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## ABSTRACTS OF CONTRIBUTED PAPERS

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**ABSTRACT OF PAPERS SUBMITTED TO 39TH CONFERENCE**

The 39th Annual National Conference of the Bangiya Arthaniti Parishad has chosen **Education, Bio Diversity and Sustainable Development , and Inclusive Growth in India, as the focal theme.** In particular, the following four important areas are chosen for discussions and presentations :

**TOPIC I : Education, Learning and Development**

**TOPIC II : Bio –Diversity and Sustainable Development**

**Topic III : Inclusive Growth in India; and**

**Topic IV: Challenges before Indian Industries**

The abstracts of contributed papers on these three sub-themes and of the Memorial Lectures are presented below.

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**I. Session on Education, Learning and Development****Sarva Siksha Abhiyan and Socially Backward classes: A story of Horizontal and Vertical Equity****Shashi Bhusan Mishra, <sup>1</sup> and Arijita Dutta<sup>2</sup>**

Launched in the year 2000-01, Sarva Siskha Abhiyan (SSA) is a centrally sponsored scheme implemented by Government of India in partnership with State Governments. It is India's main programme for universalizing elementary education. Its overall goals include universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. Historically, children belonging to socially backward communities have lacked access to education in most of the states in India. In order to bridge the social gap in access and retention, the SSA offers several incentive schemes for children at primary level of education, which includes Mid Day Meal, scholarships etc. The current paper looks into the actual situation of access to public schools and that of receiving scholarship schemes under SSA and identifies the nature of horizontal and vertical equity (or its absence), that is prevalent across the country for primary education students belonging to Scheduled Caste and Scheduled Tribe households. Using the 71st Round NSSO unit level data on expenditure and status of education, this paper finds that children from ST communities had the highest access to government financed schools all over India, followed by children from SC communities. The enrolment in government schools falls as one moves from lower income category to higher income category in all social groups, thus representing overall progressivity in education. In the public schools, the tuition fees are minimum and there are provisions for special incentive schemes including Mid Day Meal and scholarships. Yet, households need to spend around Rs 1111 per student at the primary level annually. If we dive deeper, it is evident that the share of OOPE out of total expenditure of the household is the highest in poorest quartile of income category in all social groups, except SC. In case of scholarship, it is evident that though it is primarily targeted towards the socially backward classes, the shares General caste students receive the highest share of scholarships, representing an overall violation of horizontal equity. Additionally, the amount of scholarship has increased systematically across income categories in all social groups. These facts clearly indicate that the creamy layer actually grabs the scholarships in all groups, representing a partial failure of vertical equity. Lastly, looking at the Gini index of inequality, the paper finds that the intra-social class inequality in received scholarship amount is the highest among the general caste, followed by OBC, SC and ST. This implies, that ST and SC students receive homogeneously smaller amount of scholarships across the country. In conclusion, the paper posits that though access to public-funded schools is appreciably higher for backward social castes, the financial incentives in the form of scholarships are bagged by richest class across groups. This has serious implications for overall goal and mission of SSA and more detailed monitoring and

scrutiny is called for to enable the public subsidy to reach the ultra poor, bottom of the society.

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### **Education and Skill Development: Some Emerging Issues in India**

**Dr. Sudip Jana <sup>1</sup>**

One of the significant factors for economic growth and social development is skill development. India is one of the few countries in the world where the working age population is far in excess of those dependent on them and as per the World Bank, this will continue for at least three decades. The demographic transition of India makes it imperative to ensure employment opportunities for more than 12 million youths entering working age annually. It is estimated that during the seven year period of 2005-2012, only 2.7 million net additional jobs were created in the country. The youth need to be equipped with necessary skills and education for skilled workforce in the future.

Our country faces severe scarcity of highly-trained, quality labour. On the other hand, large section of the educated work-force that possesses little or no job skill is unemployed. So country faces dual challenges to solve the problem of skill enhancement and the skill development issue in India is worthwhile relevant both at the demand and supply level. To meet the demand side challenge, consistent efforts are being made towards expansion of economic activities and creation of large employment opportunities. On the supply side, a simple look at the projected youth population provides a fair reason to believe that India has the strength to cater to this demand. However, the employability quotient is questionable and remains a major area of concern. Already huge gaps exist between the industry requirements and the level of skills workers due to varied reasons including inadequate training infrastructures, inappropriate mix of skills and education, outdated curricula, limited industry interfaces, limited standards, etc.

The Government of India has already adopted skill development as a national priority over the next 10 years. The Eleventh FYP previously detailed a road-map for skill development in India, and favoured the formation of Skill Development Missions, both at the state and national levels. To create such an institutional base for skill development in India at the national level, a 'coordinated Action on Skill Development with a three-tier institutional structure consisting of the PM's National Council on Skill Development, the National Skill

Development Coordination Board (NSDCB) and the National Skill Development Corporation (NSDC) was created in early 2008.

The skill development ecosystem in India is skewed towards a formal education with limited vocational training. While the vocational training is in a dismal state both qualitatively and quantitatively, the higher education system itself is grappling with issues related to scale and quality.

If India wants to become a manufacturing-hub, given its requirement for employment generation to reap the demographic advantage, it must focus on skill development instead of present education system. A concerted action is thus required on the supply side to ensure sustained employability of the Indian youth. Extensive efforts to skill the workforce are required, both in quality and quantity. Transforming the skill development ecosystem and making it responsive to needs of both industry and citizens requires a scalable, efficient and comprehensive vocational training ecosystem to meet future requirements.

In the above backdrop, the main objective of this paper is to focus on the performance of skill development schemes of India with respect of employment and the tasks that lie ahead in the coming future. The study is based on secondary data. The data is collected from government sources including newspaper, research papers, magazines and internet websites.

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### **Learning, Not Only Schooling for Development And Technological Advancement**

**Kasturi Bhadra Ray**

Failure to provide basic learning, a better word for schooling,ultimately translates into severe shortcomings in the skills of the workforce. Lack of skills reduces job quality, earnings, and labour mobility. Students cannot leapfrog foundational skills.Emerging data on student achievement show that, for millions, schooling is producing little learning in crucial early grades.Poverty most consistently predicts failing to complete schooling,Also most education systems do not attract teachers with strong backgrounds(like in India).Successful education systems should combine both alignment and coherence, based on correct information and execution, often compromised due to contradictory vested interests. This calls for the need to tackle the stubborn technical and political barriers to improve quality of education, which forms the crux of development and technical progress of economies.

**Comparison Of the Education System: India And Pakistan**

**Dr. Smritikana Ghosh**, Assistant Professor, Department of Economics  
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Two neighbor countries- India and Pakistan together are always at the center of interest mostly from the political perspective. Given all the differences that these two countries have among themselves, it is said that only education may solve their problems. Given that, this paper will compare these two countries with respect to education and will try to find out the difference, if any, between these two countries. From the analysis it is seen that with respect to different layers of education, these countries are vastly different from each other. With almost all respect, Pakistan is far behind India. At the same time, this is also true that growth rate of education attainment in case of primary and secondary level at least, Pakistan is going faster than India.

**Accessibility to Rural Primary Schools: A Case Study of North 24 Parganas**

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&

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Development of primary schools is an important tool for social- economic mobility and a key instrument for building an equitable society. Social mobility describes people's ability to improve on their own family social position or their own current status through the opportunities provided in their society. Primary education, forms the bases of education, has an important role to play in providing these opportunities. Along-side rural roads should be improved in locations where economic opportunities exist. Access to primary education is the key in determining the extent of mobility. Availability and quality of schools is an important determinant for enrolment in school. Again, how schools are distributed play an important role because that in turn determines the distance children have to travel to school. This paper seeks to assess the accessibility of children to rural primary schools through the three parameters such as travel time, travel cost and quality of schools. Results show that with the help of an Accessibility Index, a village with a higher score has more difficulties in accessing primary schools and a village with a lower score has fewer difficulties. Thus, Primary education is one of the key factors to bring about this social mobility.

**Brain Drain to Brain Circulation: Revisiting the Changing Era in the Context of Indian Higher Education System**

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**Arka Sanyal**, Guest Lecturer, Prabhu Jagatbandhu College  
**Sudakshina Gupta**, Professor, Department of Economics, University of Calcutta

This paper seeks to revisit the changes in Indian education system historically. It has also analyzed the concept of Brain Drain and its changing pattern with the advent of time. The paper shows the movement of Brain Drain through three distinct but overlapping phases- Brains Drain, Brain Gain and Brain Circulation. It also studies the importance of development in Indian Higher Education System in the changing pattern of Brain Drain to ensure a high rate of return of Indians living abroad. Finally this paper finds both the development in Higher Education System and the new concept of Brain Drain i.e. Brain Circulation is healthy for the overall development of Indian economy and tries to envisage the future scenario by conducting a primary survey.

**Determinants of Gender Parity Index in Higher Education in India: A Panel Data Approach**

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According to the Times Higher Education Emerging Economies University rankings 2018, Indian Higher Education system is the second largest in the world after China. Higher Education system is the source of development and it is the key to increase the economic efficiency and social consistency. The higher education sector is a vast and varied area. Now a day there is a rapid growth of this sector and becoming more diversified. The developed nations around the world pay equal importance on participation of male and female in higher education. But in the developing countries that is not happening always. In this context Gender Parity Index (GPI) is considered as an important socio-economic indicator to measure the enrolment of women in any particular type of education in relation to men. On this ground using GPI this study analyses the factors determine the relative enrolment of male and female students in higher education. To identify the factors affect GPI in higher education, we have collected information from All India Survey on Higher Education (AISHE) published by Ministry of Human Development (MHRD) and RBI Bulletin from 2010-11 to 2015-16 for the major 17 states of India. Before starting the analysis it is assumed that the variable

'Number of colleges per lakh population' is endogenous (correlation with the error term) variable in nature. But the Hausman Specification Test reports that the assumed explanatory variable is not an endogenous variable in our investigation. Then running both Fixed Effect and Random Effect regressions it is found that Hausman Test supports Fixed Effect Model. The Fixed Effect Panel data regression shows that percentage of female teachers and male literacy rate create an important role to improve GPI in higher education in India.

### **Distance Learning - A New Roadmap Towards Inclusive Education**

**Dr. Debkumar Bhattacharya**

**Anasuya Kar**

Education, as we know, has its impact in a society in many respects. Higher Education undoubtedly plays a very important role in the all-round development process of a country specially in upgrading her social, economic and scientific lifestyle. Since our independence and scientific lifestyle. Since our independence we have experienced a considerable increase in the number of educational institutions and enrollment there in imparting such education, yet in certain major issues like access of learners in the process, regional and social imbalances in the system, unjustified gender representation leading to deprivation, diversification of subjects and inadequate improvement in providing updated quality instructions to the aspirants, provision for

adequate regular public fund in the national budgets and plans etc. We find our process is not up to the targeted mark. The State of West Bengal is not showing a different picture in this respect. Insufficiency in investment in higher learning here also is producing not enough momentum in the centres aiming at necessary research and development on many aspects where we are lagging noticeably behind, compared to the developed nations. As a consequence proper innovations are not taking place to meet the growing demand from the ever-growing population. On the other hand the quality brains of our country after going through the college and university curriculum are migrating in developed nations regularly in search of better research environment and search of better research environment and attractive for job opportunities. We are, thus, suffering from chronic brain-drain traditionally.

Keeping clearly in mind the above backdrop, this paper aims at analyzing the status of higher education in West Bengal in general at the moment and the way how the distance mode of learning can be used as a relief in this field especially in motivating the huge population engaged otherwise mainly in the non-formal sector. This, we think, will offer them a chance to prove their hidden talent in reality and thereby derive individual and social benefit.

**A Revision To The Inquiry On The Infrastructural Quality Index Of Primary  
Education In The Districts Of West Bengal**

**Dr. Sanjay Bhattacharya<sup>1</sup> & Dr. Prankrishna Pal<sup>2</sup>**

The quality of human capital and the level of education act as key determinants of the technological progress of a country. Better quality of education ensures a steady growth of national income. But the issue of concern is that due to some school level infrastructure related issues like unattractive classroom and pedagogical environment, teacher-oriented delivery of education, low skill attainment, lack of cognitive improvement etc. contribute to the disillusionment of pupil towards education. Despite the fact that the National Policies of Education aimed at the qualitative improvement in elementary education, the increased retention of children in schools and a move towards a child-centered approach by recommending a minimal required infrastructure like at least two rooms, two teachers (one of them preferably female), and a set of ‘minimum essential’ teaching learning aids (TLA) for the primary education, a lot of relevant quality questions are yet to get solved.

In this paper we tried to analyze the comparative performance of some selected educational infrastructural quality variables in West Bengal and its constituent districts during last ten years. We further initiate the discourse of a suggestive re-construction of composite infrastructural quality index by switching from the conventional additive concept of Index construction and by comparing the new index with the old one during mentioned time period. Finally, the result produces fascinating insinuations while these changes are mapped with the enrolment data in West Bengal and constituent districts.

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2. Dr. Prankrishna Pal, Ex- head & Professor., Dept. of Economics, Rabindra Bharati University

**II. Session on Bio Diversity and Sustainable Development****Quantitative Measurement of District level Vulnerability in West Bengal  
A Macroeconomic Study****Jyotish Prakash Basu**

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The paper attempts to measure vulnerability of 18 districts of West Bengal. The paper utilizes 17 macroeconomic variables collected from secondary sources in 2001 and 2011 and find vulnerability indices for all districts using exposure, sensitivity and adaptive capacity of IPCC (2007). The paper identifies more vulnerable, moderate vulnerable and less vulnerable districts of West Bengal based on vulnerability indices. Besides, the paper also attempts to identify the determinants of vulnerability at the district level. The results of the study showed that the more vulnerable districts are Purulia, Bankura, Jalpaiguri and Darjeeling while the less vulnerable districts are West Midnapore, Murshidabad and Hooghly when we assign equal weights in the calculation of vulnerability index. The number of more vulnerable districts has risen in 2011 compared to that of 2001 using equal weights while the opposite picture happen using unequal weights. The determinants of vulnerability are identified as maximum temperature, cropping intensity, main agricultural population, net sown area and poverty. Lastly, the paper has an important policy implication for poverty reduction and climate risk reduction measures.

**Biopiracy: A Threat to Food Security****Anindya Bhukta**

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Misappropriation of bio-resources and associated traditional knowledge regarding their use, by nickname biopiracy, is becoming a global feature. The biopirates, namely the multi-national companies of developed world, are making their business using the loopholes of present IPR regime. But which is most alarming is that this business of theirs is putting the poor, but resource-rich countries in front of some serious threats, the most important of which is the threat to food security.

**Loss of Biodiversity and Sustainable Development-A Global Perspective**

**Dr.Saroj Upadhyay**, Faculty The Neotia University(Kolkata) &Mrs.Sudeshna Gupta,  
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The purpose of the present paper is to throw light on the number of policies that governments might consider in response to global climate change and result in loss of biodiversity. The assessment of such policies involves the economics of global warming. The uncertainty related to global warming have led to environmental degradation, as well as social and economic changes. The impacts of climate change include the loss of biodiversity, sea level rise, increased frequency and severity of some extreme weather events, and acidification of the oceans. The two main policy responses to climate change are to reduce greenhouse gas emissions i.e. preventive measures and adaptive measures like adapting to the impacts of global warming. Now it becomes the responsibility of each and every citizen of the world to take measures to conserve and protect the environment and also promote campaign to preserve the sources of energy. There is a requirement of policy changes of governments and international agencies accordingly. We require to work with common goal and uniformity of policies. The possible elements of policy issues have been discussed in this paper.

**The Dynamic Links among Human Development, Environment and Economic Growth : En Route to the Path Towards Sustainability**

**Sovik Mukherjee**

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The paper points to the interactive nature of the different aspects of sustainability of development and investigates the interrelations among the various facets of development or sustainability. The paper further makes deeper analysis of the dynamic relations among human development, the natural environment and economic growth. It has been developed and estimated as simultaneous equation econometric models (mostly of Two-Stage Least Square type), the results being useful in understanding the relative roles of economic growth, human development and environmental conservations in the sustainability of the development process. The paper estimates these models at the global level using cross country data from 1990-2015 for a cross section of 110 countries.

## **An Overview on Avifaunal Diversity in Chintamani Kar Bird Sanctuary of West Bengal**

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Chintamani Kar Bird Sanctuary is the only Protected Areas of West Bengal, within the city limit of Kolkata and is significant for its local floral and faunal diversity. Chintamani Kar Bird Sanctuary is located within a driving distance from pulsating metropolis of Kolkata, in the west of Netaji Subash Road which connects Garia with Baruipur in the Ragpure area. This 20 acres Chintamani Kar Bird Sanctuary is the heaven of huge varieties of Birds, Butterflies, Ferns, epiphytes and Orchids. This sanctuary formerly known as “Kayal-er Bagan.” It is recognized as Sanctuary in 1982 and bestowed with the name of Narendrapur wildlife Sanctuary on September 8, 2004. However since 2005, the sanctuary was finally named as Chintamani Kar Bird Sanctuary (CKBS). Migratory birds also enrich the avifauna of this beautiful sanctuary and also attract bird watchers mainly in season of winter. The study period was 2016 to 2017 during the month of November through February of the next year, (Visiting Time: 6 am to 2 pm of each day). This study shows remarkable variations in the avifaunal diversity. Present communication provides the present scenario of the Avifaunal diversity in these protected areas of West Bengal and scope of further research.

## **East Calcutta Wetlands: Our Own Paradise For Sustainable Development**

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Biodiversity is the collective term for the full variety of life on earth. Conservation of biodiversity must be of utmost concern, not only because of the existence of the natural resources in our planet, but also for the existence of our own species. Now, it is the high time that we should think about the sustainability of mankind. Sustainable development is development that meets the needs of the present without compromising the ability of future generations. In September 2015, the United Nations General Assembly formally adopted the “universal, integrated and transformative” 2030 Agenda for Sustainable Development, which is to be implemented and achieved within 2016 to 2030. One of the most essential approaches towards sustainable development by conservation of biodiversity is the conservation of wetlands. They are among the world’s most productive environments;

cradles of biological diversity that provide the water and productivity upon which countless species of plants and animals depend for survival. The wetlands of East Calcutta are famous all over the world and were designated as “wetland of international importance” under the Ramsar Convention. East Kolkata Wetlands is very significant for the wise use of sewage water, especially for pisciculture, garbage farming and harbouring the biological diversity.

**Assessing Livelihood and Environmental Sustainability: A Case Study in Simlipal National Park, Odisha**

**Shradha Agarwalla\* and Debolina Saha\*\***

Livelihood is simply a means of making a living, which encompasses people’s capabilities, assets, income and activities required to secure the necessities of life. A livelihood is sustainable when it enables people to cope with and recover from shocks and stresses. So it is closely related to the concept of sustainable development which gives emphasis in meeting the needs of present generation without compromising the needs for future. In this regard, the paper attempts to assess the livelihood of the people who are dwelling in and around the Simlipal National Park, Odisha. Simlipal National Park has been designated a tiger reserve in 1956, and is declared as a National Park in 1980 with total area of 845.70 km<sup>2</sup>. It is added as a biosphere reserve by UNESCO in 2009. To study the livelihood pattern we have considered four blocks-Bisoi, Bangripasi, Jashipur, Shamakhunta in this region. It has been seen from our field study that forest is the mainstay of livelihood for the forest fringe dwellers in and around the reserve. Non Timber Forest Products (NTFPs) are the sources of direct consumption as well as means of livelihood. Further, the forest dwellers being uneducated as mostly rely on NTFPs, this over dependence on forest products often causes environmental degradation. This type of loss of biodiversity affects also the goals of sustainable development. This paper is an attempt to analyze the issue of environmental sustainability considering the practices of forest dwellers in and around Simlipal National Park.

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**Towards Protecting and Preserving Bio-Diversity for Sustainable Development**

**Dr. Asim K. Karmakar<sup>1</sup> & Dr. Sebak K. Jana<sup>2</sup>**

The Earth’s biological resources are vital to humanity’s economic and social development. As a result, there is growing recognition that biological diversity is a global asset of tremendous value to present and future generations. We always fail to understand where this important

resource comes from. But it is the most critical component of all human development. This is actually one factor that many of us tend to ignore. We see biodiversity all around us, it is something that we take for granted and we fail to realize the values that it has for us leading to overexploitation of these valuable resources at present.

Biodiversity represents the very foundation of human existence today. Biodiversity is part of our daily lives and livelihoods and constitutes the resources upon which families, communities, nations and future generations depend. It is clear that the loss of biodiversity has serious economic and social costs.

In the above backdrop, an attempt has been made here to enumerate some aspects of biodiversity— role, importance and its significance along with the root causes of biodiversity loss and its conservation with different country experiences.

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### III. Session on Inclusive Growth in India

#### **Economic Growth, Regional Disparity And Sectoral Concentration In India: A State-Level Sectoral Analysis**

**Purba Roy Choudhury**

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According to Classical development economics, there is a causal link between structural change, regional disparity and economic growth. This paper examines the relationship between regional disparity, economic growth and sectoral concentration for six major sectors namely agriculture, industry and subsectors of services for the 16 major Indian states using time series data for the period of 1970-2010 with special reference to the service sector. The paper uses the standard methodology of time series in the context of unit root, trend analysis, cointegration and causality tests. As far as economic growth is concerned, growth performance in India improved during the post-reform period mainly because of the high growth in the services sector. The fast-growing sectors were the transport storage and communication sector and banking insurance and financial services sectors, which were considered as the dynamic components of the service sector. The paper constructs indices of structural change with the Krugman's sectoral concentration index and measure of regional disparity using Theil entropy measure of inequality. The calculations of the concentration index in the states for sectors on average for the period 1970– 2010 indicate that in 1970, the output of the states in comparison with the India is highly concentrated in transport storage and communication sector followed by industry, agriculture and financial services. However, in 2010, concentration is highest in agriculture followed by banking insurance and financial services followed by community, social and personal services. The concentration is relatively high in financial sector and conversely, the lowest concentration was seen in services as a whole and community social and personal services in particular. The increase in the degree of concentration in most branches is accompanied by the rise in regional dissimilarities. The Theil entropy measures that regional disparity is found to be high in the service sector as well as Net State Domestic Product. The increase in regional disparity in almost all the sectors is found to be positive and significant. It is clear that except for agriculture and transport, storage and communication, non-linearity in the remaining cases is found to be significant in the sense that the coefficients of the higher degrees of time are all significant. There is a non-linear fluctuating trend in the growth of regional disparity in different sectors. Finally a causal relationship using standard time series techniques shows that there is a positive unidirectional relationship between sectoral economic growth and regional disparity. However, the relationship between economic growth and sectoral concentration shows bidirectional

causality. The paper therefore ensures that higher economic growth leads to more regional disparity across sectors.

### **Self Help Group - Bank Linkage Programme And Financial Inclusion - A Performance Study**

**Tannistha Chakrabarti<sup>1</sup> , Sanchaita Hazra<sup>2</sup> , Debolina Sanyal<sup>1</sup> , Sumedha Kundal<sup>1</sup> ,  
Upasana Bhattacharya<sup>2</sup> , and Dr. Sudakshina Gupta<sup>3</sup>**

Microfinance has ushered in a revolution in India over the years and it plays a pivotal role in providing multi-pronged benefits to the poor in our country. The central aim of microfinance is to improve the overall welfare of Indian households who are living below the poverty line. In the light of this growing idea, the common targets of development and financial inclusion processes are the Self-Help Groups (SHGs). The SHG-Bank Linkage Programme launched by NABARD in 1992 analyses the impact on the socio-economic conditions of SHG member households with the emergence of microfinance as a development strategy. This paper examines the average loan disbursement by the different types of banks (viz. public sector commercial banks, private sector commercial banks, regional rural banks, and co-operative banks) from 2008-2009 to 2017-2018 to the Self-Help Groups (SHGs) via the Bank Linkage Programme, facilitated by NABARD. ANOVA analysis on the data indicates private commercial sector banks and co-operative banks have significantly lower mean values of loan disbursements than the public commercial sector banks and the regional rural banks. The study offers an emphasis on strengthening the co-operative banks and implementing rural development for the overall development of the economy while incentivizing private banks to participate more in the inclusion program.

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### **MGNREGA: Sustainable Path towards Inclusive Growth**

**Dr. Rivu Sanyal<sup>1</sup>, Nabanita De<sup>2</sup>, Dr. Susmita Banerjee<sup>3</sup>**

In this paper an effort has been made to analyse the impact of the scheme on asset creation, food grain production, women participation, social inclusion and financial inclusion. We have examined the sustainability (long run) aspect of MGNREGS by studying its impact on food grain production and asset creation. In order to understand the relation between the

assets generated by MGNREGS and food grain production, a panel regression analysis have been done and our result shows that material expenditure incurred in MGNREGS have significant positive impact on food grain production. This type of programme has gained special attention of the policy makers in the era of ‘agrarian crisis’, which began in mid-nineties for its potentialities to solve the problem. But, on the other hand, many economists are raising concern over the negative impact MGNREGS may have on labour market due to the general increase in wage rate in post MGNREGS period. These contradictions have made us interested to examine the nature of role played by MGNREGS in rural labour market. In this paper, a critical study has been made with the help of available secondary data to analyse the impact of MGNREGS on rural labour market. In order to examine the inclusive nature of the scheme we have analysed the workforce participation rate of SCs, STs and women in MGNREGA employment programme. Our study reveals that the percentage of MGNREGA participants, with bank accounts or postal accounts have also increased, across the gender and also in totality, over the year, which ensures the potential of financial inclusiveness of the scheme.

#### **IV. Session on Challenges before Indian Industries**

##### **Low Growth and Employment, Total Factor Productivity And “Missing Middle” in Indian Manufacturing: The Plausible Intervention of Information And Communication Technology**

**Dr. Sujatra Bhattacharyya**

Assitant Professor of Economics, Maharaja Srischandra College

India’s manufacturing sector is a matter of interest among the economists due to its unexpectedly unimpressive contribution towards the growth of the nation’s GDP and growth of employment. Since the independence, the unusual performance of the sector acted as a frustrating truth in the national growth experience. Compared to the other Asian nations, the performance of the sector is miserably poor. The national manufacturing policy (2012) seriously looked into the facts and aimed at increasing the share of the manufacturing sector to 25% by 2022. However the sector is characterized by low growth rate along with low employment mainly due to lack of skills. Apart from this, the sector is dominated by the unorganized segment where the productivity is extremely low.

Information and communication technology (ICT) refers to the digital processing, storage and communication of information of all kinds. It has the potential to be used in every sector of the economy. In this study we will try to examine the impact of information and communication technology on the Indian manufacturing growth, total factor productivity. The analysis also focuses on the possibility of skill formation and employment growth in the sector through successful implementation of ICT. The phenomenon of “missing middle” in this sector acts as one of the hindrances for ICT intervention in the sector. Still our analysis finds some positive and significant impact of ICT on growth, productivity and employment in the manufacturing sector.

#### **Industrial Development in India and the Challenges**

**Sathi Malakar**

Indian Industries since their early days had a global presence. During the British period, India used to import largely manufactured products from Britain against its export of primary goods like jute, tea and raw materials. After independence, India sought to establish modern manufacturing industries, particularly heavy capital goods industry under the public sector. This was followed, particularly after the second five year plan, following the strategy of industrialization of Mahalanobis model. The result was faster growth of the industrial sector, particularly during the first three five year plans. The private sector followed the lead of the

public sector and established heavy, light, consumer goods industries and also small and medium sized industries during the first thirty years of our planned development.

But then recession and deceleration started- external demand did not grow as much was expected, and domestic demand for industrial products slackened. Excessive export subsidization made Indian industries un-competitive in the global markets, and fiscal deficit soared. The policy of economic liberalization was introduced in 1991, and substantial revisions were made in the country's industrial policies-regulations and supports by the government were reduced drastically. Indian industries were made to face global competition. There were periodic up and down, but jobs in the industrial sector did not expand as was expected, and some industries turned sick.

In recent years, Indian industries faced a series of constraints. The period starting from 2011-2012 saw a severe slowdown in the industrial growth and production due to

1. Weak demand for exports from the developed western countries due to global crisis;
2. High interest rate India maintained by the RBI, due to persistent inflation, and;
3. Failure of past projects of the private sector etc.

The annual growth rate of IIP has been decelerating post 2011. The IIP has been fall from 8.2% in 2010-2011 to 2.9% in 2011-2012. Modi governments Make in India is a recent initiative to bail out Indian Industries, but it is not showing much success. We discuss some of these issues in the present paper.

### **Total Factor Productivity and Convergence of Pharmaceutical Industry across Indian States: A Study with Panel Data**

**Dipyaman Pal<sup>1</sup> & Chandrima Chakraborty<sup>2</sup>**

This paper estimates regional convergence- in terms of beta convergences - of Total Factor Productivity (TFP) of Pharmaceutical Industry across the major states of India over the period 1983-84 to 2013-14 by applying the modern panel data approach for convergence hypothesis. The Total Factor Productivity of Pharmaceutical Industry is estimated by Levinsohn-Petrin approach. The estimated equations show that the coefficients of trend are positive and statistically significant. The conclusion, therefore, is that the TFP show significant sigma divergence across the Indian states. On the other hand from the LLC test results that the demeaned series is stationary. Since the significant coefficient is negative in sign, it implies beta convergence for the series of (logarithm) of TFP of all the major Indian states to the all-India average. Hence, we conclude that the hypothesis of beta convergence holds for TFPG across the 17 major Indian states over the period 1983-84 to 2013-14.

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## **Remittances and Economic Growth: Empirical Evidence from India**

**Subhajit Majumder**

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In many developing countries, remittance payments from migrant workers are observed as an increasing magnitude and becoming a significant source of foreign reserve earnings. Remittances inflow is noted to be very useful in promoting household welfare, health and education particularly in developing countries. Inflows of remittances to India have experienced a sharp rise in recent years. Remittances have also emerged as a more important and stable source of foreign exchange inflow compared to official development assistance, foreign direct investment or other types of capital flows in particular in developing countries.

The three main recipient countries are India, Mexico and Philippines. On the other hand US, South Arabia and Germany are the three main source countries. India, with a vast reservoir of both highly skilled and semi skilled and unskilled labour force, is a major contributor to the contemporary global labour flows. An increasing trend in the inflow of remittances in the country in last pair of decades has attracted the attention of the researchers. Recent studies have shown that remittances inflow can achieve Economic growth and development through direct and indirect channel in the developing nations; thus the study undertakes a time series econometric analysis of the contribution of remittances inflow to the economic growth of India. In this study we have concentrated on the long-run relationship between remittances inflow and the economic growth of India considering annual data over the period 1975-2016, As the determinants of economic growth the study involves Remittances inflow in real terms, M 3 money supply as share of GDP as a proxy of financial development, Total Government Expenditure as share of GDP, Gross Fixed Capital Formation as a share of GDP, Net FDI as a share of GDP and Real Export. It empirically verified that remittances inflow significantly has a negative effect on the GDP of India, contradicting many of the earlier studies. This paper tries to figure out the impact of remittances inflow on economic growth of India. In this purpose we have used VAR (The vector auto regression) model for estimating the significance relationship and the direction of the relationship.

**Memorial Lectures**  
**S.N. SEN MEMORIAL LECTURE**  
**CAPITALISM AND THE COMMON MAN IN THE TWENTY-FIRST CENTURY**

**AMBAR NATH GHOSH**

Professor of Economics, Jadavpur University

Professor S.N. Sen, an eminent social scientist, through his writings and also through the Bengal Economic Association, which he founded, strived to help people gain a deep and clear understanding of the society they live in. I pay my homage to him by sharing with you my views regarding how the capitalist world functions in the twenty-first century.

A capitalist society is characterized by a very high degree of inequality in the distribution of wealth and income (see, among others, Picketty (2014) and Stiglitz (2012)). A few giant capitalists in such a society own most of its wealth and have in their command the bulk of its income. Paradoxically, a capitalist society also has multi-party democracy, where every adult citizen has one vote. Democracy, therefore, grants political equality. The coexistence of extreme economic inequality and political equality or the survival of capitalism despite political equality constitutes a grave puzzle. To elaborate, given the political equality granted by democracy, it is optimal for the political parties to work for the poor toiling masses who constitute more than ninety percent of the country's population. It is rational for the political parties to confiscate the wealth of the giant capitalists, tax away the surplus income the rich and distribute them among the masses. It seems natural for the political parties in a democracy to nationalize all the large firms and run them for the benefit of the masses. However, political parties never behave the way described above. They do just the opposite. They take away the properties of the poor and give them away to the giant capitalists free of cost. Obviously, this is a puzzle. Explaining this puzzle is one of the most important objectives of this lecture. Resolution of this puzzle is absolutely essential for gaining an understanding of how a capitalist society functions.

Just like the people in a capitalist society, countries in the world are also divided into two categories: rich and the poor or independent and dependent. Explaining this divide is another important objective of this lecture. Capitalism has been imperialist right from its birth. By the beginning of World War I, giant capitalists of West Europe and USA conquered and colonized the whole world to expand their business empires as much as possible all across the world. However, at that time, the giant capitalists were a divided lot. They were divided on the basis of their nationalities. Hence, to gain a larger share of the colonies, they fought two world wars with one another. These two world wars weakened them considerably. The First World War made the emperor Tsar of Russia so vulnerable that the Bolsheviks overthrew him and usurped state power. Eventually, the socialist state that was born in Russia grew into formidable

Soviet Union and emerged as a super power after World War II. Inspired by the strength and success of Soviet Union and aided by it, workers' movements and socialist forces all across the capitalist world gained momentum. Thus, in the post-World war II period, socialism and Soviet Union emerged as the single most important threat to the giant capitalists. To neutralize this threat, the giant capitalists shed their differences and became united. Capitalist powers led by the US declared a tacit war with Soviet Union to check the spread of its influence and, eventually, to destroy it. This ushered in the era of Cold War, which caught both the Soviet Union and the capitalist powers in a fierce arms race with one another and both the powers fought and struggled with one another to spread their respective influences all across the world. The capitalist powers had to devote so much resources to fighting the Cold War and rebuilding their countries following the devastations wrought by World War II that they had no more resources left for containing the rising nationalist movements in the colonies and, thereby, retaining hold over them. Hence, they granted them independence. Many of these colonies including India found inspiration in the example set by Soviet Union and adopted the Soviet model of planned economic development and sought to establish socialism in their countries. However, eventually, Soviet Union lost the Cold War. It collapsed in 1991. Following the disintegration of Soviet Union, the capitalist powers won back almost all their colonies, which did not accept their domination and traversed independent or socialist paths, either through war or indirectly through economic means. They won back India as well. We shall explain in this lecture how the giant capitalists conquered India again and what strategy India should follow to gain back her independence.

**SM. GIRIBALA KARMAKAR MEMORIAL ANNUAL LECTURE  
RISK MANAGEMENT: AN EVOLVING DISCIPLINE<sup>1</sup>**

**BASABI BHATTACHARYA**

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This paper gives an overview of the gradual development of the understanding of risk as an evolving discipline over the years. It discusses risk scenarios, major types of risks, Basel issues, risk features and risk measurement issues in subsequent sections. The study highlights that among the three major types of risk, market risk, credit risk and operational risk, operational risk, given its nature, deserves significant importance in the evolution of risk culture. A holistic approach, following system theoretic framework, is proposed here to understand the functioning of economic and financial systems and generation of risk within the systems.

**XIII<sup>th</sup> A.K.DASGUPTA MEMORIAL LECTURE, 2019****MACROECONOMICS IN THE POST-CRISIS ERA****SOUMYEN SIKDAR**

Professor of Economics, IIM, Kolkata

As an intellectual discipline modern macroeconomics has a fascinating history, displaying clearly discernible right and left swerves that can be generally put in correspondence with the swings in political ideology. After tracing the history in a broad sweep the lecture will concentrate on developments in theory and practice since 2000. Within this period the year 2008 marked the beginning of the Great Recession or the Global financial Crisis, which is without question the greatest economic disaster since the Great Depression. The trauma of the Great Depression gave birth to modern macroeconomics. The Great Recession-its origin and associated policy failures- exposed fundamental weaknesses and inadequacies of the prevailing macro paradigm, the Neoclassical Synthesis. The time apparently is ripe for another revolution in macroeconomics. We shall look at the novel policy measures that were taken to tackle the financial collapse and its contagion and some of the subsequent attempts at redesigning the analytical apparatus to make it more suitable for the post-crisis world. Unlike The General Theory no magnum opus has emerged yet, but numerous exciting avenues are being explored. The lecture will try to give an overview of the major developments in non-technical terms.

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