

National Seminar on
Poverty, Inequality and Health in India
With Special Reference to North-East India

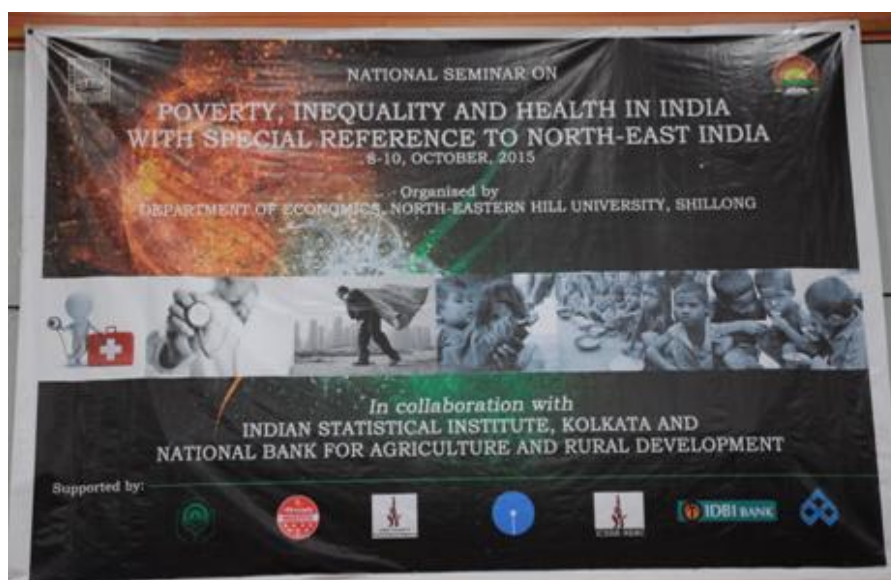
8-10 October 2015

Organised
by
Department of Economics
North-Eastern Hill University, Shillong

In Collaboration with
Indian Statistical Institute, Kolkata
&
National Bank for Agricultural and Rural Development

Report

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Background

The Seminar was interdisciplinary in nature where most of the targets of MDGs related to the all-round socio-economic development have been addressed. It started with a workshop on methods of data analysis on 7th October, 2015 where research scholars and faculty members of the Department of Economics and Commerce of NEHU (27 in number) attended and Dr Girija Sankar Mallik of the University of Western Sydney discussed various techniques of empirical data analysis. The three days seminar (8-10 October, 2015) highlighted three inescapable realities of the Indian development trajectory: incidence of poverty, inequalities and slow progress towards the goal of women's empowerment. Despite the fact that Mother Earth is kind enough to provide our necessities; hunger, malnutrition and starvation deaths still occur in many parts of the world, particularly in Asia and Sub-Saharan Africa. Also the environmental sustainability question has been discussed by a few presenters in connection with development activities.

India is not an exception, as the home of a large number of the world's poor. In addition, the rising inequality is a serious concern which results in many unwanted social outcomes such as deprivation, exclusion, social conflict etc. Indian policy models are often accused for the chronic neglect of health sector. The abysmally low allocation for public health by both centre and state is the primary reason behind the death of millions from preventable diseases. Health has become the focus in recent policy frame as it relates a number of issues: maternal and child mortalities, nutritional status, immunities, morbidity rates etc.

A nation with gender disparities cannot prosper with its full potentials. The new development paradigm believes strongly that empowerment of women should be an integral part of policy agenda not only on ethical grounds – it has an intrinsic relevance from economic, social points and long-run development perspectives.

The organizers were delighted to get an overwhelming response from research workers from all over the country, as well as abroad, keen to participate and present their research works. The abstracts were collected in advance and after scrutiny the selected scholars were requested to submit their full papers so that a proper review of the papers could be made.

The accepted research papers were then segregated into 21 technical sessions based on the similarity of the theme, like Poverty and its Dimensions, Inequality & its Dimensions, Regional health issues, Gender Inequality & Women Empowerment, Environmental and Resource Management, Agriculture & Environmental Sustainability, Health & Inequality, Poverty, Inequality and Health in North-East India, Socio-economic and Socio-Political Issues on Poverty and Inequality etc.

A theme-wise tentative distribution of the papers presented in those three days is well worth mention : 18 papers on Poverty related issues, 11 on several dimensions of inequality, 14 on gender inequality and women empowerment, 26 papers on health issues, 15 papers on the several aspects of North Eastern region, 12 papers on sustainable agriculture and environmental issues, 44 papers on socio-economic and socio-political issues including public policy and growth & development and 6 papers on application of statistical tools for the measurement of poverty, inequality and other concerns. There were also a number of invited speakers.

Day 1: 8th October 2015

The inaugural session, was chaired by Prof. N. Srivastava, Director IQAC, NEHU, which set the focus of the seminar, on the morning of the 8th, at the Multiuse Convention Hall on the NEHU Campus. After the ceremonial lighting of the auspicious lamp, the special invitees were felicitated by students of the University with bouquets of flowers.

Prof B. Mishra, Dean, School of Economics, Management and Information Sciences welcomed the guests on the dais and all the distinguished scholars present in the audience. Prof. U. K. De, Head, Department of Economics and Convener of the Seminar in his opening remarks narrated the genesis of the Seminar which began as an informal discussion in January 2015 at ISI Kolkata. The year was significant, he mentioned, as it was the culmination of the Millennium Development Goals (MDGs), which had been delineated by leaders with a dream of a better world. With facts and figures he highlighted a sketch of deficiencies in the achievements of Millennium Development Goals (MDGs) and thus expected thorough discussions on those issues in this three days seminar to find out the further directions for mitigating those issues.

Prof. M. Pal, ISI, Kolkata discussed the relevance of the issues raised as the theme of the seminar. In his view, the participants of the seminar had come from various parts of India and abroad with the unique aim of sharing their observations. Some had come from the rural areas, and some from the urban areas. The findings might be different as there exists disparities in wealth, income and standards of living across regions. He also pointed out the unhealthy trend of migration in India. Sections of the rural population, who can afford, migrate to cities for better opportunities, while others are compelled by the prevalent situation to sell their land and property, and settle down in suburban and peripheral areas.

Shri A. P. Sandilya, CGM, Assam Office: NABARD elaborated the multi-faceted roles of his organization in the development process of the country as a whole and the region in particular. For him, development did not mean to enrich the affluent class but to ensure that the poor are benefitted. In the country poverty had decreased over the period 2004-05 and 2011-12.

Yet in NER, poverty ratio moved relatively upward from below the national average in 2004-05 to above the threshold in 2011-12. It is important that development policies needed to be designed with proper focus on state-specific conditions since one size does not fit all. Although the process of urbanization is faster in the region, larger share of population still depend on agriculture. According to many academic studies, one percent income growth in agriculture is more effective in poverty reduction than the same in any other sector. This was evidenced in NER between 2004-05 and 2011-12. He elaborated the particulars interventions of NABARD to reduce poverty through the Rural Infrastructure Development Fund (RIDF). The importance of infrastructure is seen in its effect on the development of the rural sector, e.g. importance of roads and bridges can be seen in the school attendance, availing medical facilities, selling the rural produce in the market, etc. Through the RIDF, NABARD has been able to intervene in the social sector (e.g. drinking water, sanitation), self help groups, etc. He also invited the researchers to come up with concrete proposals for the holistic development of the region so that the organizations like NABARD can be benefited.

The Chairman of the session Prof. N. Srivastava highlighted the burning issues with which the country is afflicted with. He highlighted the issues related to the health, healthcare and out-of-pocket expenditure in India.

The keynote address of Prof. Santosh Mehrotra raised crucial issues related to the present inequality and deprivation in access to health facilities in India. His thought-provoking arguments raised certain valid points on the National Health Policy 2015, introduced by the present government. Explaining the functioning of health sector in India, he highlighted at least three limitations of the Policy: there is no clear commitment for any significant increase in health sector expenditure relative to GDP; distribution of public spending does not match with the present pattern of mortality and morbidity rates and finally, when comparatively high spending in poor performing states failed to catch up the better performing states the NHP doesn't show the path of improving the efficiency in the high focused states.

The session was ended with a note of thanks by Dr. P. S. Suresh, Associate Professor, Department of Economics, NEHU. The session was conducted by Mrs. Wandinecia Tariang, Assistant Professor, Department of Economics, NEHU.

Session of Invited Speakers

Chairperson: Professor M. Pal

The invited speakers shared their experiences in the first technical session of the seminar and interacted with the participants through their scholarly presentations. Gangopadhyay & Bhattacharyay enlightened the audience with their research study ‘reexamining the relationship between economic growth and income inequity in ASEAN countries, China and India’. The so called Kuznets hypothesis of inverted U prevailed for a certain level of economic growth; however, it turns into a U-shaped curve for values of economic growth lying between two critical values. As a result, the relationship between growth and inequality can take the form of a wave. Taking the case studies of two advanced cities of Australia, Mallik, Basu and Hicks reaffirm the fact that there exist certain level of gender discriminations in employment opportunities and salary components. Ashok, Nair and Kharlukhi shed light on the relative backwardness of the North-Eastern Region of India, and recommended improvement of both physical and financial infrastructure along with the development of indigenous industries. In another presentation, Banerjee, Siddique and Amin, examined the relationship between deficit financing, crowding out and economic growth in Bangladesh with rigorous analysis of time series data. The authors suggested that there is long-running relationship among the focused variables. However, in short-term, findings of the study confirmed that there is no such crowding out effects in Bangladesh, rather, the crowding-in effect is evident. The study recommended that fiscal authority should foster private investment so that economic growth would receive a boost through increasing public expenditures backed by borrowing from the banking system. Maharana narrated the contribution of NEEPCO for the generation of power and other allied activities in the North-Eastern region which in turn contributed to the overall development of the region.



Technical Session 1A: *Poverty and its Dimensions* Chairperson: Prof N. Srivastava

A. Chakraborty enlightened the audiences on the prevalence of poverty in rural West Bengal. The author tried to focus on the nature and extent of rural poverty in West Bengal during the period 1974-2012. All of the poverty estimates showed more or less, a declining trend during the period under study except for the year 1991 when the county resorted to economic reforms. The author suggested that rapid economic growth could be a good measure in eradicating poverty in India along with redistribution of income.

S. Bagli computed a multidimensional poverty index (MPI) having the dimensions of knowledge, health and living condition for each state and for each district in North-East India. The study had mainly used data published by Directorate of Population Census of India 2011. The study found that Meghalaya is one of the most deprived states in the North-East of India. The study revealed the need of government schemes for higher literacy, more financial inclusion and complete sanitization.

In another presentation, J. Sen shed light on absolute and relative levels of living and to examine how these two explain the true picture of poverty reduction in India and its major constituent states. The study found an improvement in absolute standard of living as a whole and an improvement in relative levels of living in the rural areas of Indian states. The author emphasized inclusive growth with redistribution.

The research work of Md. K. Khan, takes two aspects related to poverty estimates for the North-Eastern region of the country: head count ratio and relative deprivation index. On the other hand, M. Das, R. Nath and P. Choudhury examined the dimensions and incidence of poverty among the scheduled caste people in Barpeta district of Assam and found high incidence of poverty.

Another paper worth mentioning was presented by D. Sathe and S. Deo who highlighted the extremely poor conditions amongst pavement dwellers in Pune. They found that people were living in extreme poverty and they were pessimistic about their future.

Technical Session 1B: *Inequality and its Dimensions* Chairperson: Prof. S. K. Mishra

A. Chatterjee, I. Ghatak, R. Choudhury and M. K. Banerjee presented the results of a pilot study on a number of samples gathered from the responses of workers in the Information Technology sector. The role of information is immense now-a-days because it reduces transaction costs. The study revealed inequality in salary of IT workers in which North-Eastern states lag behind. But IT workers are happy because they get higher salaries than other positions

and this might lead to an alarming socio-economic situation in India. Inequality is always harmful in any society.

P. Ghosh and C. Mahajan presented their studies about the political organization working in a village of Rajasthan. The study showed that in spite of reservations, backward class women are sidelined because they are illiterate. R. Bordoloi intended to capture the loss in human development potentials in Assam due to gender inequalities.

A. Ganaie, S. Bhat and B. Kamaiah used ARDL co-integration approach to analyze the relationship between income inequalities in India. They however did not find any proof in support of Kuznets Hypothesis, instead the relationship is U-shaped in nature, implying that initial increase in GDP per capita led to decrease in inequality and later on as GDP increased, inequality tended to increase.

R. Chyrmang analyzed the socio-economic characteristics and the economic inequality of natives and non-natives in some selected districts of Assam. The author reported wide distributional disparity among rich and poor. This kind of inequality can be one of the driving forces, increasing the incidence of violent conflicts for economic resources that accumulate in the form of disturbances and thereby contributing to underdevelopment. The paper recommended a bottom up approach for development.

While throwing light on caste issues A.S. Kumar and P. Yazir enquired into the dynamics of inequality among different castes in Kerala with the help of NSSO data. The study found evidence in support of failure of government welfare measures as glaring inequality among different groups in terms of expenditure were observed among different social groups.

Technical Session 1C: *Regional Health Issues* Chairperson: Dr. G. S Mallik

G. Hossain, M. Kamruzzaman and Md. Wadood highlighted the anemia problem among the women in Bangladesh. They reported a high prevalence of anemia among married non-pregnant women.

In a related paper S. K. Dutta and K. Singh explained the variation of health deprivation of children as well as educational deprivation across the major Indian states. They observed that the achievement of the schooling system in India is still far away from effecting universalisation of elementary education as per the Constitutional dictum. The authors recommend more expenditure on social sectors such as health and education. The quality of health services provided by government is important.

R. Karim, N. Islam and G. Hossain presented a paper on the determinants of low birth weight of babies in 10 selected developing countries employing multivariate logistic regression.

In this study about 17.58% children were found to be with low birth-weight. The study identified a number of determinants like illiteracy, later conception, underweight and wealth status that had direct influence on the prevalence of low birth weight in the developing nations. These key mediating factors needed to be considered to improve birth weight of infants. Targeted public health interventions were needed on a priority basis to improve these factors.

While assessing the quality of health services in Brazil, N. Talita et al. suggested that innovative actions could be implemented in the public organizations by the practice of everyday activities with the use of “inputs” arranged in the organization which included the development of the human element as a motivator of innovative initiatives.

Sengupta and Naskar captured various dimensions of the inequity apparatus - social, economic and residential (Rural & Urban) in North-East India. They observed how deprivation in one dimension enhances inequity of other dimension. Their analysis revealed that across the states of North-East India, socially and economically deprived classes are always in a disadvantageous position in regards to health infrastructure provision.

While speaking on gender inequality and consequent child nutritional status, A. K. Mukhapadhaya showed how nutritional status of children fare in a cross-national perspective with an improvement in gender specific achievement indicators. The author found that gender inequalities in food and nutrition security lied at the root of the cycle of hunger and malnutrition in the region.

S. Chatterjee attempted to assess the lives of women workers who are plugged with high levels of occupational and often poverty-induced diseases, reproductive health problems and are still fighting with their deprived cultural, socio-economic and socio-political conditions and gender inequalities. She concluded with the need to arrive at a consensus for eradicating such problems and to fulfill the needs to go beyond the Millennium Development Goals set in the Millennium Summit of the United Nations in 2000.

Technical Session 2A: *Gender Inequality & Women Empowerment-1*

Chairperson: Md. Golam Hossain

While speaking on gender inequality S. Guha and S. Chakraborti tried to unveil many faces of gender inequalities in India, especially in the North-Eastern states of India. This study recommended that promoting women’s access to resources and their control over incomes would help boost growth and development.

U. Bhattacharya spoke on gender budgeting and emphasized on a gender responsive budget. Gender budgeting should be practiced not only in government programs but

everywhere. A. Bhattacharjee and P. Pal focused on self-help groups. They found that such participation in SHG played significant role in the livelihood of poor women.

Pramila. Koparkar however highlighted the role of Information and Communication Technologies (ICT) and their possible contribution to empowerment of women in North-East India. The author recommended that the government should take steps to encourage women employees to take up ICT as careers.

While speaking on Rich Heritage of Khasi Society with Special Reference to Women, B. N. Ghosh revealed from a survey that more than fifty per cent of the women were not interested in electoral politics because they were not educated to do so. The study also revealed that though in Meghalaya, matrilineal society is the norm; many of the families are headed by the males. The author ended with a comment that Khasi matrilineality was in the transition phase and its future is yet not properly defined.

S. Chakrabarti and S. Guha discussed the issue of women empowerment in the North-East India by developing a generalized empowerment index. The authors found disparity in women empowerment among the states within and between zones. It was encouraging to know that Women in the North-Eastern states were found to be relatively more empowered in the household affairs than any other states of India. The study recommended a policy to further women's formal education along with reforms in religious and cultural values.

Srivastava et al examined the extent on undernutrition among the children in North-East India. Statistical analysis of NFHS data yielded significant relation between the accesses to drinking water nutritional status among the children in the region.

Technical Session 2B: *Gender Inequality & Women Empowerment-2*

Chairperson: Mr. B. Maharana

The paper presented by S. Shome on “Women’s Autonomy and Utilization of Mother and Child Healthcare in North-East India” highlighted the variations in the position of women in India and across the states in NER. It was also observed that autonomy of women seemed to be better in the region as compared to the rest of India. Further, a relationship between autonomy of women and child healthcare was stressed upon. The possible factors that influence the utilization of mother and child healthcare (MCH) in India as a whole and NER in particular had been taken into consideration. In decision making, it was found that women in NER are also better-off as they take part in decision making. Finally, results also indicated significant variations in the use of MCH by education, economic status, place of residence, and so on.

Papiya Roy presented a paper on “Gender Differences in Morbidity Pattern among under-five children in North-East India”. Gender disparity exists in India and with no exception for the NER. The relationship between gender differences and infant morbidity status among the various states of NER was examined. It was observed that female children tend to get less care than male children. Statistical analysis shows a significant association between gender differences and infant morbidity for urban residence, primary and higher education of mothers, and so on. It was concluded that gender inequality still exists and affects the health status of the under-five children.

With the help of an index Sengupta and Karmodak tried to understand the relative dynamics of health deprivation in North-Eastern States of India. The researchers had tried to construct a Health Index and using that index they had observed that the index satisfies some well behaved social utility function.

The presentation of Dr. K. Padma “compared women empowerment across southern states: Andhra Pradesh, Karnataka, Kerala and Tamil Nadu”. Comparison of women’s empowerment was made between these states and with all India picture. Further, gender gap was calculated in the categories of literacy, employment and wages, as well as political participation, to truly understand the disparity. Also, the reasons behind the status of women were also highlighted. The statuses of women in social reform movements, matrilineal lineage, implementation of land reforms, pro-poor welfare programmes were put-forward.

Hazarika investigated the existence of gender income gap between men and women among Handloom Micro-Entrepreneurs. Looking at cross-section data and using Blinder-Oaxaca decomposition analysis, he found that the "endowment effect" explains much of this difference. The results indicate that mainly 'firm size', use of weaving machines' and 'bookkeeping' had significant impact on the difference in income, and thus it's 'endowment' rather than 'discrimination' driving such gender income gap.

The final paper, presented by Santanu Ray, proposed a Weighted Index to measure Women’s Freedom and Empowerment for Indian States with Pena Distance (DP_2) to gauge the unevenness in the level of freedom and empowerment that women in India enjoy. Twenty constituent indicators from six dimensions of women’s life were selected. The Pena Distance (DP_2) Method has been used for the enumeration of WEFI scores, which measure the distance of an individual unit from the hypothetical unit that recorded least desirable values in all parameters. Further, the results indicate unacceptable levels of spatial variations across Indian states.

Technical Session 2C: *Environmental and Resource Management*

Chairperson: Professor S. K. Datta

The first paper of the session was "Integrated Management of Aqua Terrestrial Ecosystem for Enhancing Productivity, Economic Stability and Promoting Rural Livelihoods Sustainable for India." by A.M Puste, S.K. Gunri, K. Jana, B.R. Pramanik, M Dasgupta and T.K.Maity. The presentation of Puste started with the concept of wetlands and aqua terrestrial ecosystems and referred wetland as nature's kidney. His paper dealt with the number of case studies in the last 15 years for proper utilization of wetlands which had immense potential in terms of economic stability and productivity. The paper showed the various combinations of fish and crops that are possible in the wetlands which could enhance productivity. The paper concluded with the view that the waste and unused wetlands should be utilized for the production of multiple crop variation for rural sustainability.

The next paper of the session was presented by Gunjan Kumar on the dynamics of forest resources with empirical testing on Assam's forest cover. The paper intended to formulate the optimal control path of forest, and found that any slight change in the stock leads to a change in the whole behavior of the forest cover over time. There is a specific regeneration rate and specific consumption/harvest rate for every quantity of stock which may keep the stock of forests resources sustainable for future generations.

Alex et al presented a paper on strategies for competitive farming with sustainability based on 'Theory U'. It has been observed from the paper that the adaptation of generators model of competitive advantage according to the theoretical concepts of Triple Bottom Line can direct the consecution of sustainable competitive advantages in the familiar farming activity.

The paper of Saxena assesses the socio economic and environmental performances of North-Eastern states using cross sectional data. Regarding the socio-economic and environmental factors affecting the performance of North-eastern states of India, he has observed that the performance of the states varied due to variation in per capita income, literacy rate and environmental Performance Index based on air pollution, water quality, forests, waste management and climate change. Therefore different states may need different strategies for development.

The effect of Plant Density on Economic Return from wild grass cultivated by the farmers of Meghalaya for the production of broom panicles, which has high demand in south and South East Asia has been addressed by Lapasam & Tiwari. The study revealed that the growth and production of broom panicles were significantly impacted by plant density. The production of panicles in the plantations with lower plant density was significantly higher than

those grown in higher plant density. They found that density of 3500 plants per hectare could be recommended for optimum economic return from cultivation of the plant.

Another interesting paper was presented by R. Roy et al to examine the performance of the fishery groups and impact on earnings of Self-Help Groups on their households and threats related to their economic activity, as well as social & economic empowerment of the women members of SHG of the Birbhum district of West Bengal. The survey revealed that cash credit and project loan was used for better sustainability and enhancement of income from pisciculture and male SHGs had increased their income in comparison to female & mixed SHGs.

The last paper of the session was presented by Behuria who analyzed the demographic and socio economic factors affecting fertility in Odisha. He carried out the study at district level and found that CBR and TFR were declining in the study area. Factors like increase in female literacy, female work participation rate, workers from non agricultural sector and contraceptive prevalence rate were negatively related with fertility.

The day ended with a bright showcase of the cultural diversities of North-East India by the student artists of the University in a beautiful cultural programme and followed a Gala Dinner. The show was a very unique and it received huge appreciations from the distinguished guests and learned gathering.

Day 2: 9th October 2015

Technical Session 3A: *Agriculture, Environment and Sustainability*

Chairperson: Prof. Md. Abdul Wadood

The researchers had addressed different relevant issues concerning agriculture and environmental sustainability in the present dynamic environment.

Dr A. K. Srivastava highlighted the resource conservation farming systems, which has been developed as sustainable farming system in a changed world, and urged for propagating the system as major source of rural livelihood in rural India. For him, the integrated hill farming system which takes care of natural resource management can assure both sustainability and profitability.

In the context of Bangladesh, Hossain has presented a paper on Groundwater Arsenic Contamination Problem and its Health Effects in the Ganga-Meghna-Brahmaputra Plain. The result indicated that about 9.6 million people living in this region may suffer from arsenical skin lesions.

Dehury & Jadhav had tried to unearth the agricultural sustainability of two agro-climatic zones of Rajasthan employing interview and observations method from a sample of 100

households collected from 205 villages. The study found the adverse impacts of climate change on agricultural production of main crops like wheat, bajra, soyabean and groundnut species. The study concluded that most of the farmers had lost their store of indigenous varieties of seeds and fertilizer. Further, the adaptations of new varieties had completely failed and decreased the fertility of the soil.

Viswanathan and Das compared the agricultural growth and official estimates of poverty for North-Eastern states and found that states with high growth in agriculture had in general low incidences of poverty. They came out with a set of concrete suggestions for the expansion of incomes in the agricultural sector.

Tripathi and De presented a paper on the bacterial attack on the jute farming in West Bengal. The research suggested that results of scientific studies would be helpful for the survival of the major nonfood crops in West Bengal.

The paper of N. Ganguly on the synergy between MGNREGA and Agriculture in North-East India found that there has been an increase in agricultural wages in the states under study. The Mahatma Gandhi National Rural Employment Guarantee Act was causing a shortage of labourers in the agricultural sector during peak season. Thus, it had a severe impact on agricultural productivity in the North-Eastern states of India.

Technical Session 3B: *Gender Inequality and Women Empowerment-3*

Chairperson: Prof. P. V. Koparkar

A large number of researchers had presented papers on gender inequality and women's empowerment in different regions. In an explorative study Papita Dutta has investigated the extent and inequality of some indicators of deprivation amongst women across the states of North-East India using principal component analysis. The study explored that among the states in North-East India deprivation of women in Meghalaya is the least, followed by Nagaland and Mizoram. Assam was found to be the worst in position among the states of North-East India. However, in contrast to the state of West Bengal all the states of North-East India are better in position in terms of deprivation of Women.

Another paper presented by B. Dey on "severity of domestic violence against women in India". The findings of the study indicated that the women belonging to low socioeconomic status are more likely to agree that wife beating is justified. The study also revealed that the probability of wife beating was much higher if the partner was illiterate and finally, wife beating was much lower in women with higher decision making autonomy and people belonging from the minority community were more likely to agree that wife beating was justified as compared to

other religions. The study suggested introducing reforms in our social and economic life to control the violence against women.

Another paper presented by C. S. Biswas on the “influence of marital status on women empowerment in two North-Eastern states, Mizoram and Tripura” found that majority of women (74%) in Mizoram had medium level of empowerment, while most of the women (72%) in Tripura had low level of empowerment. Thus, in Mizoram marital status had no influence on empowerment of women; there they enjoy medium level of empowerment irrespective of their marital status which is just the opposite in case of Tripura. Like Mizoram, similar results were found in another paper presented by Tariang & Suresh in the context of matrilineal society of Meghalaya.

In another paper Pamei has tried to highlight women’s involvement in the economy and examined to what extent women’s support contributes to the economic status of the society, the flexibility of women’s freedom in decision-making in regards to maintenance of households, independence in deciding various issues especially those related to agricultural production, and various platforms to expose their talent and expertise. Sharma and Boro however focused their discussion on the unequal treatment of the widows on the basis of gender in India.

Technical Session 3C:

Public Policy

Chairperson: Prof B Mishra

Taking the cases of few selected districts of Assam, K. Das intended to capture how conflict led to poverty and malnourishment among the children. The study identified that loss of livelihood mainly due to conflicts has been one of the major factors that led to poverty and malnutrition in Assam.

The second paper was on the performance of MGNREGA in the Cooch Behar district of West Bengal by M. Mandal and A. Mandal. The study found that MGNREGA had failed miserably to eradicate poverty, and to provide employment for the rural mass. The study concluded that the local administration should take proper initiatives to make the scheme more effective in poverty prone areas and should pay attention to improve rural infrastructure through the proper implementation of the scheme.

The third paper of the session was presented by Dr K Chauhan and I Kharumnuid. Taking the case of Meghalaya the authors highlighted the complexities for the institutional set up. The paper mainly discussed the grass root level decentralization (recent VAB bill) and the complexities involved in its implementation. They suggested that laws should be simple so that enforcement would be easier, otherwise the society would suffer.

A Mazumdar presented a paper on displacement issues and tried to expose the effects of displacement of peasant families of Gokulpur village of West Bengal in the name of development, on their livelihood. He found that land acquisition badly affects the lives of families as with increased school dropout rates, average age of daughter's marriage declined sharply. The paper concluded with the plea that land acquisitions may be unavoidable for development purposes but those who lost their land, should be given enough compensation for the proper maintenance of their livelihood.

The fifth paper was on the role of social protection policies to remove poverty and inequality in three tribal dominated districts of West Bengal which was presented by S. K. Das. He observed that poverty gap between tribal and non tribal gradually converged over time, and showed that the gap could be further reduced and even eliminated with proper implementation of social protection policies.

The last paper of the session was presented by N. Kalita with her coauthor R Bhuyan. The paper aimed to find out the performance of health sector in Assam and the relative effect of health expenditure on health performance. They found a positive relationship between health expenditure and health performance in the study area.

Technical Session 4A: *Health and Inequality* Chairperson: Prof. Kalyan Das

The first paper in this session, presented by Sultana, deliberated on the “determinants of low birth weight in developing countries”. It is suggested that programmes such as community based efforts of intervention could help to mitigate the problem.

H. Karmaker and Md G. Hossain carried out a cross-sectional study to identify the pattern of multi-drug resistant Tuberculosis for assessing the risk factors associated with each type of the disease. The categorization of a total of 164 respondents revealed that most of the patients belong to failure of category-1 group, followed by relapse after category-1 and non converters of category-1. However, patients' rural background and socioeconomic status emerged as major risk factors behind the disease. The study concluded that among the respondents, majority were in the productive age group (16-45). Surveillance program needed to be conducted at Rangpur division to explain low MDR case detection in spite of high notification rate. No highly remarkable risk factors were found from the study.

The study of S. M. Uddin, I. Hossain and Md. G. Hossain aimed to find the high risk factors and testing behaviours of HIV among female sex workers in urban Bangladesh. The study revealed that 84.4% FSWs were married. More than 88% of FSWs reported to had practicing unprotected sex because of client's insistence. Taking a sample of 200 sex workers the

study found that about 9 out of 10 sex workers were forced by the clients for unprotected sex, and therefore, they remained a vulnerable group for spreading of HIV/AIDS in the country.

S. S. Laha attempted to redefine the meaning of health sector reforms with its implications in post-reform era. The systematic comparison between pre and post reform years revealed that there exist a relationship between health sector expenditure and macroeconomic health of the economy. The study also pointed out the interstate variations in this connection.

On the issue of morbidity pattern of the elderly, it was opined by Chowdhury and Ladusingh that there was an increasing pattern of non-communicable as well as other diseases and disabilities plaguing the elderly in India.

D. Roy presented a paper on the incidence of teenage pregnancy and its variations across states and Union Territories (UTs) of India. The results reveal that incidence of teenage pregnancy varies across places of residence, religion, caste, region etc. The findings of the study also indicated that teenage pregnancy was positively associated with poor child health status.

Technical Session 4B: *Measures and Modeling*

Chairperson: Prof. B.N. Bhattacharyay

The paper presented by U. K. De and K. Bodosa had examined the adaptability of farmers with changing climatic conditions and the role of various factors in adaptation and crop diversification in Assam. Extent of diversification of crops had been measured by using Herfindahl Index (HI) of diversity at the farm as well as village level. The results revealed that education of the respondent farmers, farm size, area of holdings and share of family income from agricultural activities had significantly positive impacts on the crop diversification as well as adaptation to moderate the adverse climate impacts or avoid climate related disaster. Education helped to improve knowledge and raise technology adoption capacity and thus helped farmers adapt better to the changing climatic conditions.

Another paper on the “Determinants of Psychological Wellbeing and its Impact on Mental Health” presented by G. Bandyopadhyay, on data collected by using a structured interview schedule from 332 employees of manufacturing and services sector revealed differences in employee perception with regard to gender, education level, age, and the job level. The correlation results suggested that most of the variables were positively related. Further the results of multiple regressions suggested that conscientiousness, optimism and resilience significantly contributed to Psychological wellbeing.

Fitting alternative probability distributions from the skew-elliptical class and skew-normal and skew-student distributions in particular, being chosen as promising alternatives on the three

anthropometric indices, height for age, weight for age, and weight for height Z-scores from all the states of North East India (NFHS 3, 2005-06), TK Chakraborty observed that the assumption of normality of the Z-scores was untenable for the observed sub-groups of the population and skew-normal/skew-student models were better candidates. The model based estimates of under-nutrition prevalence have wider gaps and have wider inequality across socio-economic sub-groups. The findings were indicative of comprehensive gaps in explanatory factors of univariate inequality in nutritional outcomes of the children that would be aggressively targeted for policy interventions.

Jha and Singh had addressed an interesting issue to assess the burden of infant mortality on socio-economic classes by measuring the effects of socio-economic classes on infant mortality. The data exhibited a high degree of intra-state correlation as well as a high degree of inter-district spatial correlation. A generalized linear mixed model approach capitalizing on the intra-state correlation was adopted for the analysis. Further, spatial analysis of data had been performed using Conditional Autoregressive (CAR) model.

A predictive approach had been suggested by M. Deb and TK Chakraborty to study the trends and prospects of fertility in India. The study has used time series analysis to capture the trends in total fertility rate in India using the data from Sample Registration System (SRS). SRS is a large scale demographic survey for providing annual and reliable estimates of vital rates at state and national level as well as rural-urban areas by the Office of The Registrar General, India. The predictive approach had been used to forecast the future values, in which Bootstrap sampling and Gibbs Sampler had been used to simulate posterior distributions of fertility rate. Finally, the results from the predictive model had been compared with the frequently used ARIMA models in the forecasting literature.

Technical Session 4C:

Healthcare

Chairperson: Prof. P. Bharati

The first paper of the session was presented by F. Hasan on the factors affecting C-section deliveries among the Bangladeshi women in Rajshahi City. She found that incidence of C-section increased with the increase in the age, level of education, age of marriage of mother, and increase in the family income. The paper attracted few comments apart from those factors in which private hospitals were more interested to do the C- Section.

Another question regarding the less MMR and IMR among c-section mothers and their response was that they may draw proper health care at the time of delivery. Employing appropriate statistical techniques the study found that women who were 25 year and above were

more likely to undertake a cesarean delivery. And younger, overweight and obese women were also more likely to undergo a cesarean delivery more than normal weight women.

Based on a simple supply-demand framework S. Bhattacharya assessed how much of healthcare needs of the people of the Western Dooars of West Bengal were met by the existing delivery system of the PHCs, or alternatively, how much remained unmet. He concluded with the remarks of requirement of more intensive investment or allocation of resources to meet the huge gap between supply and demand for services of the PHCs in the area.

The third paper of the session was on the factors affecting morbidity and utilization of health care services and the authors were N. Devi and R. Bedamatta. The study was carried out in Nagoan district of Assam. They found that morbidity was affected by many factors. Morbidity was more in case of female, with increase in age, with lower level of education and non availability of toilet facilities.

The fourth paper of the session was presented by M. Ao on the “inequality in the intake of micronutrients among the children of North-East India. She observed that intake varied across the state and found that the determinant of micronutrient intake were the level of education of mothers and their employment level and characteristics of household.

The fifth paper of the session was presented by R. Islam entitled “The Determinant of out of Pocket Health Care Expenditure in Bangladesh: Evidence from Household Income and Expenditure survey -2010”. He observed that because of this OOP expenditure, poverty among people increased. He found that OOP expenditure on healthcare increased with females, higher age group, lack of social financial safety, unhygienic toilet facilities and unsafe drinking water. The study expected to help the planning relevant to health policy on OOP payments.

The last paper of the session was presented by N. Sharma entitled "Community Participation and Effectiveness of ICDS: A case study of Kamrup District of Assam" The paper tried to see if there were any differences in the effective functioning of ICDS in selected rural and urban areas of Kamrup District and how community participation and involvement of women in ICDS increased its effectiveness. She found that gap in the delivery of services was more in urban areas than in rural areas. According to her, the awareness and demand was different in both the areas and it required the involvement of women to bridge the gap.

Technical Session 5A: *Poverty, Inequality and Health of North-East India*

Chairperson: Prof. K. K. Das

Rimu Chaudhuri highlighted the status of women in Sikkim in three different aspects, namely, education, health and political participation and awareness. The objective was to find out

by how much the Sikkimese women were moving away from women empowerment by imbibing the superficial aspects of occidental culture. The approach adopted for the study was a combination of both quantitative and qualitative analysis with ethnogender bases. The study found that women are lagging behind in all the three indicators that are education, health and political participation. The present status of women is worsened by the fact that they were highly exposed to the modern western lifestyles and culture and hence the existence of a distorted socio economic and cultural conditions. The study called for government intervention and collective actions of different agencies to better the conditions of women in Sikkim. Gupta, Ghosh and Thakur however had discussed the healthcare and inclusive growth in India with special reference to North-East Indian States.

S. Chakraborty documented a detail account of female employment situation in the state of Meghalaya by using the unit level data on Employment and Unemployment survey of 68th round (2011-12) of NSS. Using regression analysis she also examined the impacts of caste, education, marital status, sector of dwelling, age, sex, activity status etc of any individual's preference of work. The regression analysis shows that females of higher age group or those are divorced or separated, have more likelihood to be in the self employed category than that of younger age group or are currently married. Mauli Sanyal however identified a vicious cycle involving incidence of diseases, health care utilization in terms of hospitalization and financial impoverishment and its inter-state variation in India.

Partha Dey presented a paper on the "inequality in child mortality in the North-Eastern states of India". The result showed that, the states could be classified into different groups according to the level of inequality in infant and under-five mortalities. The states of Tripura, Manipur and Meghalaya had shown higher inequality levels as compared to remaining selected states. Second group consisted of Mizoram, Nagaland and Assam. Third group of states were Sikkim and Arunachal Pradesh where inequality in child mortality among different socio-economic groups was the least.

Technical Session 5B: *Education and Healthcare* Chairperson: Prof. B.N. Ghosh

A Comparative study of Mrs. Manjusha Bhakay highlighted the health related physical fitness among children attending municipal and international schools in Nasik city. The presenter highlighted the importance of physical activity for acquiring and maintaining health. The objective of the study was to compare the health related physical fitness among children (aged 7 to 9 years) attending municipal and international schools in Nasik city. The study concluded that municipality school children fare better in physical fitness than the international school children.

Through a cross sectional survey Rana, Islam and Hossain assessed the Knowledge about TB among Rajshahi university students in Bangladesh. They found the lack of basic knowledge about TB among the university students. They prescribed for the need of health education program to improve the knowledge among university students regarding TB. They also advised for the government to take initiative to form a medical team to sensitize the non-medical university students.

Another paper presented by Das, Ray and Das on the convergence and equality issues of health care expenditure across major states of India. The health expenditure concentration and inequality had been quantified by Gini Coefficient and Theil Index and the results show that there was rising inequality up to 2003-04 and then the phase towards equality starts.

Ahmad & Rath had presented a paper on the “policies related to essential medicines in India and the availability and accessibility to essential medicines and healthcare in Primary Health Centres in India”. The study found that despite modified health system and holistic approach of National Rural Health Mission, there remain significant gaps in health service delivery in India.

Ghosh and Maity had presented another interesting paper on measuring the status and identifying the factors influencing child immunization in Darjeeling district of West Bengal. Using primary data collected from 200 households, the results indicate that there was serious lack of access to health services both for the child and for its mother and low rates of participation in vaccination coverage among poor households, minorities and people living in rural and remote areas.

Technical Session 5C: *Poverty, Health and Inequality in India*

Chairperson Prof. P. Nayak

Freedom from hunger has no doubt been a basic human right, and hence, receives top priority in MDGs which were set by the world leaders to have a better world by 2015. Chronic hunger leads to acute malnutrition that led to a number of unwanted health outcomes. Keeping these in the backdrop, the paper of M. Das Gupta recalls the notorious famine of Mizo Hills District of undivided Assam in 1980s. The public inaction and government failure to provide relief could be a possible reason behind the two-decade long insurgency in Mizoram.

The paper presented by C. Rout focused on social equality and justice in India. The study systematically articulated the various provisions of the constitution with regard to the freedom and justice. Suman Chakraborty came out with the objective to investigate the status of food security at the households of tribal communities. Three different aspects of food security – availability, accessibility and utility were taken for discussion.

Dil Nath Fuel intended to assess the poverty trend in the municipalities in Nepal from 1983 to 2010, and compared the poverty incidence region-wise. He argued that poverty was a local phenomenon and could be dealt locally through local governance and through fiscal decentralization.

Sazzad Parwez investigated the socio-economic implications of Special Economic Zone on the rural population especially the land losers and the process of their marginalization. The presentation of U. Dhyani discussed the status of the corporate social responsibility in the country and suggested some other means through which a proper functioning of CSR in poverty alleviation would be necessary.

Technical Session 6A: *Growth and Development* Chairperson: Prof. B. Panda

The papers presented in the session aimed to expose ground realities of backward regions of the country and of underprivileged socioeconomic groups within a region and also to suggest strategies for regional development through policy interventions.

Samantara examined the possibilities of district-level convergence in agricultural sector of Arunachal Pradesh through Kisan Credit Card. The results suggested that the effects of KCC would be more meaningful in the state when all districts would have equal opportunities in access, and proper emphasis was given to enhance credit absorption capacity. Based on primary data the study of Chettri, Mondal and Kundu examined the role of organic farming for women empowerment in Sikkim. They applied advanced statistical tools to establish the effects of educational and economic status, work experience of women and changes in the level of earning and modes of saving after the adoption of organic means of farming on the empowerment of rural women.

Taking a number of standard anthropometric measures Saha and Sil compared the nutritional status of Chakma school girls of Tripura. They found comparatively high rates of malnutrition among Chakma girls which could be attributed to low dietary intake and other socioeconomic factors.

The effort of Bose and Ghosh intendeds to identify the key factors those were instrumental in generating benefits under the ambitious MGNREGA programme in West Bengal. The interesting observation of their econometric analysis pointed out that political patronage along with some social factors played crucial role in this regard.

A.P. Pati examined the relationship between microfinance and the achievements in MDG targets in 92 nations across the globe. The results confirmed a significant contribution of microfinance to attain poverty alleviation goals, but microfinance variables were found to have

negligible impacts on the targets of women empowerment. Therefore, the attempt required was the redesigning of the strategies keeping the ground realities at the centre.

Taking stock of information generated by 68th round of National Sample Survey, Sandip Rudra Paul investigated the expenditure pattern on tobacco products in North-Eastern states as the consequential outcomes of tobacco consumption were comparatively high in the region.

Technical Session 6B: *Socio-Economic Issues* Chairperson: Prof. M. Dasgupta

Papers, presented in this session, dealt with a number of critical socioeconomic issues, which have serious implications on economic development through generation of income and creation of employment.

KK Das examined the insurance and banking habits of the people living in riverine regions of Assam to regulate economic stability. The study observed that the insurance and banking facilities had failed miserably to reach the population categorized as low and lower middle income group. On the other hand, the case study of SK Karma on a backward district of Nepal identified the factors that generated surplus in dairy firms.

Micro level study of Ghosh and Bose tried to probe into the factors which played key role in involving the rural households with the self-help groups. Their findings suggested that not only economic factors but social and political factors too played important role in determining association of rural households to the SGSY programme.

Kuntal Chakrabartty confirmed that micro small and medium enterprises could popularize entrepreneurship in North Eastern states of India. The sector was expected to make a marked contribution in employment generation over the long-run.

Taking information from a sizable number of commercial banks for a reasonably long period of time S. George and PS Suresh seek to address a set of intriguing questions related to direct credit program in India.

The critical study of Sahoo and Neog was also based on NSSO 2004-05 and 2011-12 employment and unemployment unit level data. They captured the trends, patterns and determinants of informal non-agricultural sector labor force participation in North-Eastern region. Amrita Acharya however analyzed the role of tourism related activities on the alleviation of poverty in Shillong and its surrounding region.

Technical Session 6C: *Social Issues* Chairperson: Prof. Anil K. Srivastava

Jain and Bhagat presented a paper on proprietary enterprises in India which accounted for 96% of the total unincorporated non-agricultural enterprises. Given the fact that share of

male proprietary enterprise is more than 70% in most federal units of the country, the North-Eastern states of Manipur and Meghalaya showed a marked difference as the share favours female-headed enterprises both in rural and urban areas.

Humtsoe emphasizes the expansion of urban transportation system in the cities of North-Eastern region. The author argued that mere expansion of road length and provision of public transport system may not be sufficient to project cities as engines of economic growth.

Lepcha and Singh questioned the ongoing developmental activities in Sikkim, which are deliberately imposed on the state keeping the aspirations and needs of the local population aside.

Nienu described the backwardness of Nagaland in overall economic activities as an institutional failure. The study argued that lack of proper governance, codified property rights, rampant corruption and many other factors has led to institutional failure in the state.

Gupta and Kumar raised a serious concern of budget allocation and actual utilization of funds on healthcare facilities in North-Eastern states of India.

Based on primary data, collected from Silchar town of Assam, Shahani and Choudhury examined the role of education on hygiene and sanitation among scheduled caste women.

Day 3: 10th October 2015

Technical Session 7A: *Socio-Economic Issues-1* Chairperson: Dr. G. S. Mallik

The third day of the seminar was devoted to various socioeconomic issues that appear to be crucial to shape the life of people. Three parallel sessions discussed several issues that owe intrinsic importance in poverty alleviation, inclusive economic progress, and most importantly, expansions of human capabilities and empowerment of women. A number of welfare programme has also been placed under the scanner to evaluate success in achieving the targets.

Raut and Roy investigated the slow economic progress of North-Eastern states, particularly of Assam and Manipur as compared to other states of India. However they found comparatively better progress of human resource through education. Using ordered logistic regression they recommended further investment in higher education and infrastructure to enhance the potential of the region and integrate with eastern neighbours to accelerate trade for faster growth of the region.

The investigation, undertaken by Sultana and Mahanta, intended to identify the challenges that are often faced by women entrepreneurs in Sonitpur district of Assam. Among other factors lack of financial ability and family support emerged as most common obstacles that women entrepreneurs are afflicted with. Taking the case of Konyak community of Nagaland, E. Yanthan observed women's inheritance rights as most critical for their empowerment.

Utilizing the secondary information, generated by Annual Status of Education Report 2013, Laskar examined the impact and intensity of private tuition in rural India. It was a matter of concern for the scholar as private tuition was completely out of reach of the state control, and in a sense violated the essence of RTE Act of 2009.

Sulaiman designed an advanced interview technique to capture the prevalence of caste system in today's urban settlement. Taking the stock of variety of poverty indicators Phukon and Singh presented a spatial analysis of poverty and sustainable development for states of North-East India. Again, based on a field survey in Senapati district of Manipur, Kipgen and Langstieh elaborated critically the maternal and child healthcare services among Thadou-Kuki community.

Technical Session 7B: *Socio-Economic Issues-2*

Chairperson: Prof. A.M Puste

Miti Siboh examined whether and to what extent the ambitious MGNREGA works to empower the women in Arunachal Pradesh. She also tried to find out the key issues and challenges to women empowerment and the implementation of MGNREA in Arunachal Pradesh. The gender discriminations in the implementation of the programme have been highlighted. Study of A. K. Mukhopadhyay showed how nutritional status of children fares in a cross-national perspective with an improvement in gender specific achievement indicators. It also found out the most significant variable like adult literacy rate, maternal mortality ratio and life expectancy at birth, which were responsible for having any possible trend between gender inequality and child nutritional status over time in India. Apart from that LEB and MMR were significant in some cases.

The application of a number of standard trend models led Bhattacharyya and Bhattacharyya to present a true picture of Indian workforce engaged in agricultural sector. They found that conditions in North-Eastern states differ considerably from the rest of India.

Marbaniang and Ladusingh focused on the interesting relationship between meteorological indicators and malaria cases in Meghalaya. They also found a significant level of regional variation within the state boundary. The innovative solutions to address the increasing demand for healthcare services had been highlighted in a study conducted by LP Soh.

P. Dutta advocated area-specific strategies for the identification of causes, and remedies for the incidence of maternal anemia in Assam, which led to a number of unwanted outcomes for mothers and children.

Anika Shadap measured the disparities in level of living across and within the states of North-Eastern states. The construction of a composite index covering a wide range of indicators revealed that development in the region had bypassed the rural areas.

Technical Session 7C: *Socio-Economic Issues-3*

Chairperson: Prof. B. K. Tiwari

V. Pala used NSS data on consumption expenditure for last two decades to estimate the incidence of poverty in North-Eastern states of India. There was an attempt to establish the relationship between poverty, food consumption and nutritional outcomes. There appeared to be a direct relationship between calorie intake and nutritional status. However, the relationship between economic status and consumption pattern were not so straightforward.

Based on field studies in Meghalaya Sarada, Misra and Vasulu investigated into the health and administrative implications that were of vital importance for the control of malaria and HbE. Apart from health and hygiene, the variable distribution of malaria could be due to differential susceptibility attributed primarily to genetic causes. It was thus emphasized that for health planning, knowledge about the genetic basis or causes are important.

Kashyap and Singh presented a systematic analysis of trends of tobacco use in North-Eastern states *vis-à-vis* other regions of the country. A series of statistically significant results indicated that most of the states in the region suffered from high rates of tobacco use, and lagged much behind in quitting trends.

The study of Boro and Bedamatta addressed intriguing questions of development economics whether and how horizontal inequality results in ethnic conflicts. Taking NSSO data of consumption/expenditure pattern they enumerated Gini indices for different ethnic and religious groups living in the BTAD districts of Assam, and examined the issues behind the notorious ethnic conflicts witnessed by the region in 2012.

Despite the matrilineal structure of the communities of Meghalaya there exist gender disparities of different dimensions in family norms, labor market and political participation which, for Tariang and Suresh, had impacts on rural poverty of the state. Their research established the links between gender gap and rural poverty in Meghalaya.

Aravamudhan presented an optimistic view on scientific and technological innovations that owe immense power to bridge up the existing disparities and oppressions in the society.

Analyzing the experiences of rural entrepreneurs of Sonitpur district of Assam Sharma and Chakraborty recommended expansion of microenterprises as a powerful tool of rural development.

The Valedictory Session

Chairperson: Prof. N. Srivastava

The valedictory session started with a welcome address by Dr. D. W. Thangkhiew, followed by the presentation of rapporteur's report by Dr. Santanu Ray. Chairman invited Dr. G.

S. Mallik to deliver the valedictory speech. Dr. Mallik reminded the audience of the responsibilities of the teaching community for the benefit of the students, and expressed his pleasure with the proceedings of the three-day seminar. Chairman of the session, in his speech, recalled the proceedings of the seminar and invited the feedback from the participants. The session ended with a vote of thanks by Dr. V. Pala.

After valedictory, an academic excursion was organized where the participants/ delegates were exposed to various natural tourist sites including that of wettest place on the Planet (the Cherrapunjee) and the pristine limestone cave for which Meghalaya is popular destination of lakhs of tourists every year.

Important Observations from Policy Perspective

- Although the incidence of poverty in India has been witnessing a declining trend, and according to a recent study total number of poor has reduced for the first time in the history of independent India it is still an embarrassing reality that most of the world's poor are living in this country. The time has come to review the strategies adopted, and to rectify the implementation of policy.
- Poverty in earlier days used to be considered as an incidence of income deprivation but in the discourse of new development paradigm poverty is considered as an acute case of capability deprivation and it is a multidimensional in nature. It has been reflected in the studies of the researchers that there is no such straightforward relationship between Multidimensional Poverty Index (MPI) and official income/consumption-based poverty estimates. Hence, it is strongly recommended by the researchers that government should incorporate the other aspects of human life such as **education and health** in the estimation of poverty.
- The best strategy for the alleviation of poverty is perhaps to focus on **employment generation for rural population and for urban youth**. A planned initiative needs to be adopted in this direction. There is a significant relationship between the participation of poor in the micro finance programme and the decline in poverty across the world. Therefore, effective promotion of micro finance especially among the needy population may help to alleviate poverty.
- In the context of climate change, agricultural sector faces serious challenges to meet the sustainable livelihood of the people especially for the vulnerable groups. Due to faulty strategies of single goal in the early stages of planning, farmers in many cases lost their indigenous techniques of production. Indiscriminate use of hybrid seeds, chemical fertilizers and excessive use of ground water resources are largely responsible for the environmental pollution and worsening of soil quality. There is an urgency to explore the strategies in order to address such

burning issues. The initiatives taken by the Government of Sikkim to ban the chemical fertilizers in agricultural sector are no doubt appreciable steps towards environmental sustainability.

- The increasing inequality in income, wealth and consumption is a great concern not only for India; the entire developing world is afflicted with this problem. The growing inequality often hinders achieving the developmental goals according to its full potentials.
- A nation cannot prosper with gender inequality. With this mantra in the backdrop, India's poor performances to achieve MDGs target is related to gender inequality and empowerment of women.
- The present statistical database for the country as a whole and the North-Eastern region in particular is not adequate for quantitative researches – a focus should be given for accumulation of quality data. Moreover, the application of quantitative tools for analyzing data needs further improvements.
- Coming to North-Eastern region of India, the researchers pointed out the spatial variations in economic, social and health related indicators. The uniform strategies for the states in the region would not be meaningful. Instead **state-specific**, on some occasions, **community specific policies** should be adopted keeping the conditions and aspirations of the people at the centre. Moreover, the participation of the common people in the development process assumes immense importance in this regard.
- When we focus attention on the matrilineal state of Meghalaya it is evident that women belonging to different tribal groups in the states enjoy special status in the family and in society. But a parallel question is also raised by the scholars whether they are really empowered in different spheres of their day to-day life in this matrilineal set up.

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