines of growth,” said Prof Rajinder Singh, dean, research, Punjab Agricultural University, Ludhiana. Maintaining that industrial and agricultural development was taking place in isolation without any strong linkages between the two, he economists mooted a Punjab Investment and Industrial Promotion Board and setting up of special economic zones through land pooling. They also underlined the need for developing quality physical infrastructure in the state.

“Every budget must have fresh taxes. Tax-free budget is not a complete budget. We need to set up an advisory council of social scientists to the chief minister,” said Prof Surjeet Singh, director, Institute for Development Studies, Jalandhar.

Prof Gian Kaur of Guru Nanak Dev University spoke on the agrarian economy, while Upinder Sahni of Punjab Agricultural University criticised the fiscal policies of the state government.

Ajit, June 17, 2012
 Powerful' Punjab should rationalise subsidies

It is good to be powerful, but it is not nearly as good as being a good leader. While the state government has been busy beefing up its administrative machinery and increasing its power, it has also been neglecting the needs of the common man. The state has been spending a lot of money on subsidies, but the beneficiaries are not always those who need it the most. The state has been giving subsidies to industries, but the industries are not always in a position to utilise the subsidy to the fullest. The state has been giving subsidies to farmers, but the farmers are not always able to utilise the subsidy to the fullest. The state has been giving subsidies to the poor, but the poor are not always able to utilise the subsidy to the fullest. The state has been giving subsidies to the rich, but the rich are not always able to utilise the subsidy to the fullest. The state has been giving subsidies to the government, but the government is not always able to utilise the subsidy to the fullest.

Daily Business, June 17, 2012
‘Commission root cause of farmers’ suicides’

Hindustan Times, June 18, 2012

The Tribune, June 19, 2012
Punjab needs own fiscal restructuring mechanism

RAJEEV RANJAN ROY
Patiala/Chandigarh

In a no-nonsense manner, Prime Minister’s Economic Advisory Council (PMEAC) member M Govinda Rao on Wednesday said that Punjab should put in place fine-tuned financial restructuring plan to deal with the state’s financial hardships, and a mere bailout package from the Centre would not do any good. “The state will get funds from the Centre and will spend the money too, it will not solve the problem at all,” said Rao, while talking to Daily Post.

He was at Punjabi University, Patiala, to deliver a lecture on the finances of states.

Rao said Punjab along with West Bengal and Kerala is left with no option but to “raise taxes, check tax evasion by computerising the system, levy proper charges on all services, and revamp the policies of subsidies.” The state government needs to put in place a realistic taxation policy. Several recommendations have been made from time to time as to what kind of measures should be initiated by the state government to deal with the financial problems, but in vain,” added Rao.

Also, Director, National Institute of Public Finance and Policy (NIPFP), New Delhi.

He said that there was a huge scope for fiscal reforms in the state. “The will power to initiate corrective measures is missing. That is a very unfortunate scenario,” he added. “If Punjab does not want to raise the taxes, why should the national taxpayers bear the burden of the state’s profligacy,” added Rao, saying mere announcing some austerity measures will not serve the purpose.

“Punjab needs a far better financial mechanism to come out of the years old crisis. Those who can pay should be made to pay,” he said, apparently referring to the extensive power subsidies being given to the farmers in the state and the non-collection of property taxes in a uniform manner. Over the last three decades, Punjab has been facing a chronic shortage of investment in capital formation. The investment-state domestic product (SDP) ratio has remained below 20 per cent, which is the lowest among 14 major states of India. Punjab’s investment-SDP ratio is 15 percentage points, which is lower than all India average. “Instead of blaming the Centre, Punjab government should come out with a detailed plan, detailing what actions the government is going to initiate to improve infrastructure, upgrade the irrigation facilities, and improve the power distribution network,” he said.

Daily Business, August 2, 2012

Patiala Bhaskar, August 2, 2012
Wrong policies to blame for fiscal mess, says economist

GAGAN K. TIWATI

PATIALA, AUGUST 1

M. Gobinda Rao, member of Economic Advisory Council to the Prime Minister, has blamed the alleged wrong policies of the Punjab Government for the state’s poor fiscal health. Rao, who is also the Director of National Institute of Public Finance and Policy, New Delhi, delivered a lecture on ‘State Level Fiscal Policy: Important Issues’ at the Punjab University here today.

Criticalising the Punjab Government’s free power policy for tubewells, he said: “Politics of populism cannot help in improving any state’s financial condition. This lack of foresight will rather push the future generations into indebtedness.”

Citing Gujarat’s example, he said, was states taking to “blackmail politics”. While West Bengal Chief Minister Mamata Banerjee has been demanding a bailout package, Punjab has been blaming the Centre for its fiscal woes. This is unjustified. Despite recommendations, Punjab has not bothered to either generate revenue or raise user charges and taxes and contain subsidies. Why should a national taxpayer pay for the lethargy of the Punjab Government?” he questioned.

The expert on economy claimed that in the 1990s, the tax revenue to gross domestic product ratio of Punjab was 10, but now it had come down to around seven, which was a “cause for concern”.

“Punjab should focus on generating revenue,” he said.

The Tribune, August 2, 2012

‘T&D losses are theft and dacoity of power’

PMEAC Member M Govinda Rao
RAJEEV BANJAN ROY
Patiala

M Govinda Rao, Member, Prime Ministers’ Economic Advisory Council (PMEAC), was in Patiala on August 1, a day after the historic blackout on July 31. He shared his pain and anguish over the way power infra is being treated in India while talking to Daily Post at Punjab University’s Old Guest House.

Excerpts:

We had a massive grid failure on July 31. It was nothing but the result of our systemic failure of our power infrastructure management.

There has been no improvement in our grid network. It requires heavy investment for long. We have to pay the price.

What about transmission and distribution (T&D) losses?
I will say that T&D stand for theft and dacoity of power in India. There is no auditing of power utilisation. We have to stop the unmetered supply of power urgently.

The coal supply remains a key concern.
In fact, we have to work hard in ensuring the availability of coal adequately to the power plants across the country. The supply chain is very poor.

Power is highly subsidised. No, free lunches please. If someone is getting power, he will have to pay as per his capacity. The tariff can be rationalised to help out those who are really not able to pay like small farmers and poor people. This, however, does not mean that the power supply will not be metered and audited.

Daily Post, August 6, 2012
Taxing Punjab more rationally

Levying taxes is something which scares the rulers of Punjab the most. If an election is around, then the question of even thinking of any taxes does not arise. Therefore, the ruling political class maintains a cautious approach while talking about taxes and subsidies, which are being given as freebees in the state. Therefore, Chief Minister Parkash Singh Badal led SAD–BJP government’s decision to increase value added tax (VAT) by 0.5 per cent does come as a surprise. It is a minimal increase, and one hopes that the government will further increase the tax in months to come. Similarly, the government has also decided to levy the property taxes as per the unit area method, which is a belated but welcome move. All these decisions were taken by the Cabinet on Tuesday will help the government mop up around Rs 900 crore as extra revenue. It is certainly a big amount, but pretty small against the target of Rs 4,500 crore. The figure further pales into insignificance if the state’s total financial liabilities are taken into consideration. The Central government debt is being pegged at over Rs 80,000 crore; and if other liabilities are added, the figure goes beyond Rs 1 lakh crore. Thus, Punjab along with Kerala and West Bengal is bracketed as ‘debt-stressed’ states. Since the Central government is unwilling to waive off the debt even partly, Punjab has to really work hard in rationalising the policy of subsidies and taxes. The government must ensure that those who can pay the tax or buy the services must not get the benefits of subsidies, which are strictly meant for the needy and the poor. In Punjab, the rich is always spared from legitimate taxation. They get themselves bracketed with the poor when they have to avail the benefits of subsidies and freebees.

It is high time that the government takes Pun firm call, and put the things in order so far as finances are concerned. The government should also overhaul the functioning of Central government schemes. Punjab needs to go for reforms at all possible levels. At the same time, the SAD–BJP regime must not give up the demand for a special compensatory package. A group of economists from Punjabi University, Patiala, under the leadership of Prof Lakhwinder Singh had recently released ‘a vision document’ in Chandigarh, where they had underlined the need for Rs 55,000 crore as ‘compensatory package’ from the Centre for the next five years to rejuvenate the state’s crippling fiscal condition. Thus, the state government and other stakeholders need to work together to take Punjab to the new heights of financial independence, which is the key to social empowerment.
Policy makers not keen on farming issues, says expert

The Tribune, September 1, 2012

Corporate sector influencing govt policy, say experts

The Tribune, September 1, 2012
‘Poverty remains a key concern for us’

PATIALA: The problem of eradicating poverty remains a key concern for the policy makers and other stakeholders, said Prof Nanaa CKakwani, a former Director and Chief Economist, United Nations Development Programme (UNDP), International Poverty Centre, Brazil. He said this while delivering a special lecture in the Department of Economics, Punjabi University (PU) here on Monday, which was jointly organised by the Centre for Development Economics and Innovation Studies, Planning Commission Chair, and the Centre for South- West Asia Study.

The topic of the lecture was ‘Defining and Evaluating Poverty in Multiple Contexts and Experiences.’ Prof Kakwani argued the most important thing related to the poverty studies is the methodology of evaluation.

“The different countries have been using diverse type of policies and programmes of social protection. The anti-poverty programmes involve direct cash transfers, generalised subsidies and pro-poor policies. The cash transfer programmes are more popular in the advanced countries. In Latin America, there are conditional cash transfers like child study vouchers the purpose of which are to reduce not only the current poverty of such households but also their future poverty by providing education to their wards,” he said. “Some countries use food voucher to provide the basic consumption of necessities. The efficiency of all programmes depends upon the administrative efficiency. The implementation is very efficient in South Korea. The need of the hour is to evolve a pro-poor policy index. The perfect targeting can be achieved by giving proportionately more to the comparatively more poor persons and households,” he said. OP
Three-day conference on emerging economics begins

Patiala: The first three-day conference on development and innovation in emerging economies began here on Friday. The conference is being organised jointly by the centre for development economics and innovation studies (CDEIS), the planning commission chair, department of economics and centre for South-West Asia study, Punjab University.

More than 70 delegates from across the globe are taking part in the meet.

While inaugurating the conference, director, National Institute of Science Technology and Development (NISTADS), New Delhi, Prof P Banerjee dwelt upon issues pertaining to development and innovation in emerging economies.

He stressed that development and innovation are about challenging the current order, and incumbent power. "Innovation and development might not 'fly together' but both seek changes in the current state of affairs; however, differently. Support of the central state power is crucial for development and innovation activities," he said.

The keynote speaker on the occasion Prof Mamo Muchie, director of research centre on development studies, Aalborg University, Denmark, spoke about locating development economics within a unified innovation system.

Prof Muchie specifically mentioned the problems of African development agenda and stressed the need to develop a unified economic growth strategy that works for Africa.

In his presidential remarks, vice-chancellor Prof Jaspal Singh pointed out that the innovation system has undergone changes and has generated accumulation from ‘need based’ to ‘greed based’.

On this occasion he also inaugurated the official website of CDEIS.

Hindustan Times, November 17, 2012
Daily Post, January 19, 2013

Hindustan Times, January 18, 2013
Knowledge economy key to human development

The issue of holistic human development is a serious matter, and needs to be debated in right perspective,” agreed Prof. Jaspal Singh, Vice Chancellor, Punjab University, while Prof. AND Bajpai, Vice Chancellor, Himachal Pradesh University (HPU), Shimla, emphasised the need for more and more application of traditional knowledge, while Ashutosh Chadha, Director, Corporate Affairs, Intel Technology India, underlined the need for skill development to ensure all round human development.

The issue of holistic human development is a serious matter, and needs to be debated in right perspective,” agreed Prof. Jaspal Singh, Vice Chancellor, Punjab University, while Prof. AND Bajpai, Vice Chancellor, Himachal Pradesh University (HPU), Shimla, emphasised the need for more and more application of traditional knowledge, while Ashutosh Chadha, Director, Corporate Affairs, Intel Technology India, underlined the need for skill development to ensure all round human development. Prof. Inderjeet Singh commented the inaugural session on Tuesday the seminar ended on Wednesday.

Prof. Leonardo A Lazona, Director, Ateneo Center for Economic Research and Development, Ateneo de Manila University, Philippines, in his keynote address said: “The world is moving towards a knowledge-based economy in which the role of knowledge and economic processes has changed.” Prof. Tilman Altenburg, Head of Economics Department, German Development Institute, Bonn, sought industrial and innovation policy for inclusive development, while Elias S smiles, Seoul National University, South Korea, tried to bring home the point that knowledge, if properly applied, can lead to better human development. Preethi Singh of Jesus and Mercy College, New Delhi, dwelt upon the role of knowledge process outsourcing in human development, while Reena Marwah of Indian Council of Social Science Research (ICSSR), New Delhi, spoke about gender empowerment and knowledge economy. Prof. Surjit Singh of IICJ talked about the synergy between knowledge economy and development.

Aruna Agrawal of the National Council of Applied Economic Research, New Delhi, looked into different aspects of acquisition of technological capabilities through a clean development mechanism. Kamal Vatta, Punjab Agriculture University (PAU), Ludhiana, and Takahiro Sato, Kobe University, Japan, focussed on Indian labour markets, while Radhe Shyam Pradhan, Mahammad Chalise, Dilli Raj Sharma, Kamal Maya Pradhan, Rita Shrestha’s presented a paper on knowledge management and organisational performance.

“Our Department has emerged as a centre for advanced studies, because of the quality efforts from our faculty members in not only taking care of classroom teaching, but also in organizing quality seminars and workshops,” said Prof RK Bansal, Head, Department of Economics, while introducing the department. “We will continue to organise more and more such seminars and workshops on issues related to human development with an emphasis on inclusive development,” said Dr Sukhwinder Singh, Professor at the Centre for Research in Economic Change.
Economists stress need for change in education system

HT Correspondent

PATIALA: An international conference on Human Development and Knowledge Economy was inaugurated by Ashutosh Chadha, director, corporation affairs, South Asia Intel Technology.

The conference is being jointly organised by Centre for Development, Economics and Innovation Studies (CDEIS), Planning Commission Chair, Department of Economics, Centre for South West Asia Study (CWSAS) and Centre for Research in Economic Change (CREC), Punjabi University, Patiala.

Delivering the inaugural address, Chadha expressed deep concern that the present system of education was creating a generation of educated-unemployed and not employable educated. “It needs to be understood that the knowledge is highway to success and has emerged as a new currency. The competition is now global and very strong and stiff. Now individuals compete with other individuals across the globe. Innovations have changed the very growth process of national income. But it is equally frustrating that we have not got success in changing the education system,” said Chadha.

He said since the education impacts the growth through entrepreneurship and innovation and the economies nowadays have moved from agrarian, industrial, financial and now to imagination ones, it was imperative to give a thought to change our education system and bring in more practical and innovative ways in our education system.

Prof. Leonardo A Lanzaona, Manila University, Philippines, while presenting the keynote paper, argued that the source of growth changed over the period with the development of technology.

He emphasised that the greatest challenge is to build a good school education system.

“The quality of education is significantly related to the process of economic growth. Knowledge economy can affect the human development by impacting and enhancing the cognitive skills. The increase in expenditure alone on education will not solve the problem of quality of education,” he said.

Earlier, CDEI coordinator Prof Lakhwinder Singh Gill introduced the theme of the conference by highlighting the various dimensions of the emerging challenges of knowledge explosion and associated policy framework.

Punjabi University vice-chancellor Jaspal Singh, presiding over the session argued that the distinction between information, knowledge and wisdom be understood clearly to build a healthy and progressive society.
Punjab’s fiscal policy needs revamp

Guest Column

Kesar Singh Brar

As far as the first line of thought is concerned, there is no denying that this was precisely because the policies of successive state governments during the neo-liberal regime remained ineffective. Consequently, the fiscal policy of the state governments was in disarray which led to the investment collapse. Due to some vested interests, the economic freedom report tries to brand the hard realities that Punjab faced and is facing as myths. At the same time, the report also disappoints the academicians who support the cause of Punjab. Further, the report also attempts to compare the incomparable and mislead people of the country. It is highly condemnable, unfortunate and seems that campaigner of the first line of thought attempts to weaken the pressure generated on the Centre by the believers of the second line of thought for a destitute investment revival package to Punjab.

Regarding the second line of thought, the common policy issues emerged that if Punjab wants to regain and achieve its lost economic glory, then the state requires diversification and structural transformation of its economy. Punjab’s economy has been facing a chronic shortage of investment in capital formation as the investment-state domestic product (SDP) ratio remained below 20%, which is 15 percentage points lower than the all-India ratio and lowest among the 14 major states of India. Further, the investment in the agrarian economy of Punjab has continuously been declining as the investment-agriculture state domestic product ratio has reached an all-time low of 5%, according to latest available estimates. The state’s fiscal policy urgently needs a revamp, so that the low tax-SDP ratio of 7% is raised to 12% and this is possible by increasing tax compliance, elimination of tax evasion and imposition of new taxes. Universal approach to subsidies should be eschewed with immediate effect and subsidies should be provided for building capabilities of deprived/sufferer sections of society for a limited time based on the principle of social justice.

The rejuvenation of the economic development process remains the fundamental responsibility of the state government, but major and dynamic policy instruments that affect the state’s growth momentum are under the Centre’s control. The Centre’s neo-liberal policies with regard to the external sector, decontrol of prices, tax restructuring and many more, in fact, have played havoc with the economic growth momentum of the state. Therefore, it is suggested that the tendencies of the federal structure which are becoming more and more unitary need to be curbed as early as possible. Since Punjab has been substantially contributing and will contribute to the food security of the nation - and also its strategic location from the point of view of national security - the revival of Punjab’s economy is both in national and state’s interests. Here, it is pertinent to point out that the constraints of economic development encountered by Punjab’s economy are partly under the purview and control of the state government and partly under the Centre. Thus, it demands joint efforts of both governments for the removal of constraints for realizing the potential of economic growth.

At this juncture, the Centre’s initiatives will go a long way to set things right. To tide over the unprecedented crisis, Punjab’s economy needs, deserves and demands from the Centre not only the long-pending debt relief package, but a capability-building investment revival package. This package must at least cover the investment deficiency gap between Punjab and Indian economy based on the difference of investment-gross domestic product ratios. The proposed investment revival package worked out to the tune of Rs 11,000 crore per annum for five years will rejuvenate Punjab’s economy. This will also lay down the road map for state’s long-awaited structural transformation from agrarian (industrialised economy, along with ensuring food safety and security of the national economy.

The writer is a professor of economics at Punjabi University, Patiala. Views expressed are personal.
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