GLOBAL CONFERENCE ON

PROSPERITY, EQUALITY
AND SUSTAINABILITY

PERSPECTIVES AND
POLICIES FOR A BETTER WORLD

Summaries of
CONFERENCE PAPERS
## CONTENTS

**Theme 1: Jobs and Economic Security**

11-13

Towards Building an Inclusive Society – Focus on the New State of Telangana

Amir Ullah Khan and Tanweer Alam

Exports, Imports and Decent Jobs in South Asia: Evidence from Firm-Level Data

Christian Viegelahn

Who Creates Jobs? Is there a role for Start-Ups?

Ejaz Ghani

Inclusive and Sustainable Development in Emerging Countries Integrating the Modern and the Lagging Sectors The Case of India

Indira Hirway

Informal Employment and Inequality in Africa: Exploring the Linkages

Jack Jones Zulu, Kalkidan Assefa and Saurabh Sinha

Do Imports Create Decent Jobs in Africa? Evidence from Firm-Level Data

Marta Duda-Nyczak and Christian Viegelahn

The Impact of Reservations for Women in Public Employment in India: Extended Abstract

Neha Prashar

The Role of Social Transfers and Rural Development Policies for Brazil’s Smallholding Farmers: An Assessment Based on 11 Flagship Policies

Pedro Arruda

More Productive for Better Jobs: Labour Productivity and Decent Employment in Rural Tanzania

Piero Conforti, Elisenda Estruch, Gianluigi Nico, Mario Spieazio

Financial Capability and Asset Building in Low Income Households

Rajeeva Sinha
The Spillover Effects of Public Investment: Implications for Formal and Informal Sector Firms in India
Santanu Chatterjee and Abhinav Narayanan

Female Labour Supply in Bangladesh: Continuity and Change
Simeen Mahmud and Sayema Haque Bidisha

Employment, Wages and Inequality in India: An Occupations and Tasks-based Approach
Shruti Sharma

Monitoring National Laws and Policies as a Tool to Achieve the Sustainable Development Goals
Willetta Waisath, Aleta Sprague and Amy Raub, Jody Heymann

Theme 2: Education for Capability Expansion

Value for Money from Public Education Expenditure in India
Geeta Gandhi Kingdon

Including the Vulnerable Sections: Ensuring Education for All
Manish Tiwari and Sonu Pareek

Marriage before 16 or 18 Years: Effect of Marital Age on Women’s Educational Attainment in Bangladesh
Mohammad Mainul Islam, Md. Kamrul Islam, Mohammad Sazzad Hasan and Md. Aminul Haque

Demographic Transition, Public Expenditure on Education and Economic Growth: New Macroeconomic Evidence from India
M. R. Narayana

Intergenerational Transfer of Education among Social groups in India
Palashpriya Halder and Ishita Mukhopadhyay

Impact of School Feeding Programs on Educational Outcomes: Evidence from School Dry Cereals in Burkina Faso
Pouirkèta Rita Nikiema

Presence of Horizontal Education Inequality in Bodoland Territorial Area Districts of Assam
Rupan Boro and Rajshree Bedamatta
Understanding the Dynamics of Educational Inequalities among the Socio-Economically Marginalised: A Study from Four Districts of India
Usharani Rathinam

Expansion in Education, and Its Impact on Income Inequality: Cross-Section Evidence from India
Vachaspati Shukla

Theme 3: Food and Nutritional Security

Answers to India’s Child Malnutrition Paradox: The Positive Deviance Model
Aakanksha Sinha, Ruth G. McRoy, Barbara Berkman and Melissa Sutherland

Enhancement of Finger Millet Production for the Food and Nutrition Security of Tribal Community in Koraput District of Odisha
Akshaya Kumar Panda, Balaji Mohanty, Susanta Kumar Mishra, Santosh Raj Benia, Debadatta Gouda, Max Aurora Gill and Ghasi Takri

The Nutritional Impact of the Public Distribution System in India: A State-level Analysis
Anjana Thampi

Food and Nutrition Security in Nepal: Status, Trends and Challenges
Anjani Kumar, Praduman Kumar, Ramesh Sharma and P K Joshi

Indigenous Communication Forms and Their Potential to Convey Food Security Messages in Rural Ethiopia
Hagos Nigussie Kahssay

Looking at Wellbeing: Why Processes are Important
Joydeep Baruah

Family Planning and Its Association with Nutritional Status of Women: Investigation in Select South Asian Countries
Md. Juel Rana and Srinivas Goli

Revisiting the Determinants of Child Anthropometric Indicators in India Using Seemingly Unrelated Regressions Model
Naline Gandhi and Brinda Viswanathan
How Consumer Price Subsidies affect Nutrition
Neeraj Kaushal and Felix Muchomba

Access to Food, Poverty and Inequality by Social and Religious groups in India: Estimation with Unit Level Data
Panchanan Das and Anindita Sengupta

Two Decades of Geographical Targeting for Food Distribution: Drawing Lessons from an Indian State
Rajshree Bedamatta

Livelihood and Food Security amongst Some Vulnerable Groups in Jharkhand
Ramesh Sharan

**Theme 4: Building healthy lives**

Income Inequality and Population Health Outcomes in Developing Countries: A Cause for Concern?
Anil Methipara

Charan S. Verma

Socio-Economic Inequalities in Maternal and Child Health Care in Selected South Asian Countries: Imperatives and Lessons for Health Care Related Policies
Lubna Naz

Effects of Remittances on Health Expenditure and Types of Treatment of International Migrants’ Households in Bangladesh
Mohammad Mainul Islam, Sayema Haque Bidisha and Israt Jahan

Policy or Perception? Women’s Political Liberalization and Sex-selection in India
Nabaneeta Biswas

How Health Behaviour Affects Depression across Different Age and Gender Cohorts in India
Reshmi Sengupta

Social Networks and Health Insurance Utilization
Sisir Debnath, Tarun Jain and Manvendra Singh
Dynamics of Impoverishment Impact of Health Care Payments in Nepal: An Analysis of Synthetic Panel Data between 2004 and 2011
Shiva Raj Adhikari and Vishnu Prasad Sapkota

Explaining the variation in health and nutrition outcomes in Bangladesh’s cities
Quynh T. Nguyen Dhushyanth Raju Ramesh Govindaraj

Opportunities for Early Childhood Development in Arab Countries: Profile and Evolution of Inequality and its Sources
Vladimir Hlasny and Vito Intini

Theme 5: Challenge of Improving Environment 71-84

Sustainable Development and the Politics of the Governance of Natural Resources: Analyzing the Peruvian ASM Industry
Alejandra Villanueva

Burden of Diseases due to Air Pollution in Urban India
Amrita Ghatak, Debasish Nandy and Sudharsal Siddhanta

The Impact of Rural Poverty on Environment: Evidence from Sundarbans in India
Chandan Roy

An Insight into Payments for Ecosystem Services: Presentation of the Topic and Application to Arbio Project in Amazon Rainforest
Dario Belluomini

Co-development and Co-evolution: Towards an Economics for the Anthropocene
Dev Nathan

Coping through Credit: Effect of Microfinance on Informal Lending after Disasters
Pankhuri Jha and Syed M. Ahsan

Climate Change and Anthropogenic Contributions to Uncertainties in Hydrological Modeling of Sustainable Water Supply
Roman Corobov

Adaptive Tools to Evaluate the Interventions’ Program on Climate Change and Disaster: Index of Disaster Preparedness Measurement
Sri Hartini Rachmad, Widaryatmo and Indra Murty Surbakti
Gender-related Differences in Knowledge about Climate Change Impacts and Resilience Measures: A field Experiment in Can Tho, Vietnam
Tarlise N. Townsend, Quynh Anh Nguyen and Ellin Lede

**Theme 6: Strengthening Social Protection** 85-96

**Child Deprivation in India (2013-14) Evidence from Rapid Survey of Children**
Aalok Ranjan Chaurasia

**Fiscal Policy Incidence: Evidence from Tunisia**
Ahmed Moummi and Nizar Jouini

**The Quest for Achieving Universal Social Protection in Nepal: Challenges and Opportunities**
Bandita Sijapati

**NREGA Protecting the Protected: An Analysis of Labor Market Outcomes and Livelihood Security in Kashmir**
Mushtaq Ahmad Malla

**Spatial Analysis of Structural Determinants of Child Poverty Incidence in Nigeria**
Olagunju Kehinde Oluseyi and Ogunniyi Adebayo

**Some Dimensions of Vulnerability: A Study of the Urban Poor with Reference to Kolkata**
Saswati Chaudhuri

**Disability Indicators for the SDGs and its Relevance for India**
Surajit Deb

**Growth and Development Finance Required for Achieving Sustainable Development Goals (SDGs) in Africa**
Zivanemoyo Chinzana, Abbi Kedir and Diderot Sandjong

**Theme 7: Social Inclusion** 97-110

**Encouraging Affirmative Action in the Private Sector in India**
Abdul Muheet Chowdhary

**Medical Management of Intersexuality and Marginalization of Non-normative Gender Identities**
Asilata Karandikar
Exclusionary Urban Space: Class, Gender and Marginalities in Delhi
Bhim Reddy and Manoj B. Balsamanta

Occupational Segregation by Race in South Africa after the Apartheid
Carlos Gradín

Human Inclusion as Capability Expansion
Iris Macculi

Development and Exclusion: Intergenerational Stickiness in India
Rajarshi Majumder and Jhilam Ray

Marginalization and Adverse-inclusion in India’s Urban Labour Markets: A Gender-Caste-Community Approach
Simin Akhter Naqvi

Indian IT Workers in USA and Their Transnational Practices
Uma Sarmistha

Public Goods Provision and Upward Intergenerational Occupational Mobility: Empirical Evidence from China
Ziming Li, Abhinav Alakshendra, Shengfeng Lu and Bo Xiong

Thematic Panels 111-124

Thematic Panel on Governance for Sustainability in Global Value Chains

Standards as Drivers of Sustainable Development Processes – The Case of “Fair Trade in Tourism”
Annika Surmeier

The Role of Indian Civil Society Organisations in Shaping the Governance of Labour Standards in Emerging Markets
Natalie Langford

Large Retailers’ Role in Governance for Sustainable Production: The Case of UK Retailers Selling Cotton Garments Produced in India
Rachel Alexander
Governing Sustainable Informal E-Waste Management: The Indian Reality
Somjita Laha

Thematic Panel on Sustainability and Inclusive Urban Development in Global Perspective

Can slum-free India be Inclusive India?
Abhinav Alakshendra

Regional Collaboration & Sharing as Pathway to Sustainable, Just & Inclusive Cities in Europe
Andrea Frank

Social Sustainability: The Quest for Equality in Post-Apartheid South Africa
Brian Boshoff

Reconciling Inequalities and Sustainability in Southeast Asia Megacities
Christopher Silver

Inclusive Urbanization in the 21st century China
Jieming ZHU
Theme 1

JOBS AND ECONOMIC SECURITY
Towards Building an Inclusive Society – Focus on the New State of Telangana

Amir Ullah Khan, Gates Foundation and Tanweer Alam, Aequitas Consulting

Telangana is India’s newest state, the 29th. It comprises 10 districts of the erstwhile Andhra Pradesh state that qualify as among the more backward in the country on almost all socio-economic indicators. Telangana has substantial tribal and Muslim populations that are predominantly poor. These sections of the population also suffer from low work participation rates, poor levels of skilled employment and high presence in the unorganised sector. This paper emerges from a study that has been commissioned by the State government to look into socio-economic conditions of Muslims particularly, identify the causes, analyse the data available and suggest policy solutions. A large primary survey is being undertaken towards exploring some of these issues along with extensive field visits and discussions with various stakeholders. This paper will show how extensive evidence based analysis is being used to convert the same into inclusive policy that will focus on providing social and economic security to the deprived populations in the state of Telangana.

From among the issues that deter inclusion, this study focuses on education, health, employment, housing and security. The education sector is unique as there is the question of Urdu medium schools that are blamed for being poorly equipped and under staffed. Does the mainstreaming of the Muslim population necessarily rest on improving the quality of these schools? Health is a subject that is closely associated with the hygiene environment. Urban squalor impacts health outcomes and therefore the issues of housing, sanitation and drinking water are critical. In rural areas, it is access that defines health outcomes. Employment in government jobs is an open and shut case and is the one variable that is often used to prove discrimination. The study looks at the diversity in the work force in the public sector to determine the status of inclusion.

In the current political context, the focus has returned on reservations in jobs and educational institutions in the context of building inclusion. In Telangana too, this issue has emerged as the centre piece of electoral promises made to the Muslim population. However, the constitutional basis for such a provision is seemingly untenable given the view that reservations can only be caste based. Additionally, there is a 50% reservation requirement for seats or positions reserved under various categories that cannot be breached. With claims from various castes across the country being accommodated by state governments, can Telangana use these as precedents to extend reservation to a religious group that lags behind on educational and economic parameters? This paper would look at the current status of the reservation debate and explore the manner in which the future discourse gets shaped.
Exports, Imports and Decent Jobs in South Asia: Evidence from Firm-Level Data

Christian Viegelahn, International Labour Organization, Geneva

The international trade literature has identified various channels through which firms may benefit from engaging with foreign markets. According to the learning by exporting hypothesis, exporting may lead to an improved quality of products, triggered by competition in export markets. There may also be a positive scale effect, allowing firm to produce and ship goods at lower costs (De Loecker, 2013). On the importing side, learning from new technologies embedded in foreign inputs, access to a better quality of inputs, or access to a larger variety of inputs are often deemed beneficial for importing firms (Ethier, 1982; Markusen, 1989; Grossman and Helpman, 1991). However, these gains from trade may not automatically translate into better working conditions. Productivity gains may not always come along with an equivalent increase in workers’ wages, especially in the context of countries with a large pool of surplus labour. Suppliers to global value chains may in some sectors require a high degree of flexibility in production, related to global demand fluctuations and just-in-time production schemes, which in turn causes firms to increasingly revert to temporary workers, which in turn makes jobs more insecure from workers’ perspective.

This paper focuses on South Asia and analyzes the firm-level implications of trade for workers in terms of both quantity and quality of jobs. The analysis is based on data from the World Bank Enterprise Surveys and relies on 11 firm-level surveys conducted in Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka in 2007-15. The database for South Asian countries comprises more than 7,500 observations with information on firms’ exports and imports, and on firms’ workforce, including data on the number of workers, their sex, the skill structure, wages and types of employment contracts.

The paper finds that exporters and importers are larger than non-trading firms in terms of employment, even after controlling for a variety of firm-level characteristics. Moreover, exporters and importers on average hire more women. Importing appears to be conducive to reducing the share of temporary workers in total employment, hinting to the importance of longer-term employment relations when using foreign inputs into production. While the average education level is higher in firms that engage in trade, wages are not higher after controlling for firm-level sales. Future research will investigate whether labour market implications differ across different exporting firms, depending on whether these firms face obstacles to their business, such as a high number of power outages, problems with receiving licenses and permits, the lack of sufficient production capacity, problems with the delivery of inputs used in produc-
tion or problems with the delivery of the exported goods. South Asian countries face enormous challenges in the world of work, including rising wage inequalities (Chandrasekhar and Ghosh, 2015) and high levels of working poverty. Insights from the paper will help to inform policies on the role of trade for decent job creation, with a view to improve labour market outcomes in the region and fully exhaust the potential that trade has in this respect.

Who Creates Jobs? Is There a Role for Start-Ups?

_Ejaz Ghani_, The World Bank

There is increasing anxiety about the pace of job creation around the world. There is a consensus that jobs are vital for promoting prosperity, improving equity, sustaining social cohesion, and translating economic growth into poverty reduction. But who creates jobs is an understudied field. There is evidence in the case of India that shows a strong link between initial levels of young and small firms and subsequent job growth. The economic geography of entrepreneurship is still evolving in India. Yet there is no question that entrepreneurship works—cities that have embraced entrepreneurship have created more jobs. However, the link between entrepreneurship and job growth is not automatic. Cities that have a higher quality of physical infrastructure and a more educated workforce have many more entrepreneurs. There are several policy levers that can be used to promote entrepreneurial growth. Instead of being preoccupied with firm chasing—attracting large mature firms from other locations—policy makers should focus on improving physical and human infrastructure and encouraging entrepreneurship in their communities. Small is beautiful in job creation.

Inclusive and Sustainable Development in Emerging Countries: Integrating the Modern and the Lagging Sectors: The Case of India

_Indira Hirway_, Center For Development Alternatives, Ahmedabad

One of the greatest challenges for researchers and policy makers at present is how to move rapidly towards inclusive and sustainable development. We believe that this requires integration of the rapidly growing
high-tech modern sector with the lagging sectors where the excluded and the marginalized are located; and this, in turn, calls for a two pronged strategy consisting of modifications in the prevalent macroeconomic policies and promotion of the lagging sector to enable it to move upwards towards the mainstream economy.

The paper is divided into three sections: the first section discusses the dynamics of rising dualism and the rapidly increasing inequalities of wealth and incomes in the world including emerging economies, and examines the case of India in this context; the second section shows how these inequalities can be reduced substantially by modifying macroeconomic policies so as to move towards equitable and sustainable development; while the third section discusses how the excluded and the marginalized can be helped to move upwards through creation of social capital and collective efforts.

The two pronged strategy of modifying macroeconomic policies on the one hand and empowering the poor at the bottom through providing strong support in technology and finance and in setting up the right institutions on the other hand are both needed to ensure inclusive and sustainable development.

Informal Employment and Inequality in Africa: Exploring the Linkages

Jack Jones Zulu, UN Economic Commission for Africa; Kalkidan Assefa, UN Economic Commission for Africa and Saurabh Sinha, Employment and Social Protection Section, Social Development Policy Division, UN Economic Commission for Africa

Africa has experienced almost fifteen years of sustained economic growth of nearly 5 percent a year on average. About a quarter of the countries in the region grew at 7 percent or more, and seven of the ten fastest growing countries in the world today are in Africa. Despite this dynamism there are worrying signs that this growth acceleration has not yet translated into inclusive and equitable growth for all segments of the population.

Most economic activity in Sub-Saharan Africa is informal. There are few ‘good’ jobs, which offer secure employment and social protection, and less than 20 percent of Africa’s young workers find wage employment. Over 70 percent of young people and women work informally as own-account or unpaid family workers, or jobs that are classified as ‘vulnerable’. Even though the informal sector contributes 55 percent of total GDP (including agriculture) and 38 percent of non-agricultural GDP, the
working poor in Africa constitute 80 percent of the total employed, more than twice the global average of 39 percent. At the same time, many countries in Africa experience high levels of inequality. Overall Africa is the second most unequal region in the world after Latin America. Seven of the ten countries with highest inequality in the world are also in Africa.

The paper examines the nature and extent of informal employment and explores its contribution to fostering inequality within countries in Africa. A key question explored is whether, and to what extent, limited access to quality education and poor acquisition of skills, especially for youth and women, contribute to informal employment.

Using household survey data from selected African countries (where available); the paper documents the degree of informality in the labour market and tests whether the degree of informality in the labour market explains the extent of inequality in earnings. The paper concludes that structural transformation in Africa will occur, not only by formalizing the informal sector, but through an increase in productivity, working conditions, and protection for workers in informal employment, especially youth and women. It provides policy suggestions for increasing access to stable and ‘decent’ jobs and achieving Africa’s Agenda 2063 and the Sustainable Development Goals (SDGs).

Do Imports Create Decent Jobs in Africa? Evidence from Firm-Level Data

Marta Duda-Nyczak, United National Economic Commission for Africa (UNECA) and Christian Viegelahn, International Labour Organization, Geneva

Trade theory suggests that productivity gains can be generated through various channels, including learning from new technologies embedded in foreign inputs, access to better quality of inputs, or access to a larger variety of inputs. This paper uses African firm-level data from the World Bank Enterprise Surveys, comprising 65 surveys conducted in 47 African countries in 2006-2014, and systematically explores the relationship between importing and labour market outcomes in African manufacturing firms by sector and country, and its drivers. In the paper, we engage in a two step approach. In a first step, we quantify the firm-level employment premium of importing both in terms of total employment, employment by sex, non-production employment and temporary employment. We also quantify the firm-level wage premium of importing in terms of average wage, and investigate whether there is a skill intensity premium of importing in terms of the average education level of a firm’s workforce. In a
second step, we make an attempt to explain the heterogeneity of wage, employment and skill intensity premia across countries. The paper also explains the heterogeneity in gender gaps across countries, measured through the difference between the male and female employment premia. Our results indicate that importers tend to employ more fixed-term permanent employees than non-importers. Importers in particular employ more female workers on average, while the importer premium on male employment is quantitatively smaller. The importing status of a firm in contrast does not explain the number of temporary workers, at least when considering the results for the whole African continent. Simultaneously, the findings on the average wage are not robust. While there is a positive importer premium on wages, when comparing importers with non-importers, this premium turns negative as soon as firms’ sales are controlled for. In the case that firms’ sales are equal and firms only differ in the importer status, it will be on average the firm that is non-importer that pays a higher wage to its workers. This result indicates that economic gains of importing are not always translated into gains in terms of increased wages for workers. This is the case, even though importers employ production workers that on average have more years of education. This importer premium on skill intensity is significantly positive not only in continent-wide regressions, but also in a large number of regressions by survey. Further, there is no evidence that economic development explains either the importer premium on employment and on female vis-à-vis male employment, or the importer premium on skills intensity. However, we find some weak evidence that import premia on wages is positive in particular for countries at a lower level of economic development. The preliminary results are encouraging evidence that trade-inducing and trade-facilitating policies and regulations giving incentives to imports can be an effective tool to foster inclusive growth in a country, provided that trade liberalization is accompanied by policies that ensure that also workers obtain their fair share of the economic gains induced by trade.

The Impact of Reservations for Women in Public Employment in India

Neha Prashar, University of Birmingham

This study seeks to analyse the effect of women’s reservation policy on female participation rates in employment in India. Women’s reservation policy is a form of positive discrimination and part of the wider class of affirmative action that India has implemented since independence. Due to the ongoing debate on whether this policy is unconstitutional due
to its gender targeting properties, only a handful of states have implemented this policy. In particular, Gujarat, Maharashtra and Karnataka are the states studied in this research and the policy is only applicable to public employment.

It is anticipated that the policy would bridge the gap between female and male employment and allow women bargaining power within the household by earning a stable income by relaxing some of the structural barriers to entry for women. Structural barriers refer to the availability of jobs for women, who, as they become more educated, prefer white-collar jobs; however, the availability of these is few and far apart, especially in the public sector. The policy tries to correct for this by guaranteeing employment for women in public employment jobs, however, there are also cultural aspects that can outweigh the efficiency of the programme. For example, if the low participation rates are due to the cultural norms of women giving up their job after marriage then the policy will be ineffective. This study looks at the likelihood of women going into employment with the policy in place, making the important distinction between caste reservation and women reservation.

The data used in this study is the National Family Health Survey (NHFS) for 1992-93, 1998-99 and 2005-06. This is a women only survey (with the exception of 2005-06 where the husbands were also interviewed), which has a plethora of data on household characteristics, as well as health and knowledge variables. A multinomial probit regression is used to estimate the likelihood of women going into different types of employment. The variable of interest is a dummy variable that only includes women who are eligible for women’s reservation but not for caste reservation in order to isolate the policy’s effect.

Preliminary results indicate that Karnataka’s policy has led to a positive likelihood associated with women being in professional/manual employment relative to other states. Maharashtra, however, still shows a negative likelihood, despite the implementation of the policy and Gujarat has no significant results. The steady decline in public employment is used to justify these results, as this would affect the absolute number of public sector jobs guaranteed to women. Gujarat has seen the sharpest decline out of the three states. It may be incorrectly targeting women whose cultural norms prevent them entering the work place to begin with but also because the number of jobs available to women are still considerably low and will continue to decline.
The Role of Social Transfers and Rural Development Policies for Brazil’s Smallholding Farmers: An Assessment Based on 11 Flagship Policies

Pedro Arruda, International Policy Centre for Inclusive Growth, Brasilia Brazil

When answering the question of how to transfer the vast number of labour engaged farmers in low productivity agriculture to more productive activities, one often has to address whether family farming can improve its productivity and reach sustainability in an ever-globalizing world in which agriculture is becoming more commodity oriented and technology-dependent.

Brazil is an interesting case for seeking both, theoretical and empirical evidence to answer this seminal question. It presents a sample of global interest in light of it facing structural challenges shared by most developing countries (e.g: high poverty, inequality, labour-informality, budgetary and institutional constraints). It also has a substantive and very heterogeneous agricultural dimension and, for the past decades, it has been implementing a set of varied, large-scale and globally recognized policies of relevance to the rural world. Hence, based on some recent findings brought by researches of the IPC-IG demanded by IFAD (SILVEIRA et al, 2016; SOARES et al, 2016), the paper briefly introduces and analyzes 11 of Brazil’s flagship policies of relevance to the rural world, which are analytically divided in two categories: 1) Social Assistance Policies, aimed at providing cash and social security benefits to poor and vulnerable households; and 2) Rural Development Policies, aimed at providing smallholding farmers and peasants with factors that could bear a positive effect on increasing their productivity and sustainability, such as land, water, education, credit, production-insurance, grants for environmentally friendly practices and access to markets through structured demand/ institutional procurements.

These policies are assessed in terms of their coverage and beneficiary profiles, estimated out of several administrative data and national household surveys (e.g: Censo, Censo Agropecuário and PNAD). The study also assesses their operational aspects and measurable impacts by means of both, comprehensive desk reviews of the already published impact evaluations, and estimations based on cross sections analysis of Brazil’s cash transfers and social pension (based on their administrative data and that of PNAD from 2004 to 2013).

The analytic division of policies is intended to assess the validity of a conservative argument that has become mainstream in Brazil. It purports that development must be sought by concentrating social assistance grants on poor and vulnerable farmers so that they can be relocated to other activities (presumably becoming employees of the agribusiness, engaging in
pluriactivity, or merely migrating to seek urban opportunities). Simultaneously, agricultural support in the form of credit, assets and access to markets, must be solely concentrated on the agribusiness sector and on the best performing family farmers.

The findings suggest that, even though there is a degree of truth that the productivity and sustainability of the most vulnerable smallholding farmers and peasants has not been substantially increased despite the many national policies in place, this should be attributed to a bias in rural development policies towards farmers who already have more settled capabilities, and not at all to any intrinsically unsustainable aspect, or lack of potential, of smallholding and family farming. In addition, the study suggest traditional indicators available at the Censuses and PNAD underestimate the productivity of smallholding and family farmers, since they fail to reveal relevant dimensions of family farming income (e.g: the effect of land-ownership preventing households from having expenditure with rent). Finally, it compares general production functions that downplay the relevance of assets, especially land, to modern agriculture, against functions that concentrate so specifically on family farmers.

More Productive for Better Jobs: Labour Productivity and Decent Employment in Rural Tanzania

Piero Conforti, Elisenda Estruch, Mario Spiezio and Gianluigi Nico, Food and Agriculture Organization, Rome

Limited availability of productive and decent jobs is a worldwide challenge. A low level of labor productivity is likely to cause unsatisfactory working conditions. At the same time, lack of decent jobs is indicated as a cause of low labor productivity in agriculture. Disentangling this relation and its direction is largely an empirical question. This paper tests the hypothesis that an increase in productivity has a positive effect on the quality of jobs in agriculture and rural areas. Using data from the 2012-13 Tanzania National Panel Survey, three decent work indicators are identified that apply to agriculture and rural areas – informality, job multiplicity and children at work. A industry-wise translog production function is estimated to derive the marginal productivity of family labour. Marginal labour productivities obtained from the production function are plugged in a probit regression, which estimates their effect on the probability to obtain a decent job. To circumvent endogeneity, the study instruments the marginal productivity of family labour by constructing birth cohorts based on economic reforms undertaken in Tanzania. Both IV and probit estimates indicate that an increase in the marginal productivity of family labour significantly reduces the probability to hold an informal job. A di-
rect relation is also found between productivity of family labour and the use children’s work in agriculture. Results from the IV model show, instead, that the impact of marginal productivity of labour on job multiplicity is significant and negative in non-farm activities only. These findings indicate that growing productivity is a necessary -- tough not sufficient -- condition to see more decent jobs being demanded by agriculture and in rural areas in general, at least in the medium run. Efforts to generate more and higher quality jobs, both in agriculture and other sectors can contribute to absorb surplus labour that is likely to be present in agriculture.

Financial Capability and Asset Building in Low Income Households

Rajeeva Sinha, Odette School of Business, University of Windsor, Canada

Asset building is now recognized as a component of a policy triad of poverty reduction programs, the other two being transfers and tax credits. Asset building focuses on intertemporal goals and assumes significance given its potential role in the reduction of intergenerational poverty. Transfer payments and tax credits are more geared towards current income and consumption. Asset building in general and in particular of low income households is a complex behavioural outcome. Establishing the drivers of such a complex behavioural outcome require a framework and empirical evidence ideally gathered through randomized control trials.

This study uses financial capability as the tool and framework for asset building by low and vulnerable income households. The study uses a more comprehensive and interactive view of financial capability than that has been traditionally used in finance literature where financial capability is treated as analogous to financial education or financial literacy. Following Sen (1987) and Nussbaum (2000) discussions on capability, and Sherraden (2014), financial capability, is perceived as a joint and interactive outcome of financial knowledge/literacy and financial opportunity/inclusion.

Conducting a randomized control trial is not an option in most social policy and program evaluations. This is also the case with any proposed evaluation of the process and effectiveness of asset building as a poverty reduction tool. There are two methodological options, one is to conduct large sample analysis of micro data on behaviour of low income households and the other is to conduct detailed analysis of households using quasi experimental design. The two approaches can be used as complements to further our understanding of asset building.
This study utilizes data from two rounds of surveys of Canadian households, to examine distinguishing characteristics of low income households by focusing on four categories of assets: financial; home ownership; education and business. The analysis is based on within group comparison of low income households. The study focuses on households in the lower income quintile and examines distinguishing attributes of these households based on the four categories of assets listed above. The attribution of asset building to financial inclusion and financial opportunity is explored by applying propensity score analysis to the micro level data on financial capability of Canadian households.

The paper is divided into five sections. Section two provides an overview of the literature and some of the key questions that arise in asset ownership of low income households in particular. Section three provides an overview of the data on finances and assets of Canadian households. Section four describes the methodology followed. Section five presents the key findings and Section six discusses the conclusions from the study.

---

**The Spillover Effects of Public Investment: Implications for Formal and Informal Sector Firms in India**

_Santanu Chatterjee and Abhinav Narayan, University of Georgia_

Informal production is a pervasive feature of most developing countries. As such, this sector consists of small, unregistered firms that typically produce labor intensive non-traded goods and services, with little or no access to capital markets, and limited outward labor mobility to the formal or organized sector (LaPorta and Shleifer (2014)). However, this sector plays an important role in the structural evolution of these countries, accounting for about 42 percent of GDP, and absorbing between 48-54 percent of the labor force (Schneider et al. (2010)). Given capital and labor market rigidities, informal firms may have to rely heavily on government-provided investment goods such as transportation, power, water, etc. for production purposes. However, very little, if anything, is known about the benefits of government investment for informal production in developing countries.

This paper uses firm-level data on formal and informal production in India to examine the sectoral consequences of government investment in public infrastructure. Restricting our coverage to only the manufacturing sector, the study presents a cross-section of 32,388 formal-sector firms (from the ASI) and 82,748 informal sector firms (from the NSSO) for 2010. We proxy public investment by state-level data on government Develop-
Global Conference on Prosperity, Equality and Sustainability: Summaries of Conference Papers

Growth Expenditures is obtained from the Reserve Bank of India. We consider two sub-categories of expenditures: (i) Economic Services, and (ii) Social Services. Empirically, the study first estimates the output elasticities of the flow of public investment and the accumulated stock of public capital at the firm level in the formal and informal sector. The method suggested by Levinsohn and Petrin (2003) and Sivadasan (2009) to control for endogeneity of private inputs (capital and labor) in each sector is used. Since public investment is exogenous to an individual firm, we circumvent the problem of endogeneity of public investment and output by using firm-level data. While this method gives information on how the average firm in each sector is affected by public investment, it masks the distribution of the sectoral elasticities across firms. Thus quantile regressions (QR) are used to examine how the sectoral output elasticities vary across the size distribution of firms.

The results show that the average output elasticity of the flow of public investment for an informal sector firm is 3 times smaller than its formal counterpart. For the accumulated stock of public capital, this difference increases to a factor of 7. However, the sectoral size distribution of firms matters for the effects associated with public investment: for the formal sector, there is very little variation in the output elasticity of public investment across the size distribution of firms. On the other hand, the output elasticity for informal sector firms is strictly increasing in firm size. Further, the relationship between public investment and capital intensity in production for formal sector firms is negative, especially for firms in the middle of the size distribution. By contrast, the corresponding relationship is strictly positive and increasing with firm size for the informal sector, indicating strong complementarities.

Female Labour Supply in Bangladesh: Continuity and Change

Simeen Mahmud, BRAC Development Institute and Sayema Haque Bidisha, Department of Economics, University of Dhaka, Bangladesh

While rising female labour force participation (LFP) in Bangladesh in recent years denotes progress for women in a relatively conservative society, which has significant implications for economic growth and poverty alleviation of the country, there remain critical aspects that need detailed examination. The study attempts to analyze the changes over time in the nature of the female workforce and to identify factors affecting the labour supply decision of women in Bangladesh using Labour Force Survey data of several rounds. The trend comparisons in the composition of the female workforce indicate that there has been an increase in women’s labour force.
participation in a more mainstream manner to contribute to family incomes and reduce labour cost, compared to earlier when women’s market work/economic activity was often undertaken by women without male support or very inadequate male incomes and seen to be more poverty driven. In addition to descriptive analysis, a probit model has been used for understanding the determinants of female labour market participation and the multinomial logit method was used to analyze the determinants of different modes of employment e.g. paid versus unpaid.

Our results about the determinants of female labour market participation indicate that, women’s labour supply first increases with age and then declines, indicating a withdrawal from the labour market after a certain age. Being married along with child care responsibilities and the presence of in-laws in the home constrains labour supply. Formal schooling increases female labour market participation, as does family land. A self employed head has a large positive effect on female labour supply, but family income and head’s education depress women’s labour supply. Thus, women’s labour supply for income earning is not simply an individual choice, but influenced to a large extent by the household situation. The findings of this study has important policy implications. Rising female LFP, whatever the route, can be growth enhancing since more women are spending time in productive activities, and because it means that the ‘demographic dividend’ of a growing workforce is being reaped to some extent. But the implication of expansion of female LFP as unpaid family labour on women themselves is not clear. No doubt rising social acceptance of women’s economic activity and their contribution to family income and welfare, particularly in some regions of the country, is empowering for women. This improves women’s social position and their value to family members. It also increases acceptance of women’s visibility in the public and enhances women’s capabilities such as physical mobility and public exposure. Finally, the study concludes that, regardless of the type of employment, the one factor that makes the most difference to women’s lives in terms of giving them a sense of control over their lives and giving them self esteem is having their own income.

**Employment, Wages and Inequality in India: An Occupations and Tasks-based Approach**

*Shruti Sharma*, Indian Institute of Management, Ahmedabad, India

This paper analyzes the employment and wage trends for Indian workers for the period 2005-2012 by computing the task-content of occupations (Autor et al 2003, Acemoglu and Autor 2011). Two sources of data have been used for this analysis. The first is data from the employment and
unemployment rounds from the National Sample Survey for India for the years 2005, 2006, 2008, 2010 and 2012, which provides information on the principal activity of workers, as defined by the three digit National Code of Occupations (2004) and five-digit National Industrial Classification (2008), along with details on other employment and wage characteristics. Further, I used the data on the task content of occupations from the database provided by the ONET program. Using this information, occupations were classified into three main groups based on their task content: non-routine cognitive, routine cognitive and routine manual. There were no occupations that could be mainly classified as non-routine manual, thus there are only three main categories in this exercise. I find that there is evidence of job polarization in India. First, workers with graduate and higher education are primarily engaged in non-routine cognitive tasks, while workers with lower than “middle-school” education are mainly engaged in routine manual tasks. Further, the share of employment in routine cognitive intensive occupations is the lowest at about 15 per cent, but mostly stagnant during the period under analysis, i.e. from 2005-2012. The share of routine manual tasks in employment has been declining in the period of analysis whereas the share of nonroutine cognitive tasks has been increasing. This corroborates the hypothesis that employment in tasks that can be routinized should decline over time with rapid innovations, improvements and lowering costs of technology. Decomposing the changes in employment shares of occupations reveal that for routine cognitive tasks, the slight decline in employment share is mainly explained by a reduction in the intensity of routinized cognitive tasks across all industries. The increase in the employment share of non-routinized occupations can be explained both due to an increase in share of services and occupations intensive in non-routinized cognitive tasks as well as an increase in the intensity of non-routinized tasks within most industries. Similarly, the decline in the share of employment of routine manual occupations can be explained both by the shrinking of industries intensive in these routinized tasks as well as a decline in routine manual intensive tasks within industries. An investigation into the returns to workers specializing in each occupation type reveals that the wages of workers engaged in non-routine cognitive and routine cognitive occupations rise faster than wages of workers engaged in routine manual occupations. I find that for male workers, wages in non-routine cognitive tasks are higher as compared to routine cognitive tasks across almost all years, whereas for female workers, the wages in routine cognitive tasks are higher than non-routine cognitive tasks.
Monitoring National Laws and Policies as a Tool to Achieve the Sustainable Development Goals

Willetta Waisath, Aleta Sprague, Amy Raub and Jody Heymann, Fielding School of Public Health, University of California, Los Angeles

The rate of extreme poverty has dropped and the proportion of workers in vulnerable employment has declined, but these achievements have too often bypassed women and marginalized populations. Over the next fifteen years, the Sustainable Development Goals (SDGs) have extraordinary potential to sustainably achieve greater equality in low-income and high-income countries alike. However, the promise of the SDGs relies on the actions of individual countries. Well-developed national policy frameworks have the ability to advance equality and shared prosperity at a scale unparalleled by other interventions. Using a quantitatively comparable database of laws and policies in all 193 United Nations member states from the WORLD Policy Analysis Center, this study draws on select indicators to demonstrate the feasibility of mapping and monitoring national actions aligned with the SDGs.

In particular, this paper focuses on a sample set of globally comparative indicators critical to ending global poverty (SDG 1), achieving gender equality (SDG 5), and advancing access to decent work (SDG 8): minimum wage policy, paid leave for caregiving, and income protection during unemployment, among others. For example, there is global consensus around the importance of minimum wages, and the majority of countries have established a minimum wage—only 22 countries have not. However, minimum wages are often set too low to lift families out of poverty; 40 countries set minimum wages at or below the global poverty line of US$2/day per individual, for a family comprised of a working adult and one dependent child.

Likewise, income protection during periods of unemployment supports inclusive economic development and ensures families can meet their basic needs during unemployment. This income support can also enable workers to find new jobs that better match their skills, a critical step for achieving full, productive employment. While 163 countries guarantee some form of income protection during unemployment, 82 of these countries only require employers to pay severance pay and do not provide for any unemployment through social insurance, leaving out the self-employed—a group that includes many of the world’s poorest men and women.

Further, women are still disproportionately responsible for unpaid caregiving and domestic work. Policies which allow women and men to balance work with caregiving responsibilities support women’s access to paid employment without vastly increasing their workload. However, too
many national policies reinforce the norm that women will be responsible for childrearing when they provide maternal leave, but fail to guarantee paid leave for fathers. Globally, 135 countries provide paid leave for infant caregiving for at least 4 weeks to mothers, while only 48 provide both parents at least 4 weeks of paid leave.

The study sheds light on areas where countries have established laws and policies aligned with SDGs 1, 5, and 8, as well as remaining legal gaps, including coverage for the informal economy. This information can serve as a baseline against which progress can be measured, allow researchers to rigorously analyze the link between policies and outcomes, and monitor national laws and policies through 2030.
Theme 2

EDUCATION FOR CAPABILITY EXPANSION
Value for Money from Public Education Expenditure in India

Geeta Gandhi Kingdon, Institute of Education, University College London

Since resources for publicly-funded education are scarce, it is important that every Rupee is used efficiently and yields a high return in terms of children’s access to education and learning outcomes. Value for Money (VFM) analysis shows what return the taxpayer gets from public education expenditure. This paper attempts to calculate and benchmark the economic value of any increases in children’s access to schooling and in students’ learning levels that may result from increases in public education spending over time.

The paper focuses on VFM from government educational investment in terms of increasing children’s learning levels. It investigates how students’ literacy and numeracy skill levels change with increases in government’s per pupil expenditure, and then measures the extent to which those resulting changes in cognitive skill levels influence individuals’ productivity in the labour market. It also measures the cost per achievement unit in the government and private school sectors, to compare the VFM from education expenditure in these two schooling sectors. The paper examines the various underlying sources of VFM in school education and considers how VFM could be improved. Finally the paper considers the VFM from government education expenditure in terms of increased access to schooling denoted by the drop in the number of out of school children between 2009 and 2014.

The paper finds that the economic returns from public education expenditure are negative in terms of falling learning levels and their deleterious impact on labour market productivity. This problem is compounded by the fact that learning levels fell during a period when government education expenditure nearly doubled in per pupil terms, which was due partly to a strong increase in total government education expenditure (1.4 lakh schools established) and partly to a 24% reduction in government school enrolment and a 20% reduction in the average enrolment per government school.

Value for money from the government school system is also low in comparison with that from the private school system. The reasons are partly to do with lower learning levels in the government school system but more majorly due to the huge cost dis-advantage of government schools which pay bureaucratically set high minimum wages, compared to private schools which pay market-clearing wages based on the supply of unemployed graduates who are willing to work for low salaries. Private schools have flexibility in the mix of inputs they use and they also
elicit greater teacher effort and demand greater teacher accountability, as seen from the lower teacher absence rates in private than in government schools.

The factors behind the low value for money include low learning levels, high public expenditure on education, non-productive expenditures on education, the inefficiency of maintaining small schools, inefficiency due to non-genuine enrolment numbers, and the high teacher absence rates. The paper’s recommendations are based around these areas.

Including the Vulnerable Sections: Ensuring Education for All

Manish Tiwari and Sonu Pareek, SCM Social Policy Research Institute, Jaipur

It is a widely accepted belief that certain categories of the society have remained out of reach of the education net, which include SCs, STs and Muslims. Many reports have shown that Muslims among minorities are educationally backward. Similarly the enrollment of tribal children has been gradually increasing over the years; but the process has been extremely slow. DISE data reveals that the proportion of ST (22.17%) /Minority (8.18%) students is quite high in proportion to the total enrollment in government schools. The Gender gap too is highest for Minorities (9.12%) and ST students (7.40%). The Child Tracking Survey also indicates a large number of students dropping out are from these categories. This indicates the importance of government system of schooling for these sections of the society. Thus, coveted goal of education for all can only be achieved by including these deprived sections into the education net.

The present paper is based on two studies sponsored by the Ministry of Human Resource Development, Government of India, first on elementary education facilities in Muslim pre-dominated areas and the other on elementary education facilities in tribal pre-dominated areas in Rajasthan. The studies focus on assessing the schooling facilities including Maktabs /Madrasah, EGS, AIE and Tribal Department Centres, the improvement in enrollment and retention, incentives available for them and the perceptions of the parents about the facilities available for them especially girls.

The studies found that there is a lack of specific measures for these vulnerable sections of the society. The facilities for ST/Minority are the same as for all the students. Keeping in mind the socio-economic & cultural fabric of this lack of incentive also poses as a challenge in ensuring their basic educa-
Education for Capability Expansion

It is found that the more effective measures are required to ensure that the facilities are evenly distributed with inclusive concerns at the school level for which the school’s academic wherewithal has to be sensitized, thus creating a more congenial environment in the schools to make these vulnerable children at ease in pursuance of their studies. It is argued that cultural and social sensitization of the education system is also required in ensuring delivery of education to these sections of the society. The monitoring system should be made effective with regular visits to schools by educational personnel placed at different levels for this purpose. Thus, there still exists a need to formulate and implement a meaningful strategy for improving the coverage and quality of education for these children.

Marriage before 16 or 18 Years: Effect of Marital Age on Women’s Educational Attainment in Bangladesh

Mohammad Mainul Islam, Md. Kamrul Islam, Mohammad Sazzad Hasan, Md. Aminul Haque, University of Dhaka, Bangladesh

In spite of high prevalence of child marriage in Bangladesh, studies on the effect of child marriage on educational attainment of women are limited. We sought to answer the questions: to what extent the effect of child marriage on educational attainment vary by women married below 16 and 18 years of age?, and how does age at first marriage affect a woman’s length of participation in school? Thus the objective of this study was to assess the impact of child marriage on secondary incomplete and higher education, and total years of schooling of women.

Bivariate and multivariate analysis was conducted by using the 2011 Bangladesh Demographic and Health Survey of which 17,749 respondents were 15-49 years old ever-married women.

Child marriage (whether married before 16 or 18 years) leads to higher rate of secondary incomplete education for women compared to their respective reference category even after adjusting for their age, employment status, economic condition, religion and division. The higher rate of incompletion secondary levels among women who are married as children would exert wide range of consequences both at individual and national levels. We found that reducing each year of age at first marriage for women would lead to six months reduction in their years of schooling suggesting that two years decline in age at marriage (e.g., from 18 to 16) would cause one year loss of schooling on an average. It should be mentioned that for a year lost in education, will throw millions of young females into poverty, exploitation, abuse and vulnerability.
Child marriage before age 16 (instead of 18) leads to higher rate of secondary incomplete education, and lower rate of higher educational attainment for women. Completing higher secondary education will bring higher employment opportunities compared to those who could not finish higher secondary education. If Bangladesh wants to harvest the benefits of education, effective strategies should be taken to prevent child marriage instead of making 16 years as the legal age of marriage for females. Therefore, the government should take this rationally while reviewing legal age of marriage for young females in a way that is conducive for their socioeconomic advancement in general, more particularly for educational development.

Demographic Transition, Public Expenditure on Education and Economic Growth: New Macroeconomic Evidence from India

M. R. Narayana, Institute for Social and Economic Change, Bengaluru

This paper argues for a macroeconomic linkage between demographic transition (through age structure transition), public spending (or consumption expenditure) on education and economic growth to answer important policy relevant questions including: How does age structure transition impact on public spending on education? Will age structure transition result in savings of public resources in elementary education? If so, can those savings be the new sources of public expenditure for secondary and higher education? How to separate consumption and production effects on economic growth within the public consumption expenditure on education? What are the nature, magnitude and duration of growth effects of public education spending through human capital formation? Using the National Transfer Accounts methodology and a model of expenditure forecast, these questions are answered by the following analysis with reference to public consumption expenditure on education. Age profile of public education expenditure by levels of education is calculated for the benchmark year 2005 and forecast up to 2050 and beyond. Impact of age structure transition on public education spending is (a) distinguished by age and levels of education, (b) decomposed by age structure and other effects, and (c) explored on reallocation of resources by levels of education. Growth effects of public education spending forecast on consumption and investment are calculated through demographic dividend up to 2050. Forecast results show that age structure transition reduces public education expenditure on pre-secondary education because of a long term decline in young (less than 14 years) population. A decomposition of sources for the decline in
public expenditure shows that age structure transition is a major source for the decline as compared to changes in per capita spending levels and interaction effects between age structure transition and changes in spending levels. Results on growth effects show that the demographic dividend can be positive, higher and longer up to 2050, if more public education spending on human capital formation is reallocated for the secondary and higher education. Thus, in the context of the demographic transition over the period 2005 to 2050, new long term policies on size and reallocation of public spending by levels of education are essential for attainment of higher economic growth for India. These new macroeconomic evidences and implications provide useful design parameters for such new policies on public education spending, at present and in future. In addition, subject to the comparability of socio-economic and demographic structures, the above macroeconomic approach and implications are of relevance for other developing countries in Asia and elsewhere in the world.

Intergenerational Transfer of Education among Social Groups in India

_Palashpriya Halder, Vijaygarh Jyotish Ray College, Kolkata _and _Ishita Mukhopadhyay, University of Calcutta_

Mobility is one of the pillars in the process of development. This lack of mobility means that many sections of the society are unable to reap the benefits of the phenomenal levels of economic growth of the country. Economists have looked at the persistence as a channel through which the inequality is transmitted across generations. In the absence of mobility over generations, the gains from growth accrue disproportionately across the population and in particular some sections of the population are unable to take advantage of the opportunities that the growth process in the country has provided. For the benefits of the growth process to be distributed in a much more egalitarian manner, the population needs to be mobile, specially, in terms of increasing the level of educational attainment across generations. While the issue of intergenerational mobility in educational attainment has received some attention in other countries, the issue has received surprisingly little attention in the context of India. The absence of intergenerational educational mobility among the socially excluded classes in the developing countries in comparison to certain advanced groups is another manifestation of long-standing discrimination in terms of capability formation (educational attainment). India serves as an excellent case study because of the presence of diverse social groups and a
long history of gender discrimination between them. In the present paper, we examined the extent of intergenerational mobility of education from father and mother to son and daughter, in terms of educational attainment, respectively. We used India Human Development Survey (IHDS), Round II (2011-2012) dataset. In order to examine the extent of educational mobility over generations, we categorised four pathways of transfer: Father to Son (F-S), Father to Daughter (F-D), Mother to Son (M-S), and Mother to Daughter (M-D). Then we defined one variable “sameedu” in order to find out whether “level of education” was the same between two generations or not, that is, if the value of sameedu=1 then there is “persistence” in the level of education, otherwise there is “mobility” in the “level of education” between generations. Again this “sameedu” is further divided into four categories: sameedu1 for F-S transfer, sameedu2 for F-D, sameedu3 for M-S and sameedu4 for M-D. As the result from logit regressions suggest, from the above mentioned transfer pathways, we find that as the level of education of one generation increases, it is more likely that there will be “mobility” in the “level of education” between generations for most of the social groups at each level of education.

Impact of School Feeding Programs on Educational Outcomes: Evidence from School Dry Cereals in Burkina Faso

Pourikèta Rita Nikiema, University of Cheikh Anta Diop, Senegal

This study uses a quasi-experimental method to evaluate the impact of a School Feeding Program on educational outcomes in primary schools in Northern Burkina Faso. The program targeted at school level is a double scheme. First, in all schools, at lunch time students are provided with meal each school day. Second, in all rural schools where girls’ enrollment rate is below 40 per cent, all girls are provided with an additional scheme, take home ration for household. Under this additional scheme, girls are provided with 10 kg of dry cereals each month, conditional on 90 per cent attendance rate. At the end of 2011-2012 academic year, results by difference-in-difference regression shows that taking home ration increased school attendance for all students (boys and girls) by 8.4 per cent. However, while enrollment rate within schools increased for girls, it decreased for boys. Indeed, results show us that girls’ enrollment rate increased by 3.2 per cent and boys’ enrollment decreased by the same percentage suggesting a substitution effect between boys and girls within schools. This means that taking home ration leads parents to send more girls in school but pull up boys for labor because the latter do not benefit from taking home ration. In addition more girls mean more food for household. Moreover, our results suggest that schools characteristics influence the extent
to which taking home ration improves school attendance and girls’ enrollment. Students in schools which had more female teachers and in public schools gained significantly more from the program. Overall, our results show that school feeding through taking home ration programs in a specific context of food insecurity can increase school attendance and girls’ enrollment. We conclude that taking home ration has the potential to increase girls’ educational attainment and the long term gender equality within schools.

Presence of Horizontal Education Inequality in Bodoland Territorial Area Districts of Assam

Rupan Boro and Rajshree Bedamatta, Department of Humanities and Social Sciences, Indian Institute of Technology, Guwahati

Education plays an instrumental role in enhancing elementary freedoms (Sen, 1995, Dreze and Sen, 1996). Inequality in access to education and job opportunities adversely impact expansion of valuable capabilities. In a stratified society, if the privileged groups control political processes that run the school system and funding structure, favoring promotion of only members of the in-group, gives rise to a deeply unequal society. Such inequality between groups is defined as horizontal inequality (HI) as opposed to vertical inequality (VI) which is inequality between individuals irrespective of their social identity (Stewart, 2000). Empirical studies have shown that horizontal education inequalities (HEI) can play significant role in furthering ethnic stratification and unrest in society. The argument is that unequal provision of education opportunities leave children of subordinate groups feeling undermined and humiliated, or convinced that the majority of the groups consider them inferior. They are forced to leave schooling with a deep sense of distrust in state funded institutions. Further, low levels and poor quality of education received by the children of subordinate groups make them more vulnerable in violent situations (Bush and Saltarelli, 2000).

This paper seeks to inquire if there were significant horizontal education inequalities in the Bodoland Territorial Area Districts (BTAD); a recurrent ethnic violence affected autonomous region in the state of Assam, India. We used the framework developed by Mancini, Stewart and Brown (2010) to measure HEI. The NSSO 61st (2004-05) and 66th (2009-10) Employment Unemployment round unit level data have been used to calculate the population weighted group Gini coefficient (GGini) based on the dimension of education (literacy rate, average year of schooling and status of current attendance). The NSSO socio-religious classifications
have been followed to group the population into Muslims, STs, SCs, OBC and General. Our estimates show evidence of significant horizontal education inequalities in BTAD and western Assam compared to the whole of Assam. This paper in no way attempted to conclusively prove a causal relationship between HEIs and violent conflicts. It is only a reflective of any policy relevance that such measurements can have, given the recurrence of violent conflicts in this region.

Understanding the Dynamics of Educational Inequalities among the Socio-Economically Marginalised: A Study from Four Districts of India

Usharani Rathinam, Western University, Canada

Existing educational policies emphasise an equal opportunity in education, and universalisation of primary education, howbeit, it is a well established fact that there are more number of women illiterate globally and in particular, India. Differences also exist in educational stages between men and women; however, this varies among states, regions, socio-economic classes and castes. For example, Kerala has advanced much in achieving women literacy when compared to other states of India. This paper discusses on how gender differences in acquiring education perpetuates among the marginalised class, followed by a suggestion that could be used to review policies. I utilised case study approach to address this concern in four districts of India; Jhansi, Tikamgarh, Cuddalore and Anantapur. These four districts were selected by purposive sampling based on two criteria; the district should either be categorised as a backward district or should have a history of high poverty rate, and should have different local dialect and traditions. Qualitative methods including eighty in-depth interviews, six focus group discussions, six social mapping procedures and three key informant interviews were conducted in 2011, at each of the locations. In Jhansi and Tikamgarh, the BPL census 2009 and in Anantapur and Cuddalore, criteria obtained from Modified Poverty Assessment (MPA) exercise were used to select the participants using purposive sampling to represent the poor.

Analysis of the data revealed that proportion of female illiterates was higher than their male counterparts in all the study districts, and the number of female participants was found to be indirectly proportionate to the level of education. This implied that female participants were less qualified than men. Further, intra-household allocation of resources for education varied between male and female children in the study districts; sons are preferred for higher and premium education,
whereas daughters are retained for household chores. This contrariness is mainly observed in large sized (6-10 members per family) families with lower income. A general conception that men have greater social value in patriarchal societies like India promoted families to spend more resources on male prodigy for education. This trend has given an indication that unequal educational procurement, and differences in the level of education between men and women would probably be continued to future generations. Therefore, in order to formulate an effective policy, it is significant to consider the structural complexity and dynamics that perpetuate gender inequalities in attaining education, rather than having a universalised policy.

Expansion in Education, and Its Impact on Income Inequality: Cross-Section Evidence from India

Vachaspati Shukla, Centre for Development Studies, Thiruvananthapuram

Generally societal inequalities are viewed as undesirable because income inequality can exercise negative influences upon the economic and political environments, many would agree that having a less skewed distribution of income is preferable to a highly unequal society. In this regard, education is often seen as a potentially powerful income equalizer. The policy of equal access to education is supported when there is an interest in equalizing income distribution. A common view is that education can play an important role in reducing income inequality. If the pool of the workers with better educational achievement increases, it reduces the inequality in the distribution of income in the economy. However, theoretical studies suggest that the relation between education and income inequality is not always clear. The human capital model of income distribution relates dispersion of earnings with level and dispersion of schooling and rate of returns to schooling. It predicts that if educational expansion reduces the returns to education; an increase in schooling can reduce the inequality in the distribution of income. Contrary to this, if relation between the returns to education and the level of education is positive, improved access to education might increase inequality.

India too, has seen the enormous progress in the educational expansion in recent years, as evidenced by improved literacy, enrolment rates and increase in the number of educational institutions. It led to the significant decline in the inequality in educational opportunities. However, it is still not known how expansion of educational opportunities in India impacted the inequality in income distribution.
In this background, this paper attempts to examine the association between educational expansion and income distribution using cross section data from India. It is carried out separately for rural and urban sector. During the course of analysis, an attempt is also made at verifying the inverted U-shaped relationship for mean and inequality in education, and mean and inequality in per capita income. The empirical results confirm the inverted U-shaped relation for mean and inequality in education both for rural and urban sector with varying turning points. But this is not observed in case of per capita income. A U-shaped relation between mean and inequality of per capita income is observed in rural sector while it is found linear in urban sector. The finding also suggests a negative influence of mean years of schooling on income inequality while share of ‘graduate and above’ positively influence the income inequality in the urban sector. There was no such evidence found in rural sector.
Theme 3

FOOD AND NUTRITIONAL SECURITY
Answers to India’s Child Malnutrition Paradox: The Positive Deviance Model

Aakanksha Sinha, Ruth G. McRoy, Barbara Berkman and Melissa Sutherland, Boston College, USA

India has the world’s highest share of child undernutrition population (World Bank, 2013). This situation is prevalent despite presence of the largest national nutritional program in the world. The UN Millenium Development Goals (MDG) report (UN MDG, 2015) highlighted India’s failure to reduce prevalence of child undernutrition by half, i.e. to 26%, by 2015. To achieve the post-2015 SDGs 2 and 3 which aim to eradicate child hunger and malnutrition by 2030, the approach towards tackling undernutrition needs to be re-looked. This study, in the background of success in other parts of the world, recognizes that financial support alone is not sufficient to improve the nutritional status of children in India. There is a need to examine best practices and understand as also attend to underlying social norms and power relations existing within households. These interventions help to build favourable caregiver characteristics in a more strategic manner and would lead to better nutritional outcomes.

The 2005-06 National Family Health Survey (NFHS-3) is utilized for this cross-sectional study. The study sample consists of urban women (15-49 years), who are married and have at least one living child (0-5 years) [N= 9,092]. Confirmatory Factor Analysis (CFA) is used to develop and validate scales on maternal autonomy and health related awareness. Three ordered logistic regression models (OLS) with mediation effect were conducted to examine the effect of maternal autonomy and health related awareness on child nutritional status, when mediated by maternal health. Child nutritional status was measured using Z scores for stunting, wasting and underweight. Socio-demographic variables including maternal age, education, caste, location of household and income, sex of child and enrollment in the Integrated Child Development Scheme (ICDS), were used as controls.

The results indicate that maternal health, autonomy and health related awareness significantly predict a difference in child nutritional status. The OLS results indicate that caste, education, enrollment in ICDS, sex of the child and residing in states with more gender equality (e.g. Kerala) were significant predictors of child nutritional status. The mediation model results show that maternal autonomy and health related awareness do not have a significant direct effect on child nutritional status, however a significant indirect effect when mediated by maternal health was observed. For this model, socioeconomic status was controlled. The total effect was 1.5 times higher than the direct effect and 36% of the total effect was related to maternal health.
The results of this study highlight the continued prevalence of child undernutrition in India. It suggests that socioeconomic status is not the only predictor of child nutritional status. Deep-rooted cultural values need to be challenged to achieve headway in the nutritional status of the children in India. Rather than concentrating only on the supply of meals through the ICDS, efforts need to be made to (i) understand how to tackle underlying social and cultural values that are averse to investment in girls and women who are critical for child development, and (ii) recognize and learn particularly from low income mothers who have been able to successfully tackle the issue of poor child nutrition in their community.

Enhancement of Finger Millet Production for the Food and Nutrition Security of Tribal Community in Koraput District of Odisha

Akshaya Kumar Panda, Balaji Mohanty, Susanta Kumar Mishra, Santosh Raj Benia, Debadatta Gouda, Max Aurthur Gill and Ghasi Takri, M. S. Swaminathan Research Foundation, Chennai

Finger millet (Eleusine coracana (L.) Gaertn) is the major cereal crop in the undulating terrain of Koraput district of Odisha; it is a staple food of the native tribal communities who constitute 51 per cent of the district’s population. More nutritionally rich than rice and wheat, finger millet is also a climate resilient crop. The area under finger millet has however been falling over the years and giving way to commercial and horticultural crops. Area under finger millet now accounts for 16 per cent of the total gross cropped area and 28 per cent of the total area under cereal crops cultivation in the district. The tribal communities predominantly cultivate local landraces of finger millet viz: Telugu mandia, Dasara mandia, San mandia and Bada mandia using traditional agronomic practices like broadcasting; they rotate the same seed year after year by saving their own seed which is a mixture of varieties and generally low yielding.

Enhancement of finger millet production however can be a means of addressing food and nutrition insecurity in the district. Promotion of nutritious finger millet has been identified as a major initiative under a feasibility study of a Farming System for Nutrition (FSN) approach to address nutrition deficiencies under the research programme on “Leveraging Agriculture for Nutrition in South Asia (LANSA). Enhancement of finger millet cultivation and yield in selected project villages in Boipariguda block of Koraput district has been taken up to promote consumption of the nutrient-dense crop. This is being done through introduction of new high yielding variety of the crop, improved production package of prac-
tices and seed selection and storage in village seed banks. GPU-67, an improved variety selected by farmers under an earlier project in the district yielded 31 per cent more than the local varieties, in 2015-16. Larger area and more farmers are being targeted this year. A sustainable seed enterprise also has to be developed to ensure availability of the improved variety of seed.

The Nutritional Impact of the Public Distribution System in India: A State-level Analysis

Anjana Thampi, Jawaharlal Nehru University, New Delhi

Since its inception, the Public Distribution System (PDS) in India has undergone many changes. In 1997, following claims of the urban bias and high level of leakages of the system, there was a shift from universal to targeted PDS. The current refrain is to dismantle the system altogether and put in place cash transfers or food coupons. However, this refrain does not give sufficient importance to the recent evidence of a revival of the PDS in some states after 2007, which has been replicated in many other states by 2011-12. The improvements in the impact of the PDS on poverty reduction have been extensively studied in the literature. Studies on its impact on nutrition have been relatively less, and consider the effect in terms of intake of nutrients. This paper therefore adds to the literature by studying the state-level impact of the PDS on child anthropometry in the context of the recent changes in its functioning. A further objective is to understand whether the PDS as a programme of nutritional supplementation has been able to aid catch-up growth among previously malnourished children.

Extending an earlier classification on the basis of utilisation of the PDS, states were divided into functioning, reviving and languishing states using three rounds of National Sample Survey data between 2004-05 and 2011-12. To study the impact, propensity score matching was applied to India Human Development Survey data of 2011-12. The impact of expansion of coverage of the PDS on the nutritional indicators of children aged 7-19 years was studied by state. This exercise showed that the coverage expansion of the PDS has had a significant impact on the longer-term nutritional indicator in three of four functioning states, while it has had a significant impact on the shorter-term nutritional indicator in two of the reviving states. A further objective was to study the role of the PDS in aiding catch-up growth of children in each state. This showed that the revival of the PDS has begun to translate into nutritional gains in some states and indicates the greater role of the PDS in aiding catch-up growth in these states over the past decade. This paper thus attempted to understand the
long-term nutritional impact of the PDS at the state level and thereby contribute to the existing body of work on the subject. Such a study gains relevance in the context of the increasingly louder advocacy of replacement of the PDS with direct cash transfers.

Food and Nutrition Security in Nepal: Status, Trends and Challenges

Anjani Kumar, Praduman Kumar, Ramesh Sharma and P K Joshi, International Food Policy Research Institute, Asia Office, New Delhi

Food security is defined broadly with at least four dimensions of availability, access, utilization and stability. These dimensions are often interrelated, and are broad enough in terms of the indicators to characterize them. Nepal, like many other developing countries, continues to struggle with issues of food and nutrition security. The 2010/11 Nepal Living Standards Survey (NLSS) shows that 42 percent of children are stunted, 14 percent are wasted and 31 percent are underweight. The extent of under and malnutrition has important implications on country’s long run socio-economic development. However, Nepal has the distinction of achieving the highest reduction in undernourishment at the global level. This stellar achievement by Nepal in the midst of a violent Maoist insurgency (2001–2006) and subsequent political instability and uncertainty (2006–2011) is really outstanding. Nevertheless, challenges remain as Nepal continues to lag many of its peers in ensuring food and nutrition security.

In this backdrop, we try to understand Nepal’s dynamics of food and nutrition security based on the three rounds of Nepal Living Standards Survey (NLSS, 1995/96, 200304, 2010/11). Specifically, we are examining (i) the progress in food supply in terms of availability at the national levels; (ii) progress in terms of access to food and nutrition requirements at the household level; and (iii) the drivers of food and nutrition security.

The Nepal Living Standards Surveys (NLSS) are nationally representative household surveys conducted by Nepal’s Central Bureau of Statistics and covering about 6000 households. The integrated household questionnaire address multiple topics including food consumption and production, household expenditures, farm and off-farm income, labour and other welfare measures at both the household and individual levels. The NLSS followed the methodology of the World Bank’s Living Standard Measurement Survey and used a two stage stratified random sampling technique.

Trend in food security in Nepal with the latest available evidences
in terms of availability, access and absorption, indicate that all these dimensions are inter-related. This paper also sheds light on impact of some socio-economic factors and policies on food security. These conclusions have some important implications for the food policies to ensure food security in Nepal. The persistence of nutritional deficiency suggests to vigorously pursuing the long-term strategies for augmenting food production, especially through enhancement in productivity. The positive relationship between household income and nutritional intake suggests that the income enhancing and poverty reducing programmes should be continued, broadened and enhanced to achieve the desired outcome.

Indigenous Communication Forms and Their Potential to Convey Food Security Messages in Rural Ethiopia

Hagos Nigussie Kahssay, University of Queensland, Australia

This paper examines the use of indigenous communication forms to convey food security messages in chronically food insecure areas of eastern Tigray, rural Ethiopia. Food insecurity has become one of the defining features of rural poverty for most of the developing nations. Studies indicate that Ethiopia is one of the most food insecure countries in the Sub-Saharan region. 85% of the Ethiopian population lives in rural areas and the nation predominantly relies on agricultural economy. Based on this, the Ethiopian government has introduced Agriculture Development-Led Industrialization (ADLI) as its main development strategy. However, ADLI could not provide the required result compared to the time it took. Consequently, the country has been in a state of food insecurity and poverty as many of its rural population relies on foreign food aid for their survival. Despite the various factors determining food security, this study is confined to the use of indigenous communication forms to convey food security messages. To this part, ‘Multiplicity paradigm’ of development was used as the basis for this study. Multiplicity paradigm focuses on the cultural and social multiplicity perspectives and the role of people as initiators to their own development. Overall, this paradigm advocates that there is no specific development strategy for nations as each can devise its own development strategy. This study employed an ethnographic research method. Individual in-depth interviews, focus group discussions, participant observation and document reviews were used to generate data from two districts of eastern Tigray namely: Irob and Gulomekeda areas. Hence, the study findings showed that there are no explicitly designed rural food security communication strategies but food security messages are communicated through frequent government meetings. However, respondents believed that government meetings are dominated by the interests of government
officials and development agents that rarely entertain peoples’ needs. The findings also indicated that indigenous communication forms are widely practiced in eastern Tigray to which rural people distinguish them as potential conduits to convey different messages. Development agents and food security experts also believed that these communication channels have the potential to mobilize communities and enable them to actively engage in food security programs. But indicated that they are not using them as they are not included in food security implementation manuals. Thus, the overall result of the study showed that despite the knowledge about the potential of indigenous communication forms to convey food security messages, development agents are not using them in food security programs which have resulted in low level community participation in the food security programs.

Looking at Wellbeing: Why Processes are Important

Joydeep Baruah, Associate Professor, OKD Institute of Social Change and Development, Guwahati

In the evaluation of wellbeing and development it is also necessary to measure the subjective outcomes through the experiences of the people and their communities. This can be carried out within the capability framework, which essentially aims at enlarging freedom and minimising critical deprivations of human life. The objective outcomes of development such as, reducing income poverty, illiteracy, mortality and morbidity would still occupy the central theme in a development agenda but these should be considered to constitute the basic elements of the capability of individuals that expand their opportunities to choose a life they value.

The notion of ‘freedom’ embodied in capability, however, has two connotations - (i) freedom from within i.e. individuals are to be freed from internal limitations due to basic deprivations in terms of ill health, ignorance and poverty to exercise choices over given opportunities, and (ii) freedom from limitations imposed by external conditions in exercising their choices. The first i.e. the ‘opportunity aspect’ of freedom relates to the level of achievement, while the second relates to the ‘process aspect’ of freedom i.e. how the realised level of wellbeing is actually achieved. Therefore, the normative framework of evaluation must examine, not only the achievements, but it should also carefully assess the processes by which the achievements have been realised. In the capability approach, the first type of achievement – achievement without taking note of the processes involved is usually called ‘culmination outcome’. The other type – achievements considered along with processes involved is formally
called ‘comprehensive outcome’. The relation between these two aspects of freedom is of fundamental significance in a capability approach.

In this paper the idea of subjective wellbeing is wholly concerned with the valuation of processes. It is subjective because it takes note of qualitative aspects of various processes involved including governance and service delivery. The valuations of various processes – social, political, ecological and personal – have been attempted by considering peoples’ level of satisfaction over them, where ‘satisfaction’ is taken to be reflective of the implicit preferences of people over the existing processes. If a person is unsatisfied in any aspect of the processes, it simply implies that the process under consideration is surely not of the kind that he or she would prefer and would, therefore, value.

The paper attempts at a clear value addition by emphasising on ‘comprehensive outcomes’ within the capability framework. This emphasis on ‘comprehensive outcome’ enlarges the scope of analysis and also widens the perspective of the progress of wellbeing and development. This paper clearly underlines why processes are important in evaluating wellbeing.

Family Planning and Its Association with Nutritional Status of Women: Investigation in Select South Asian Countries

Md. Juel Rana and Srinivas Goli, Jawaharlal Nehru University, New Delhi

Maternal, infant, and young child nutrition (MIYCN) and family planning (FP) programs and services are often perceived as distinct, yet integration of these interventions can be mutually beneficial for mothers and their children. Previously, studies have documented that childbearing during adolescence hamper post-menarcheal linear and ponderal growth of young girls during a potential window of opportunity for the catch-up growth in an undernourished population. Furthermore, pregnancy and lactation in early gynaecological age leads to depletion of maternal fat stores, micronutrients and increases the vulnerability of young mothers to lean body mass. Moreover, spacing of births will allow women to feed their babies well and also help them to recover from physiological losses of previous birth. Use of contraception allows planning of the births in terms of postponement of childbearing and spacing and limiting of births. However, the literature on the returns of family planning largely ignored to quantify significant relationship between the planning of the births and nutritional status of women. Therefore, in this study, an attempt has been made to examine the research question, ‘does planning of the births affect the women’s nutritional status?’

Food and Nutritional Security
We used the recent Demographic and Health Survey (DHS) data of four South Asian countries (Viz. India [2005-06], Bangladesh [2011], Nepal [2011] and Pakistan [2012-13]) which are considered under countries with low family planning use and high malnutrition levels among women and children. Since, questions on family planning and planning of births are not uniformly asked in all the four countries; we used the planning of births comprising the birth order and birth interval as a proxy indicator of family planning. We used descriptive statistics, Bivariate, and Multivariate regression analysis. Multinomial regression with MCA conversion model was used to estimate adjusted percentage of nutrition outcomes by selected independent factors.

The results reveal that women’s nutritional status has shown a significant relationship with the planning of births: being ‘thin’ in women is significantly higher among those with axis of birth order >3 and <24 months of interval between birth and subsequent birth [IBBSB] (32.2%, p < 0.01) compared to women with birth order 1 and 12-24 months of interval between marriage and first birth [IBMFB] (27.4%). Overall, the findings advance that family planning for the timing, spacing and limiting of births can promote better nutritional status in women.

This study is a first empirical step towards the maximizing synergies between maternal malnutrition and family planning. Integration of family planning and nutritional interventions can be beneficial for mothers. Thus, along with food security and other social safety programs, planning of births using contraception in terms of timing, spacing and limiting of births is very important in eradication of women malnutrition in South Asian countries which is a needed step-up to achieve the SDG 2 and 3.

Revisiting the Determinants of Child Anthropometric Indicators in India Using Seemingly Unrelated Regressions Model

Naline Gandhi and Brinda Viswanathan, Madras School of Economics, Chennai

With the MDG’s set to expire in 2015, the recent achievements in the progress of child health indicators in India such as mortality, morbidity and malnutrition have failed to distribute the fruits of the development evenly among the States and also within states; as in one State performing well in one indicator and not in the other. This paper focuses on the malnutrition indicators of children in India namely stunting, underweight and wasting. The main objective was to identify the predictors of child under nutrition and analyze the differences in the impact of determinants across the three
indicators and between States. The National Family Health Survey (NFHS 3) data was used which gave information for nearly 51555 children of 0-59 months of age to understand how the determinants of intergenerational transmission, feeding and care practices and ICDS varied in their impact when these commonly used measures of child nutritional status were considered together in a systems framework. The SUR technique was used to improve the efficiency of regression estimates as in one hand, errors in the measurement in individual height for age, weight for age and weight for height was likely to be correlated (contemporaneous correlation) and on the other hand other household level omitted variables for a child belonging to the same household could also be correlated. Breusch-Pagan LM Diagonal Covariance Matrix Test was used to check the appropriateness of SUR model. As expected, mother’s height, BMI and anaemia levels were all highly important in explaining the variations with large impact of height on HAZ, BMI on WAZ and more widespread impact of anaemia on WHZ. Initiation of breastfeeding within an hour of child’s birth, exclusive breastfeeding in the first six months, and inclusion of protein rich diets for the older children had a large impact on HAZ and so did access of daily food supplements from ICDS by rural children. Other predictors such as wealth status, safe water access, sanitation and use of clean cooking fuel by the households, were found to be strongly associated with all the indicators. The results from this study, strengthen the evidence that though multiple determinants played a role in child’s growth, the key factors were in the mother to child transmission and in quality of early child care feeding habits and preventive and curative health care practices. In India, the performance of these indicators varies because of the influence of the regional factors and also because of major variations in wealth status, caste and religion. Since nutrition depends on various factors, the linkage of nutrition with sanitation policies, environment policies, agriculture related policies and infrastructure, needs to address under-nutrition.

How Consumer Price Subsidies Affect Nutrition

Neeraj Kaushal, Columbia University and Felix Muchomba, Rutgers University

There is a longstanding debate on the extent to which nutrition among the poor in developing countries improves with income or food price subsidies. A key concern with existing research is that estimated effects are likely biased since income is not exogenously determined and low-income households, who are more likely to seek and receive subsidies, are also likely to have lower levels of nutrition. We investigate the effect of an exogenous increase in food price subsidy to poor families resulting from the introduction in 1997 and expansion in 2002 of India’s Targeted Pub-
lic Distribution System. The Indian government issued BPL ration cards to low-income households, which could be used to purchase at approximately two thirds of the market price 10 kg of rice or wheat per household per month - an amount that was raised to 35 kg in 2002.

We used data from the 1993-1994, 1999-2000, and 2004-2005 National Sample Surveys that allowed us to control for long-term trends in nutrition and estimate the effect of food price subsidy on consumption patterns and nutrition as measured by per capita calorie intake, per capita protein intake, and per capita fat intake. We focussed on states with relatively high take up of food price subsidy and used the probability of BPL ration card ownership as an instrumental variable for the food price subsidy of households.

We found that the increase in income resulting from the subsidy, increased consumption of the subsidized grains and certain more expensive sources of nutrition, lowered consumption of coarse grains, the cheaper, yet, unsubsidized staple food, and increased expenditures on non-food items but had no effect on nutrition. Estimates of the price effect of the subsidy on nutrition were also negligible; the price subsidy increased consumption of wheat and rice and lowered consumption of coarse grains. Further, our analysis showed that households allocated some of the increase in income from the food price subsidy to expenditures on non-food items.

Our results thus suggested that the poor felt the other deprivations acutely more which resulted from poverty than low nutrition and that they tried to reduce with additional income from food price subsidies.

**Access to Food, Poverty and Inequality by Social and Religious Groups in India: Estimation with Unit Level Data**

*Panchanan Das, University of Calcutta and Anindita Sengupta, Hooghly Women’s College, Kolkata*

This paper looks into nutritional wellbeing and relative deprivation in terms of food security, poverty risk and inequality of the people in different castes and religions in India by utilising household level information. This study estimates relative poverty or the risk of poverty by comparing actual consumption expenditure (taken as a proxy for income) per capita of a household to the 75 percent of median expenditure of the population distribution. The Gini index is used as a summary measure of consumption inequality. It also identifies how the household specific
factors are responsible for food security that is not adequately quantified so far by applying discrete choice model with ordered logit specification. Ordered logit in our study produces predictions about the probability of a person’s severity level of food insecurity.

Dalits are socially excluded and have unequal access to labour markets because of lack of human capital and other resources for historical reasons. They are more likely to be poor and their poverty perpetuates through generations. People in Hindu religion in rural areas and Muslims in urban locations suffered more from poverty risk. Christians were relatively better off as compared to other religions. Distribution of consumption expenditure was more unequal among Christian population in rural areas and Hindus in urban areas. Consumption inequality in nonfood items was significantly higher than inequality in food consumption for every religion both in rural and urban areas in India. Inequality in food consumption was the highest among the upper caste people in Hindu religion both in rural and urban economies. In the case of Muslims, inequality in food consumption was highest among upper castes in rural and among the schedule tribes in urban areas.

We define severe or chronic food insecurity if family members within a household manage to take one meal or less per day, transitory food insecurity if number of meals taken lies between one and two, and no insecurity in food when they were able to take three meals or more a day. Food insecurity in this study is primarily a phenomenon relating to households and the analysis is based on unit level data. The likelihood of food security was higher in the rural economy as compared to the urban one. The extent of food security had been lower for the Muslim households, the major minority religious group in India, as compared to Hindus and other religious groups of the country. The severity of food security was also significantly less among the tribal people compared to other social groups. The tribal people were mostly food insecure while the chance factor for their food security in transitory stage was the highest both in the rural and urban economy irrespective of religion.

Two Decades of Geographical Targeting for Food Distribution: Drawing Lessons from an Indian State

Rajshree Bedamatta, Indian Institute of Technology, Guwahati

Theoretical frameworks of public policy analysis necessarily deal with the twin concepts of ‘efficiency’ and ‘equity’. In an economic sense of the term, a policy that minimizes deadweight losses to the society is
said to have achieved efficiency and a policy that leads to an efficient re-distribution of resources/real income is said to have achieved equity. Since the initiation of economic reforms of the 1990s, the composition and the role of social sector expenditures of the Government of India has been highly debated. Two distinct and deterrent voices that have engulfed mainstream public policy analyses are: One, the State’s dependence on very high levels of subsidies has resulted in an opportunity cost to the society that far outweighs the social benefits derived out of the subsidized goods. In effect, it has led to a large scale crowding out of private investment thus hampering private savings and growth (Bhagwati and Srinivasan, 1993; Parikh, 1994; Dutta and Ramaswami, 2001).

The second and contrasting opinion largely emerges from the critics of neoliberal policies of economic reforms that say that the overall welfare costs of increased privatization and narrow targeting of population has led to large scale ‘errors of exclusion’ whereby the social costs of under-consumption have led to a highly unequal society (Cornia and Stewart, 1993; Swaminathan, 2002, 2008).

In India, among the subsidized welfare programs, the targeted public distribution system has seen fierce debates in the recent decades. The debates surrounding the PDS policy are manifold. It ranges from those that denounce the need for a food distribution policy to those espousing for a universal policy of food transfers. Still others argue for a targeted system of food transfers (either through in-kind transfers, conditional cash transfers or food coupons) which gives rise to the issue of rightful identification of ‘beneficiaries’. With the official policy moving towards more and more of narrow targeting of households, a full-fledged debate on measurement issues has emerged in the recent times (Sundaram, 2003; Alkire and Seth, 2012).

This paper takes a long-term and critical view of the state of public distribution system in Odisha, one of the poorest states of India, and examines the welfare costs borne by rural households when the transition took place from a universal food distribution system to a targeted food distribution system from 1991-92 onwards. With the help of data collected on retail price and PDS price of rice during the period 1991-2011, this paper shows that households located in the poorest districts of the state suffered welfare losses when the policy moved from a universal to a targeted one. In the 2000s, Government of Odisha has moved towards a more universal PDS, which has led to a more efficient system.
Livelihood and Food Security amongst Some Vulnerable Groups in Jharkhand

Ramesh Sharan, Department of Economics, Ranchi University

This abstract is based on the study of the livelihood and food security two PVTGs (Particularly vulnerable tribal groups) namely Savars and Birhors who happen to be one of the most marginalized tribal groups in the State. While on the whole the tribes in Jharkhand are most food insecure community but the reasons for such vulnerabilities are multiple as the tribal groups are not homogeneous. Savars are almost within forty kms of the industrial zone of Jamshedpur. The same is the situation of the Birhors. The livelihoods and food security are closely linked. Both the group under study are primarily depended on withdrawal from common property resources, for food and cash income, wage labor and only partly on the state entitlements. They happen to be landless. Savars in the sample do not migrate and depend on the other farmer community and forest (selling of fuelwood) for their survival. The Birhors are basically forest dependent people who continue depend on the foraging from the forest that includes trapping of birds, hare, medicinal plant, rope making etc. The livelihood options for shrunk over time partly due to deterioration of the CPR and partly due to the policies of the state limiting the access on such resources. Because of limited mobility, the wage rates and terms of work has not improved much. They have not been able to take advantage of the newer options available because of their poor skills that includes basic literacy. The communities are in almost day to day survival mode. While there is deficit of food is in terms quality is chronic through out the year, in some of the months the food security becomes very low. They depend basically on cereals/rice for meeting the food requirement, protein/fat/micro nutrients are very deficient in their food baskets. They suffer social exclusion and geographical marginality which retards their access to state entitlements. The study has recommended that reach and access of state entitlements for these communities is very critical in the short run while in the long run access and clear cut property rights on CPR. There also is the need for sensitization of the delivery system concerning the problems and vulnerabilities the communities face.
Theme 4

BUILDING
HEALTHY
LIVES
Income Inequality and Population Health Outcomes in Developing Countries: A Cause for Concern?

Anil Methipara, Carleton College, USA

This paper develops a panel regression model to study the relationship between income inequality and population health indicators in developing countries. As developing countries look to improve their health outcomes, it is crucial for them to understand how these outcomes may be affected by different factors, including income inequality. The absolute income hypothesis suggests that income inequality would be negatively correlated with population health outcomes for a given country. However, much of the current literature regarding income inequality and population health has focused on developed countries.

Previous studies focusing on developing countries have severe limitations in estimating this relationship. Most of the previous developing country studies have used cross-sectional data which do not allow for estimation of the within-country income inequality and population health relationship over time. While longitudinal panel data allow for within-country estimation, and is therefore preferable for estimating this relationship, the earlier literature panel data in developing country have limitations stemming from omitting important variables such as education and health spending variables from their models. Because of these limitations, the significant results found in these studies need to be further interrogated.

This study addresses the limitations of the previous developing country studies by using a longitudinal panel dataset and a holistic set of control variables. Specifically, it tests if a developing country’s income inequality is correlated with its life expectancy at birth or infant mortality rate after controlling for country and time fixed effects, average income levels, female education, and public health spending. A full sample of 102 countries (including both developing and developed countries) and four sub-samples of low income (28 countries), middle income (46 countries), low and lower-middle income (56 countries) and low and middle income countries (74 countries) from the time period 1996 to 2007 were used to estimate this correlation. Countries were categorized into income groups based on historical World Bank income classifications. From the four sub-samples, two were identified as holistic “developing” country sub-samples.

Contrary to the predictions of the Absolute Income Hypothesis and the previous developing country panel data studies, the results show no correlation between income inequality and life expectancy at birth or infant mortality rate for developing countries. The results are robust across all sub-samples and the two definitions of “developing.” These results
provide preliminary evidence that income inequality does not predict population health outcomes in developing countries. Furthermore, they suggest that results from previous developing country panel data studies were biased due to omitted variables, and that the different direction of bias may be due to differences in the sample of countries. The results do not provide support for egalitarian income redistribution as a way to directly improve population health outcomes. Policy makers and future research seeking to improve population health outcomes in developing countries may want to move away from looking at income inequality as a determinant of population health and instead focus on other variables that are correlated with population health outcomes.


Charan S. Verma, Giri Institute of Development Studies, Lucknow

Every day, 800 women worldwide die from pregnancy or childbirth-related complications. Approximately ninety nine percent of them belong to developing countries and at least 160 women or 20% of them are from India. The majority of these deaths are largely preventable and treatable with prompt referral transport services and adequate medical attention. One third of rural women cite distance as being a big obstacle to obtaining medical care. Delay in reaching a health facility is one of ‘the three delays’; referral transportation also indirectly affects the other two delays, that is, the decision to seek care and delay in receiving adequate care. The present case study is presentation of a success story of a public private partnership (PPP) wherein implementing agency (NGO) tries to identify disconnects in knowledge and practices existing between health system and the community in order to facilitate a healthy involvement of both stakeholders on how to jointly improve the maternal experience and reduce maternal mortality and morbidity in Aligarh, where these risks are significantly higher.

Primary helpline data on 30785 pregnant women (CPW) registered with ASHA during January 2011 and December 2012 in the district were analysed to assess extent and pattern of transport utilization. Birth plan tracking results of helpline on utilization of ANC and PNC after the introduction of referral transport were analysed using qualitative analysis. In-depth interviews were done with 100 pregnant women, husbands, mothers in law, ASHA and ANMs. Institutional deliveries and use of ANC and PNC services in the district rose significantly after the introduction
of community based transport network service in Aligarh. Deliveries at home, in private nursing homes have declined sharply. Use of unsafe transport (bullock cart etc.,) was replaced by safe transport. The findings of the present study showed a positive effect of referral transport service on increasing institutional deliveries in general and the public institutions in particular, thus leading to more safe delivery and significant reduction in maternal and neonatal mortality.

Socio-Economic Inequalities in Maternal and Child Health Care in Selected South Asian Countries: Imperatives and Lessons for Health Care Related Policies

Lubna Naz, Karachi University, Pakistan

The present study analyzes levels, trends in maternal and child health care inequalities for India, Pakistan and Bangladesh. The study assesses bad health-care outcomes, absence of antenatal care among married women of 15-49 years and absence of full immunization coverage among children of 12-23 months. The study has used two sets of Demographic and Health Surveys conducted during 1990-2007 in each country to analyze within country and over time inequalities in maternal and child health outcomes. For that, it uses selected absolute (Range Difference and Slope Index of Inequality), and relative inequality measures (Rate Ratio, Concentration Curves, Concentration Index, and Relative Index of Inequality).

The slope index of inequality and relative index of inequality are regression-based measures. The slope coefficient of regression (SSI) shows relationship between a dependent variable (health outcome) and explanatory variable (relative rank of the wealth quintile). The RII, relative of SSI, is obtained by dividing the slope coefficient of regression (SII) by the mean of health outcome.

For decomposition of health inequalities, the study uses a binary variable (0 or 1) for presence/absence of antenatal care/child immunization. The explanatory variables include household wealth index, age of woman, husband’s education, place of residence, media exposure, birth order, and tap water. This study estimates two logit regressions, each for antenatal care and child immunization.

The results indicate largest increase in the rate ratio of absence in antenatal care (from 1.25 to 16.6) for India, and lowest increase (from 2.6 to 3.8) for Bangladesh over time. The RR in full vaccination coverage increases by 66 percent in India, by (62 percent) in Pakistan, and decreases by 5.5 percent in Bangladesh over time. The results from concentration...
curves show that maternal and health inequalities concentrate in poorest households. The estimates of concentration index show increase in maternal and child health inequalities over time in all selected countries.

The Slope Index of Inequality (SII) declines by 36.5 percent in India, by 45 percent in Pakistan, and by 56.76 percent in Bangladesh, if a woman moves from poorest quintile to wealthiest quintile in each country. The slope index of inequality for child vaccination (absence) show decline if a non-recipient child moves from poorest quintile to richest quintile in each country. The RII show lower likelihood for absence of antenatal care among richest households in all selected countries. Some initiatives are called for improving universal access in antenatal care and full vaccination of children in their early age at the national and South Asian forum. First, identification of the most disadvantaged socio-economic groups should be aimed by health care policies. Second, targeted provision of social capital in regions (worst in health outcomes) through common welfare fund at SAARC level, and third, consolidating taxation policies to redistribute income from richest to poorest at the district level.

Effects of Remittances on Health Expenditure and Types of Treatment of International Migrants’ Households in Bangladesh

Mohammad Mainul Islam, Sayema Haque Bidisha and Israt Jahan, University of Dhaka, Bangladesh

The economy of Bangladesh is characterized by remarkable progresses in the area of international migration, resulting in a huge inflow of remittances. Although a number of studies have attempted to analyze the effect of foreign remittances on household expenditure pattern, no effort has been made to critically analyze the effect of migration and remittance flow on health expenditure of migrant households and the type of treatments. We sought to assess if there are any effects of effect of remittance in the health expenditure of recipient households, and the possible effects of the pattern of treatment chosen by such households.

The paper has analyzed the Household Income and Expenditure Survey (2010) of Bangladesh through descriptive analysis, regression analysis and standard micro econometric techniques.

The study has found that remittance recipient households spend higher percentage of consumption expenditure (4.16%) in health purposes in comparison to a non-recipient household (3.55%), where rural households have higher percentage of share of total consumption expenditure.
in health purposes. The average per capita monthly treatment cost (PCMTC, TK.151.27/$1.92) for male and female are higher in remittance recipient households compared to non-recipient household. The yearly per capita health expenditure (PCYHE) for the remittance recipient household is Taka 866 ($11.02) higher than that of the non-recipient households. Remittance causes PCYHE to increase by almost TK.750 ($9.54) and TK.861 ($10.96) for male and female respectively. However, the individuals in remittance recipient households have higher treatment costs. That means, if the household receives remittance from abroad, the individuals increases his treatment cost by 54.4 Taka considering that the other factors are constant.

The study shows that, one percent increase in average monthly income from remittance increases the monthly treatment cost of an individual from that household by 0.027 percent. Also age of the head, per capita consumption expenditure, total land size, number of dependent members in the household has a positive impact on treatment cost of an individual. Our study also found that better health facilities ((govt. health worker, govt. doctors (public and private facilities)) are being taken by the individuals from remittance recipient households with higher percentages than that of the non-recipient households. On the other hand, individuals from non-recipient households are taking treatments from traditional sources with higher percentages (homeopath, Ayurveda, spiritual, family or self-treatment). Results from t-tests show that only the difference of the output from the parameter govt. doctor (private facility) is negatively significant which means that individuals from remittance recipient households are more likely to receive treatments from better sources than those of the non-recipient households.

International migration and resulting remittances can have significant implication towards the health status of households. Given the resource constraint, the financing of health sector in Bangladesh requires careful planning and management. Being one of the highest remittance recipient countries of the world with a promising yet challenging health sector, findings of our study will direct better policy options for designing effective health sector strategies.
Policy or Perception? Women’s Political Liberalization and Sex-selection in India

Nabaneeta Biswas, Terry College of Business, University of Georgia

This paper investigates the effect of women’s political empowerment on sex selection in India. In a society with severe gender inequalities including discriminatory treatment of young and unborn girls, women’s participation in public administration often entails higher benefits for their kind. Using a representative sample of 500,000 mothers and their birth histories from the District-level Household Survey (DLHS) of 2002-04, the study analyzes if changes in gender composition of politicians at the district-level affect the probability of female births. The analysis covers 585 districts across 30 states over time between the years 1977-2004. Based on state assembly elections held in these districts over the sample period district-year panels are constructed, nested within a mother, to test the impact of women’s electoral success in an election year on child gender in the successive birth. The primary identification strategy is based on a binary choice instrumental variable model, where instrument selection is based on a fuzzy regression discontinuity design.

The study finds no evidence of an unequivocal change in societal attitudes towards girls ensuing from women’s victory in state assemblies. Overall, the probability of female birth declines with marginal victory of women indicating a sort of perverse effect of female representation in the political domain. Any decline in pre-birth sex selection owing to women’s political representation in the district occurs only at the margin of the mother bearing a son in her first birth. This is evident from the differential impact of female representation on gender outcomes at higher parity births to mothers with a firstborn son than to those with a firstborn daughter. Hence, the demand for sons is persistent and any reduction in son preference due to a potential role model effect of women’s electoral success is limited to mothers with a firstborn boy. Results also indicate that the effect of female state legislators on prenatal sex selection is sensitive to the overall social, political or legal environment for girls or women. In the period following women’s political reservation in local governments, the probability of a female birth increases with the district share of female state politicians. This highlights the importance of a comprehensive political agency of women for improving outcomes for girls. Not only their numbers but also female representation across multiple tiers of administration is essential for bringing about a positive change in the treatment meted out to girls. The positive impact of female representation on female birth is further enhanced following the 1996 ban on sex determination. On the other hand, women’s political victory unambiguously improves postnatal survival disproportionately among female infants compared to their male counterparts. The decline in infant mortality is driven mainly
by an increase in neonatal survival of girls. Hence, postnatal daughter discrimination reduces with female representation. This potentially embodies both a health effect as well as the substitution effect of increased prenatal selection. Moreover, prenatal selection itself is associated with the overall status of district health facilities that moves systematically with female representation.

How Health Behaviour Affects Depression across Different Age and Gender Cohorts in India?

Reshmi Sengupta, Institute for Human Development-Eastern Regional Centre, Ranchi

Depression is a common mental health problem across all ages. It is a major public health concern in almost every part of the world because of its spread, prevalence and sufferings. This mental health problem can be chronic and recurrent, and may cause significant dysfunction in daily life activities, morbidity, and even mortality. Major depression may also pose serious economic burden on the society through direct and indirect costs on individuals. Although depression is treatable, but it often remains undiagnosed or untreated. According to the World Health Organisation report on India, one out of every seven Indians was depressed in 2011 and one out of every five Indians was depressed in 2015. This shows an alarming increase in the rates of depression within a span of just four years. Yet, like any other mental health problems, depression has long been ignored in the India’s health policy agenda. Studies have shown that depression rate varies by gender and age of individuals. In general, women are at higher risk of depression than men. Among several factors, individual’s health behaviour may also affect the onset and severity of depression both positively through preventive health behaviours (such as regular exercising, nutritional food intake, etc.) and negatively through risky behaviours (such as smoking, alcohol consumption, etc.). However, no empirical study has so far analysed the effect of health behaviour on depression particularly across different demographic groups in India. Therefore, this paper empirically examines the effect of health behaviour (both preventive and risky behaviours) on the prevalence and severity of depression across different age and gender cohorts using data from the World Health Organization’s study on Global Ageing and Adult Health: Wave 1 (2007-2010) for India.
Social Networks and Health Insurance Utilization

_Sisir Debnath, Tarun Jain_, Indian School of Business, Hyderabad; _Manvendra Singh_, J-PAL South Asia

This paper examines the role of social connections in increasing use of public welfare programs. In the context of health insurance programs, utilization by socially proximate peers helps individuals learn about program and treatment procedures. Social peers might influence adoption by providing more program information, offering expertise on how to make choices and signaling whether using the program is socially appropriate, all of which could increase program utilization. Using complete administrative data on claims from a publicly financed health insurance program in India, the study estimates if utilization by members of “naturally” occurring caste peers within the village can predict subsequent first-time utilization of the program. Specifically, we examine the role of caste peers within a village or urban ward, in increasing utilization of Aarogyasri, a large publicly financed health insurance program operating in the state of Andhra Pradesh (AP), India since 2007. We posit that local caste peers play a vital role in transmitting information about the Aarogyasri program. The kinds of information communicated might include eligibility criteria, procedures for contacting hospitals and availing treatment for specific diseases. We find that a unit increase in social peer utilization predicts a subsequent 20% increase in utilization, with negligible effects of individuals who are not in the same caste group, suggesting an important role for network based policies to promote program use. Simultaneously, as a placebo, neither other castes inside or outside the village, nor same caste peers outside the village in the same sub-district, have any discernible effect on utilization. Peers have the strongest predictive power on the treatment of intensive procedures such as oncology and cardiology. Combining the administrative data with village/ward level census data, reveals that connections are most effective in dense urban areas and where communication is easiest, suggesting that information through social groups complements rather than substitutes for more formal sources. While the study investigates public health insurance utilization as an outcome measure, the impact on overall welfare, as measured by improvements in overall health, remain unexamined. Nonetheless, our work has important implications both for increasing utilization of welfare programs, and for the provision of healthcare in developing countries.
Dynamics of Impoverishment Impact of Health Care Payments in Nepal: An Analysis of Synthetic Panel Data between 2004 and 2011

Shiva Raj Adhikari, Tribhuvan University, Kathmandu and Vishnu Prasad Sapkota, Institute for Nepal Environment and Health System Development, Kathmandu, Nepal

Poverty dynamics discusses the length of time experiencing poverty and explains about movements into and out of poverty. Evidence on poverty dynamics is important for policy makers to design appropriate anti-poverty policies. Dynamics of poverty is also determined by the health care payment. Panel data is central to obtaining a better understanding of poverty dynamics. Due to the absence of panel data, the paper constructs synthetic panel datasets using two rounds of cross sectional surveys in 2003/04 and 2010/11 in Nepal to assess the poverty dynamics. Incidence of poverty estimated from hybrid dataset may not be directly comparable with the estimation of poverty through conventional approach. The results indicate that chronic poverty is almost 21 percent for 2003/04 and 2010/11. Movements into and out of poverty, non-poor to poor and poor to non-poor, are 6 percent and 14 percent respectively. The percentage non-poor to poor have increased by health care payments; however, the percentage of poor to non-poor is decreased by the health care payment. Almost 60 percent people are in non-poor category in both periods. Chronic poverty exists in all regions, marginalized ethnic and Dalit (occupational caste) groups. Different anti-poverty policies are required to address chronic or transitory poverty. The policies or opportunities such as increasing credit facilities, increasing access to services, remittances, or social safety net programmes that can stabilize short-term income fluctuations may be more appropriate to address transitory poverty. In contrast, the policies that are related to structural or long-term interventions such as development of basic infrastructure, increasing of social and political inclusion, redistribution of assets, increasing rates of capital accumulation among others are required to address chronic poverty.
Explaining the Variation in Health and Nutrition Outcomes in Bangladesh’s Cities

Quynh T. Nguyen, Dhushyanth Raju and Ramesh Govindaraj, The World Bank

Bangladesh’s urban population has been growing rapidly, driven by the influx of mostly economically-disadvantaged migrants from rural areas. This urbanization process has led to the proliferation and expansion of slum settlements, especially in the country’s major cities. Slum residents tend to observe poor socioeconomic conditions and healthcare service and realize poor health and nutrition outcomes. Using novel, large-scale household sample survey data representative for Bangladesh’s major cities, and for slum and non slum neighborhoods within the cities, this study examines socioeconomic factors behind the variation in child and adult health and nutrition outcomes between and within slum and non slum neighborhoods. Age, relatively high levels of education attainment, and household economic status are quite consistently associated with outcomes, even after accounting for unobserved heterogeneity at the neighborhood level. Neighborhood environmental quality and healthcare service availability by different provider types are less consistently associated with outcomes. Most of the variation in outcomes is within neighborhoods rather than between neighborhoods. Nonetheless, mean outcomes differ between slum and non slum residents. These differences in mean outcomes tend to be associated with corresponding differences in mean socioeconomic factors, in particular with respect to education and household economic status.

Opportunities for Early Childhood Development in Arab Countries: Profile and Evolution of Inequality and Its Sources

Vladimir Hlasny, Ewha Woman’s University, Seoul and Vito Intini, UN Capital Development Fund, New York

High inequality of opportunity is a major social challenge in the Arab region. This study evaluates opportunities for early childhood development (ECD) in fourteen Arab countries using a number of indicators for mothers’ care during pregnancy and child delivery, as well as children’s access to minimum nutrition, health, parental care and cognitive developmental activities, in twenty standardized national surveys from fourteen countries. We find that children in most of the included Arab countries receive inadequate access to good quality prenatal and delivery care and many fail to be properly vaccinated or receive adequate supply of iodine. In part
due to these shortfalls, disproportionately many children become stunted and underweight, or die before reaching their first birthday. Particularly significant deficiencies exist in children’s access to cognitive development, namely enrolment in nurseries and pre-school programs, cognitive stimulation at home, violent disciplining and exploitation of children for housework. Opportunities for children’s development are limited in Iraq, Mauritania, Morocco, Somalia and Sudan, with Somalia being a distant outlier. Within countries, disparities exist in children’s access to ECD opportunities across households from different wealth strata, regions and educational backgrounds, particularly for mothers’ access to qualified physicians, and children’s access to nursery and pre-school education.

Over time, children’s opportunities are improving across countries and dimensions of ECD, but the improvement is uneven. Immunization, iodine intake and children’s stunting have worsened in many countries. Djibouti and Morocco have seen deterioration in many aspects of ECD. Finally, within-country inequality in opportunities is falling across many ECD indicators and countries, but these improvements have also been uneven. Inequality in child mortality, enrolment in preschool programs, engagement in developmental activities at home, violent disciplining of children and exploitation of children for housework has worsened. Algeria, Djibouti, Morocco, Iraq and Palestine have seen deteriorating inequality across many dimensions of ECD. In light of these findings, local and national policy should target ease of access to health facilities and pre-school programs in order to promote fair access to ECD for everyone. International organizations should further coordinate support for disadvantaged families and proper investment in medical and educational infrastructure.
Theme 5

CHALLENGE OF IMPROVING ENVIRONMENT
Sustainable Development and the Politics of the Governance of Natural Resources: Analyzing the Peruvian ASM Industry

Alejandra Villanueva, Universidad del Pacífico, Peru

Success of sustainable development (SD) has had in increasing awareness of environmental sustainability in the global development agenda, one of the main criticisms this theory faces is the lack of clarity as to what ‘sustainability’ means, leading to the development of a variety of different views on SD. Building on political ecology theory and its understanding of the environment as a social and political construct, this research aimed to explore how the different approaches to SD play out in practice, and their influence in the coalitions that shape the governance of natural resources in developing countries. To explore these approaches, this study suggests using a political settlements conceptual framework to analyze the policymaking processes of Peru’s artisanal and small-scale mining (ASM) industry. Peru’s last year’s ASM industry has been at the center of political debates. Although the country’s large-scale mining (LSM) industry has been the backbone of the recent economic boom, thanks to a mineral-based and neoliberal economic model backed by a mining legislation that protects and promotes private investment in the LSM sector, ASM has not experienced the same support. As a result, Peru has witnessed the rapid increase of illegal ASM, especially in its rainforest. While this industry has been responsible for the deforestation and contamination of one of Peru’s most valuable ecosystems, it has also brought economic prosperity to poor and neglected regions. Consequently, the policy debate on how to regulate this industry has witnessed the emergence of groups that prioritize the protection of the rainforest and that want to eradicate illegal ASM, as well as actors who consider this industry as part of a poverty alleviation strategy. By analyzing the Peruvian case, this research argues how social groups define and commit to distinctive policy approaches on SD and relies on bargaining processes in which actors at different levels engage in interactions to mobilize and legitimize their ideas and interests on the environment and development. In the case of resource-rich countries whose economic performance depends on the exploitation of natural resources, these negotiations will generate the creation of coalitions that seek to reframe the policies on resource governance to improve environmental sustainability. Nonetheless, ideas on SD might also aid actors in increasing their control over natural resources. Consequently, SD can act as an instrument to reproduce development models that favor the elites’ power position in society. However, they can also influence the emergence of new political actors who will demand more inclusive policies over the governance of natural resources, challenging power distribution. In this sense, this research highlighted the central role politics plays in development and resource governance. Furthermore, it stresses the need to pay closer attention to political coalitions in order to gain a better understand-
ing of why SD policies succeed or fail, how they affect the different actors engaged in extractive industries such as ASM, and how they shape the role and the reputation these industries have in the SD agenda.

**Burden of Diseases due to Air Pollution in Urban India**

*Amrita Ghatak*, Gujarat Institute of Development Research, Ahmedabad; *Debasish Nandy*, and *Suddhasil Siddhanta*, Gokhale Institute of Politics and Economics, Pune

Air pollution causes some of the most serious long-term impacts on human health. Unlike other health problems the diseases caused by air-pollution is expected to affect everyone exposed to the polluted air. This paper makes an attempt to ascertain the economic burden of diseases related to air-pollution in urban areas. By economic burden of illness we mean the burden of health expenditure and loss of labour productivity as reflected in loss of income due to diseases that are caused by air pollution.

Using data from various sources such as population Census, National Institute of Urban Affairs and Annual Survey of Industries it is observed that India has started experiencing a rapid growth of urban population in recent past. Although number of class I cities has increased from 25 in 1901 to 503 in 2011, it is the group of non-class I cities (class III, IV and V cities with less than 1,00,000 population) that are increased to a great extent during this same period. Interestingly the data collected from air quality monitoring stations show that a large number of cities suffer from very unhealthy quality of air. The quality of air is largely associated with the vehicular emissions and emissions from industries that are located in large numbers in the urban areas.

The burden of health expenditure at the households for treatment of air pollution related diseases has increased substantially over 10 years between 2004 and 2014. Using non-parametric regression analysis this paper has argued that the impact of air pollution related health disorders out-weighs the impact of other health problems on income loss. This indicates how severe and serious air pollution can prove to be by taking toll not only on health but also the households’ income in the urban areas of India within a short span of 10 years. In a scenario of high informalisation in the labour market the impact of air pollution related illness on loss of income reinforces the nexus between health and income poverty in urban areas particularly among the socially weaker sections of population.
The Impact of Rural Poverty on Environment: Evidence from Sundarbans in India

Chandan Roy, Jadavpur University

Human influence on environment is a well-recognized fact. As societies develop, they increasingly consume higher amount of resources as well as contribute more to pollution. This paper attempts to empirically test the impact of rural poverty on environment in an under-developed country context. This paper also identifies various socio-economic determinants of rural poverty and its impact on ecosystem services. A study is made in the Sundarbans region in India, which is one of the richest areas in the world in terms of natural resources and biodiversity but also home to some of the world’s most poor people. The results show that rural poverty has a negative influence on environment quality. Extremely poor families’ share of natural resource based income in total income is much higher than that of moderately poor families. Extremely poor families contribute more than moderately poor families to environmental degradation due to higher dependence on environment and unsustainable patterns of consumption, which emit more CO2 during their day-to-day survival. At the top is the wood and leaves with a share of 49.11 percent of total CO2 emissions in this area. We have identified six socio-economic determinants of rural poverty and their impact on environment. Primary data is collected using stratified sampling techniques, pre designed questionnaires and focus group discussion. Cross-section data is analyzed by using a log-linear regression model, which separates the marginal effect of the six socio-economic factors on natural resource based income. It is found that four imperative factors such as distance to nearest motor road, level of education of the earning members, real dependency ratio and change in original livelihood over last 10 years are significant out of six independent variables. Distance to nearest motor road has positive influence on poverty and negative influence on environment. Level of education of the earning members, real dependency ratio and change in original livelihood over last 10 years have negative influence on poverty and positive influence on environment. Therefore, it is clear that four important socio-economic factors have significant impact on rural poverty as well as environmental degradation. More particularly, sustainable pattern of consumption can reduce gross CO2 emissions of the poor families in this area. Therefore, framing of policies and investments should take into account these factors because it may be impossible to improve environment quality without improving the socio-economic status of the poor families.
An Insight into Payments for Ecosystem Services: Application to Arbio Project in Amazon Rainforest

Dario Belluomini, University of Lisbon, Portugal

Payments for Ecosystem Services (PES) are perhaps the most innovative and fascinating market-based instrument of the ‘environmental policy toolkit’: they compensate landowners for conserving their forest and vegetative areas in order to generate (or to protect already existing) environmental services (ES), like watershed protection and carbon storage (i.e. sustainable management), instead of clearing land or exploiting natural resources (a common feature of developing countries). Indeed, ES, broadly defined as the benefits humanity receives from the natural world, are usually seen as externalities, then not precisely valuable; but living in a well-managed environment, surrounded by nature, does have a value. That is exactly why PES was born, i.e. trying to attribute an economic value to threatened externalities. In fact, they have their roots right in the field of public economics theory that studies possible solutions to the market failures generated by negative environmental externalities. After debating the link with Coase theorem (to show how, by means of continuous negotiations, ‘victims’ may be willing to reward the ‘polluter’ in return for a reduction of his polluting activities, according to the ‘beneficiary pays principle’), we offer both a theoretical and applied analysis of PES. Presenting their definition and related conceptual problems, we shall briefly introduce all the main elements of a proper PES scheme, i.e. voluntary adhesion, conditionality, additionality, permanence, and the possible risks of leakages and perverse incentives. Potentialities of these tools seem to be exceptional also from the socio-economic point of view, not only for environmental safeguard: indeed, possible implications for rural and indigenous communities shall be taken into account as well, presenting a few positive examples of their successful inclusion in PES schemes around the world. The last part of the work focuses instead on the recent Peruvian-Italian project named Arbio: it takes place in Amazon rainforest and aims at protecting pristine green areas by means of ‘productive conservation’. It is an alternative economic, environmental and social development model, which takes into account the ES provided locally and forest products (e.g. fruits, jams, etc.) obtained in a sustainable way. After presenting the main causes of environmental deterioration in the region of Madre de Dios (Peru), they shall be discussed, the possibilities for Arbio of establishing two PES schemes based on ‘biodiversity conservation’ and ‘ecotourism’ ES, with the objective to show how PES, albeit their complex and time-consuming design, represent a crucial asset and be exemplary for other similar small-scale projects too.
Co-development and Co-evolution: Towards an Economics for the Anthropocene

Dev Nathan, Visiting Professor, Institute for Human Development, New Delhi and Visiting Research Fellow, Center on Globalization, Governance and Competitiveness, Duke University

This paper deals with the limitations of standard (neo-classical) economic theory, including its extension to take account of environmental capital or markets for environmental services, in dealing with environment issues in building sustainable development. The concept of the Anthropocene makes clear humans’ current geological role in making resources, and not just using them. This requires the re-fashioning of economic analysis in a number of ways, including the inclusion of reflexivity and evolution. While economic analysis has played a key role in fashioning policies that created the Anthropocene, this theoretical note deals with some issues that need to be dealt with in re-fashioning economic analysis.

This paper discusses the researcher’s experiences with the Anthropocene in the course of dealing with some economic problems – that of the rights of indigenous peoples in forests in India and China; fashioning a system of payment for environmental services in Nepal, Indonesia and the Philippines; linking local development with the global carbon market; developing common property regimes for inland aquaculture in Bangladesh; dealing with privatization of land and forests in India; linking marketized production and care work; understanding environmental cleaning-up in value chains; and developing synergistic systems to reduce the effects of market volatility on precarious livelihoods. Through these encounters the author deals with some limitations of standard economic theory, in dealing with environment issues in building sustainable development in what is now being called the Anthropocene.

Some of the important limitations and in this regards are:

• The interaction between humans and forest dwellers leads to the formulation of the concept of co-evolution of humans and forests (Ingold, 1987). Co-evolution is an important concept in understanding the Anthropocene.

• A number of questions arise with the attempts at payment for environmental services. (1) What is the extent to which environmental services can or should be commodified? (2) Does payment for environmental services crowd-out moral behaviour? Or, does such payment reinforce moral behavior? (3) The term ‘externality’ suggests something that is not quite intrinsic to the phenomenon. How does one develop a valuation system that brings in current externalities into the common or inherent characteristics of the phenomenon?
• Carbon emission is a global public good; but it is a privately produced public good. The manner in which private and global public interests can be synchronized is a matter still to be resolved.

• Setting aside land on stream banks as critical natural capital is an example of the limits that could be set to privatization.

• The view of economics as the allocation of resources (nature) that are given and not made by humans is the economic counterpart of the philosophy of the domination of nature by humans – resources are there for our taking and they do not bite back, except to get depleted. Reflexivity or better still co-evolution and the interaction of different agencies, need to replace the allocation of resources paradigm.

• While alienable and tradable products are extracted and their production paid attention to, such an approach ignores the connection between what is extracted and the commons (defined as waste or non-economic), within which regeneration or production take place.

• In particular, both economic practice and analysis privilege production for the market over the care economy; even making invisible the function of the care commons as the basis for the extraction of marketized production.

• Products that exist or grow in a symbiotic relation show the role of the entanglement of products or species.

• Co-development that economists now analyze in terms of global supply and value chains is seen to be a more general framework of evolution as such.

These inadequacies and problems do not amount to an overall critique of economic analysis. But they do point to problems that need to be dealt with in developing an economic analysis that can deal with the world of the Anthropocene. At one level, the need for reflexivity needs to go beyond feedback-loops to models where agents change their mental models based on current outcomes and also introduce systems with many agents.
Coping through Credit: Effect of Microfinance on Informal Lending after Disasters

Pankhuri Jha, J-Pal, South Asia and Syed M. Ahsan, South Asian University

This paper tries to look at the role played by microfinance in consumption smoothing by poor households after aggregate shocks. We tried to check if the presence of microfinance leads to higher liquidity and cheaper informal lending after natural disasters. We tried to establish this link by looking at the main coping strategies of households, overall liquidity in the market and availability of microfinance within the region. The specific focus on credit arises from the fact that it has traditionally been one of the important self-insurance techniques employed by communities. Even the dataset that we use showed widespread informal lending to cope with the disaster. In this context, it became important to study factors which led to greater credit availability after disasters. Studies have documented how microfinance helps in restarting business after natural disasters. However, limited work has been done to understand the effect of microfinance on borrowing for consumption after disasters. This study tried to fill this gap. We carried out a deeper analysis of the lending behavior, studying the lending amount, interest rate charged and other parameters and work to make a coherent case, studying the variations between these parameters across geographical units based on the prevalence of microfinance and lending thereof. The methodology involved carrying out district-wise analysis and studying the lending pattern in each district. The analysis comes up with interesting insights wherein we tried to establish that households living in areas with a greater microfinance presence were able to access cheaper credit for consumption. The research shows how other institutions, such as village moneylenders, were also lending at much lower interest rates in such areas. An understanding of these mechanisms becomes important in the light of increased climatic volatility and limited insurance penetration in developing countries. We feel that insights from this paper offer strong leads into designing relevant policy in developing countries to address the risks associated with climate change.
Climate Change and Anthropogenic Contributions to Uncertainties in Hydrological Modeling of Sustainable Water Supply

Roman Corobov, Eco-Tiras International Association of River Keepers, Moldova

The movement and storage of water on watershed scales is a complex system affected by climatic, geologic, soil, land use, anthropogenic and other factors. The nature of processes inherent in surface and subsurface hydrology is best investigated by hydrologic models simulating these processes over different spatial and time intervals, and physiographical conditions. Therefore, in recent years a number of conceptual hydrological simulation models have been developed and increasingly used by hydrologists and water resource managers to understand and address the extensive array of water resource problems, including those related to sustainable water supply. In 2014-2015 the SWAT (Soil and Water Assessment Tool) model was used as a basis for follow-up investigations of Moldova small rivers’ potential streamflow in current and likely future climate. Actuality of this research was caused by the observed and expected future deficit of water resources, necessary for sustainable functioning of the country’s economy.

The present study provides certain evidence that SWAT is an effective tool for modeling a watershed runoff. At the same time, being useful for design purposes, it seems less powerful in modeling the flow of small anthropogenically altered streams. In these cases, the simulated runoff, which eventually enter to the river stream, does not reflect water losses resulted from agricultural, municipal, industrial and other human activities. The comparison of annual runoff simulations for a pilot watershed with the observed streamflow of its corresponding river has shown that the latter was only between 10 and 20 percent of the modeled value.

The assessment of likely alterations in rivers streamflow in the condition of climate change was based on the latest high resolution data set from a multi-model ensemble of regional climate simulations developed for the IPCC Fifth Assessment Report. These simulations are also based on new approaches to accounting for greenhouse gas concentrations – the Representative Concentration Pathways (RCPs), which assume the different targeted radiative forcing in the twenty first century. The SWAT modeling of the future runoff from three small rivers’ watersheds, as a function of projected values of local air temperature and precipitation, confirmed the IPCC assumptions about expected decrease of water resources. In particular, a possible reduction of the water yields in studied watersheds could reach, depending on a time horizon and radiative forcing, from about 2% to 21%. On average, this reduction can reach 6.5% in the 2021-2050s and 16% – in the last thirty years of the century.
Thus, the “nonnormalized” anthropogenic pressures on water resources, caused by their poor management combined with the effects of climate change, negatively affect the quantity and quality of water supply, necessary for sustainable functioning of the national economy and providing the ecosystems service. The correct use of the achievements of up-to-date hydrological modeling allows quantifying these losses and to plan timely the response measures.

Adaptive Tools to Evaluate the Interventions’ Program on Climate Change and Disaster: Index of Disaster Preparedness Measurement

Sri Hartini Rachmad, Widaryatmo and Indra Murty Surbakti, BPS Statistics Indonesia

The high frequency of natural disasters in Indonesia had provoke the local, regional and national administration of Indonesia Government to implement disaster risk reduction and preparedness as an effort to strengthen the resilience against unexpected disaster. Therefore, the provision of Disaster Preparedness Index would be expected to facilitate the measurement of disaster knowledge level of community, as consequence, reducing the size of disaster victim can be anticipated. This research aims to examine the urgency of creating measurement related to evaluation-monitoring program development, particularly adaptation to vulnerable people, links to climate change effect which resulted by disaster in the peak disastrous region of Indonesia, namely Padang City. Padang city is mainly located in the coastal area and has experienced several catastrophic earthquakes and tsunami. The pilot survey result in 2013 tried to portray the knowledge level, mindset and behavior of the people towards disaster where the type of disaster mostly has an effect of climate change, thus it is very urgent to do monitoring-evaluation. The sample size of survey covered approximately 250 households in the areas exposed to the disaster. The catastrophes were among other floods, floods and landslide, landslides, earthquakes, tornados, land and forest fire, droughts, tidal waves/abrasion, and transportation accidents. The programs of disaster preparedness should be developed by humanitarian workers in order to minimize the loss of life and property, and help the people who live in earthquake and tsunami prone areas. This data survey is the cornerstone of effective emergency preparedness, conflict prevention, emergency relief, and the rehabilitation and reconstruction process. Furthermore, in the acute phase this data will be very crucial for implementing and targeting effective responses.
Findings show that of the nine types of disasters, flood is the most frequent, which is 32 times or 48 percent in the period 2000 – 2012. The number of people who died as the result of the earthquake in the year 2000-2012 amounted to 774, while 79,016 units of houses were severely damaged. Many people who evacuated with private vehicle raised the ‘high traffic’ in several points and was very dangerous when tsunami occurs. Another point to be noted is the lack of an early warning system coordinated by relevant agencies. To sum up, understanding of the hazard, exposure and vulnerability to disasters will be useful for the community in identifying the main risk factor, to help develop appropriate strategies for risk reduction.

Gender-related Differences in Knowledge about Climate Change Impacts and Resilience Measures: A Field Experiment in Can Tho, Vietnam

Tarlise N. Townsend, Quynh Anh Nguyen and Ellin Lede, National Institute for Science and Technology Policy and Strategic Studies, Ministry of Science and Technology, Vietnam

Efforts to develop resilience to climate change depend in part on the public understanding the negative consequences of climate change, perceiving them as a threat, and feeling motivated to take protective measures. Although there is widespread concern that women around the world are more vulnerable to climate change than men, it is not known whether this vulnerability extends to the knowledge and perceptions that influence resilience behavior. If there are gender related disparities in knowledge and perceptions of climate change, these should be identified so that climate change communicators can better target and tailor their materials. We examined this question using a field experiment in Vietnam, which ranks among the countries most vulnerable to climate change-induced sea level rise. First, we conducted one-on-one surveys with 722 inhabitants of peri-urban Can Tho, in Vietnam’s Mekong Delta, to identify any gender-related disparities in knowledge and perceptions of climate change. We found that women were less familiar with climate change and less informed about its likely impacts on their community. National television or radio segments, brochures and flyers, and other one-way communication methods are likely strategies for reducing these gender-related disparities. It is thus critical to understand the effectiveness of such means for improving knowledge. We therefore showed participants a short video about climate change impacts and resilience measures after they completed the baseline survey. We then conducted a post-intervention survey to assess change in knowledge and perceptions. Indeed, some of the gender-related
gaps were eliminated by the intervention, suggesting that one-way communication campaigns can improve knowledge. However, women were still more likely to doubt that climate change is occurring and less confident that scientists agree it is occurring. They were also less confident in their ability to take a specific measure to increase household resilience to climate change impacts. This study suggests that, in Vietnam, women’s disproportionate vulnerability to climate change does extend to the knowledge and perceptions that likely underlie resilience behaviors. It also provides evidence that one-way communications campaigns can help to eliminate these disparities. These findings have implications for governmental and non-governmental groups aiming for climate-resilient communities in Vietnam and other lower- and middle-income countries.
Theme 6

STRENGTHENING SOCIAL PROTECTION
Child Deprivation in India (2013-14): Evidence from Rapid Survey of Children

Aalok Ranjan Chaurasia, Shyam Institute, Bhopal

This paper uses the data available through the latest Rapid Survey of Children (RSC), 2013-14 conducted by the Government of India to measure child deprivation in India and in its constituent states. The analysis is based on a child deprivation index (CDI) that has been developed for the purpose and that follows the rights framework as outlined in India’s National Policy on Children, 2013 and United Nations Convention on the Rights of the Child. CDI is based on 10 indicators grouped into 5 domains – child survival; child growth; child education; child protection; and child environment, and covers entire childhood period – from conception to 18 years of age. CDI ranges from 0 to 1. The higher is the CDI, the higher is the deprivation faced by children. The CDI for India is estimated to be 0.433 – 0.468 in the rural areas and 0.387 in the urban areas. This shows that child deprivation in the country remains quite pervasive and appears to have persisted over time. The analysis also suggests that the proportion of children facing deprivation in either one or more domains of child well-being varies across states and, within states, by residence, social class. Among different states of the country, CDI is estimated to be the lowest in Kerala but the highest in Nagaland. The analysis also reveals very strong residence and social class inequalities in child deprivation. The analysis suggests that a child-based life cycle approach should be adopted for planning and programming efforts to mitigate child deprivation in the country and in its constituent states. Different states of the country need to formulate their own strategic and operational framework to combat the challenge of child deprivation by taking into consideration the state specific child deprivation scenario. The paper also stresses the need of institutionalising a system of measuring and monitoring child deprivation and class for standardising the child deprivation framework to facilitate this institutionalisation.

Fiscal Policy Incidence: Evidence from Tunisia

Ahmed Mounmi, African Development Bank and CIDEMA, France and Nizar Jouini, University of Nabeul, Tunisia

Since 2011, the economic recovery of the Tunisian economy depends on the increasing and pressing social expectations. It is therefore necessary to ensure effective management of public resources to enhance equity, growth and job creation. Since then a substantial need for policy reforms
has characterized the policy debate in order to identify policies that will guarantee more equity and poverty reduction.

To address this deficiency, this paper aims to analyze the incidence of the fiscal policy in Tunisia with a view to distilling policy lessons to inform future growth policy. In particular, this paper seeks to respond to common questions asked by policy makers and civil society like, how progressive are the current tax and transfer systems? can public taxes and expenditures better redistribute opportunities so that a more equitable system promotes sustained growth? who benefits the most from public services (e.g., education, health, etc.)? and what can be done to ensure that these efforts are fiscally sustainable?

This analysis attempts to cover a very broad spectrum of taxes and transfers in the individual level and analyzes their impact on inequality and poverty. Taxes include direct and indirect taxes, and transfers include direct and subsidies as well as in-kind transfer. This study uses a micro-simulation methodology following the multi-country Commitment to Equity project (CEQ). It consists of constructing five basic income concepts, that is, the market income, the net market income, the disposal income, the post fiscal income and the final income. Then it assesses the impact on different concepts of inequality and poverty reduction and simulates different scenarios of redistribution of taxes and subsidies in Tunisia. Each concept includes a particular distribution of taxes and transfers applicable to revenue, consumption or inputs.

Our results show that Tunisia succeeded to make its public spending redistributive, making stable the size of its middle class and the enrichment of the low-income classes at the expense of high-income classes. Compared to CEQ results from South American countries, Tunisia has a relatively high burden of taxes and social contributions supported mainly by salaried, direct transfers programs are well targeted but have relatively small share in the budget.

Level of poverty and inequality continues to remain high but is less than that of Latin American countries. Redistribution is made mainly through education and health but with small efficiency. However, cash transfer programs are the most efficient but their share in the budget is small. Tertiary education, hospital spending and subsidies are not pro-poor and need urgent reforms. Direct taxes are equalizing and progressive while VAT is a bit regressive.

The analysis highlights the need to target the poor through different programs. In particular, the most unequal programs that show the highest concentration rates are the tertiary education spending and subsidies programme. Whenever, the Tunisian Government tries to target vulnerable population by a given program, results show high rates of effectiveness and low rates of concentration.
With the entry into the new millennium, social protection has emerged as a new priority for developing countries as well as international development institutions. Earlier, social protection programmes were considered unsuitable for developing countries; in recent years, there has been a shift in the development paradigm with social protection policies now being considered a key component of international poverty reduction strategies and a development instrument centered on the rights of the poor. In the context of developing countries, social protection initiatives are broadly viewed as a ‘conceptual tool’ as well as a set of ‘policy interventions’. Conceptually, ‘social protection offers a way of thinking of the requirements of groups and individuals to live a fulfilling life, the role of the state in facilitating this, and the vulnerabilities of particular groups or individuals’ (Scott 2012: 5), while as a set of concrete policies, social protection primarily comprises interventions to address the vulnerabilities, especially of the poor, and measures to support a group’s or individual’s capacity to ‘enjoy a fulfilling life’.

This paper will use the experience from Nepal as a case study to understand different approaches to social protection in the South Asia region, and also the challenges faced and issues remaining in providing a minimum level of social protection necessary for a decent living. The experience of Nepal is important because the country has come a long way over the last 20 years with social protection where the government is implementing a varied portfolio consisting of social insurance, cash and in-kind social assistance programmes and labour market initiatives, which cost about 2.5 percent of the GDP and directly benefit over 7.6 million individuals (out of the approximately 27 million). Despite these initiatives, the coverage of social protection programmes in Nepal has been considered relatively low and the impact on poverty reduction limited, if any. In this regard, the paper first maps the existing social protection programs to examine the extent to which they are contributing to the four policy spheres of social protection programmes, namely, protective, preventive, promotive and transformative. Secondly, the paper focuses on the empirical evidence on the impact and performance of the social protection programs using household survey data. Thirdly, using the ‘politics of social protection’ approach, the paper then discusses the institutional and governance structure for effective implementation of social protection policies in Nepal. It is expected that the lessons drawn from Nepal would be of critical importance not only to policymakers within the country but also to others in the region.
NREGA Protecting the Protected: An Analysis of Labor Market Outcomes and Livelihood Security in Kashmir

Mushtaq Ahmad Malla, Institute of Rural Management, Anand, Gujarat

This paper examines the labor market and livelihood security outcomes of National Rural Employment Guarantee Act (NREGA) in Kashmir. NREGA is a universally guaranteed public works program based social protection policy in India, which aims to provide unemployment insurance to overcome the livelihood crisis in the rural labor market. The policy has completed almost a decade of implementation. Most of the empirical literature shows that although the policy is not working as a guaranteed and demand driven entitlement, it is hitting the core target of providing employment to the poor and vulnerable groups. Moreover by providing wages equal or higher than private wage in many states, it has enhanced the bargaining power of rural laborers thereby exerted pressure on private wage market. Notwithstanding, there are still limitations to our understanding about the functioning of the policy because these outcomes are mainly from few states, which also show huge inter-state variations due to differential influence of contextual diversities.

Kashmir in particular is one of the least researched regions so far, with some of the main reasons being its consistent political fragility and complex geo-economic context. This paper attempts to address this knowledge gap by examining how NREGA as a social protection policy has changed the labor market and livelihood security in rural areas of Kashmir. It is based on a cross-sectional mixed-method study of 200 households (HHs) and 40 bureaucratic and political representatives that are equally distributed between high and low performing areas. The study is conducted in eight Panchayats of four Blocks in one of the poorest and first implementation districts of Kashmir, Kupwara. The paper argues that NREGA is not working as a guaranteed safety-net for the poor and job scarce households, The overall outcomes are very poor as the average yearly workday contribution of the policy is one third or less than what it actually guarantees, out of which forgone employment is close to 50 percent. The level of reduction in job scarcity and livelihood related worries is also marginal. While the supply shortage is one reason for these poor outcomes, rationing in distribution by middlemen in collusion with bureaucrats, through involuntary exclusion of several poor and deserving HHs, to actualize their political and economic interests has further complicated it.

Notwithstanding, taking forgone employment into consideration, we find that even within this captured implementation system the net labor market and livelihood security benefits are much better for poor compared to non-poor and choice-less compared to choice-based HHs. Further, counting of cross-sectional outcomes show that high performing
areas are at much better position compared to low performing areas with regard to participation rate, workday generation, and level of reduction in job scarcity, and enhancement in livelihood security. On the basis of these outcomes we contend that if implemented properly the policy still has enormous scope and potential to achieve its anticipated objective of acting as surrogate unemployment insurance for job scarce informal workers in rural areas of Kashmir.

Spatial Analysis of Structural Determinants of Child Poverty Incidence in Nigeria

Olagunju Kehinde Oluseyi, Szent Istvan University, Hungary and Ogunniyi Adebayo, University of Ibadan, Nigeria

Despite goal four of Millennium Development Goals (MDGs) targets set by the United Nations for the nations of the world to reduce child mortality to its half by 2015, Nigerian children are still greatly affected by the incidence of poverty. The government has made attempts to reduce child poverty through formulation and implementation of policies, programmes and huge investments; however, they have not had significant intended effects and continue to remain plagued with child poverty. This can be attributed to the non-consideration of the heterogeneous nature of child poverty and spatial contiguity of geographical units in their designs. There is scare information on spatial decomposition and spillover of child poverty across the Geopolitical Zones (GPZs) in Nigeria.

Though many researches have been conducted in areas of child welfare and poverty, most of these researches neglected the spatial patterning of child poverty in Nigeria and the role of place in aggravating and reproducing poverty. Neither does all the past literature examine the expanded set of determinants namely, factors related to social capital and political influence inclusive. Most, if not all, of these studies in Nigeria have not used national data to make their conclusion because of unavailability of such data. This may have contributed to poor policy response to child poverty in Nigeria as the literature has shown that child poverty continue to aggravate. This study was therefore motivated to bridge this gap in literature and proffer recommendations to this vacuum in policy process related to child poverty.

The study focuses on the social attributes of the local area to assess what the geographic place represents in terms of social characteristics, namely infrastructural composition and economic structure, and to resolve apparent inconsistencies in poverty research. Using spatial error regression techniques to analyze geopolitical zone census data from Demographic
Health Survey and National Living Standard Survey, the study examines spatial differentiation in the relationships that generate child poverty and further explore their determining factors.

The results of the study indicate that child poverty is more prominent in the Northern region of the country. However, results from the analysis also establish that there is a spillover of child poverty existed among the GPZs. While social and economic factors that influence the probability of child poverty varied across difference geopolitical zones (GPZs), poverty incidence in a GPZ is much influenced by the neighboring GPZ. Results also showed that local-area processes are at play with implications for more nuanced theoretical models and anti-child poverty policies that consider systematic differences in factors contributing to child poverty according to the social, infrastructural, agro-ecological and economic contexts.

Some Dimensions of Vulnerability: A Study of the Urban Poor with Reference to Kolkata

Saswati Chaudhuri, St. Xavier's College, Kolkata

More than one billion people worldwide are mired in extreme and inescapable poverty while millions of others are on the brink of poverty. They face risks which are further exacerbated by natural hazards and ill-health. However, those who are poor today may not necessarily be poor tomorrow. Again, many of those who are non-poor today face a high chance of becoming poor after experiencing an adverse shock. In other words, we need to go beyond the listing of households who are currently poor, and attempt an assessment of vulnerability of these households. Thus, a better understanding of the vulnerability concept is pressing, particularly in the context of the third-world cities like Kolkata, where safeguard measures against risks are not enough. The vulnerability context frames the external environment in which people exist. This paper attempts an analysis of the vulnerability, and its impact on the livelihoods of the people living in slums in Kolkata.

The paper is based on a primary survey of 300 households in the slums of Kolkata. The vulnerabilities of the slum-dwellers are analyzed after constructing a vulnerability index using the techniques of Principal Component Analysis. The Vulnerability Index can be used as a tool for identifying and prioritizing the population according to their food insecurity, fragility of health and number of days in employment because they are considered as the main dimensions of vulnerability.
A simple bifurcation of the sampled households in terms of poor and non-poor is examined in terms of the constructed vulnerability index which shows that nearly 98% of them are vulnerable although only one-third of them are designated as ‘poor’. An explanation of the determinants of the vulnerability index has been attempted using a multiple linear regression. The SC/ST households are found to be less vulnerable in our study areas. Age of the household head, average education of the household, household size, migration status of the household head, proportion of household members aged 15-64 years, and possession of assets appeared to be statistically significant determinants of vulnerability levels of the households.

As many of our surveyed slum households are found to be ‘vulnerable’ (although they may not necessarily be ‘poor’ as per conventional income-measure of poverty), the government should assess the levels of vulnerability of households and use that as an yardstick (instead of income alone) at the time of distribution of various benefits so as to avoid the ‘targeting error’.

Disability Indicators for the SDGs and Its Relevance for India

Surajit Deb, University of Delhi, Delhi

Given the nature of deprivations that the disabled persons face on account of education, employment, income and social rights, it is often postulated that the class could be the largest marginalized group in India. The post-2015 development framework adopted a social rights based approach to disability that is in accordance with the guidelines of United Nations Convention on the Rights of Persons with Disabilities. The United Nations Statistical Commission has initiated working through the Inter Agency Expert Group and the High Level Group in the formation of the indicators framework to measure the progress made by disabled persons in the implementation of the Social Development Goals. This paper inquires whether the disability related SDG targets in the indicators framework could provide the resolution for addressing disability issues in India. We first provide an account of the present state of disability prevalence in different states of India along with information on the types, age-distribution, literacy and employment aspects. According to the Census 2011 data, the percentage of total disabled persons in India remained at 2.22%, which seems to be an underestimate in comparison to the World Health Organization’s World Health Survey data that estimates the disability prevalence of 24.9% in 2002-2004. The recent application of Washington Group survey questions found the overall...
The prevalence of disability in the Telangana state of India could be around 12.2%. Our analysis of the Census 2011 data reveals that although the disability prevalence rates varied across states, the rural disability prevalence remained higher than the urban counterpart and the male disability prevalence rate exceeded the same for females in most of the states. The disability prevalence is also found to be prominent in the type of physical disabilities that includes disabilities in seeing, hearing, speech and movement. The age-wise distribution indicates that disabilities of different types are extensive in the 15-59 age-groups. We found that there are 11 states where the proportion of illiterates remained higher than the literates among the disabled class. An analysis of the worker-population ratio across types of disability indicates that about 60% or more remained as non-workers. We subsequently evaluate India’s preparedness to accomplish the disability-related SDG target. This paper concludes that the status and availability of data on different aspects of disability could become a major challenge for monitoring India’s progress in this regard.

Growth and Development Finance Required for Achieving Sustainable Development Goals (SDGs) in Africa

Zivanemoyo Chinzana, The World Bank; Abbi Kedir, Sheffield University and Diderot Sandjong, University of Ottawa

This paper attempts to estimate the level of additional investment that will be required to meet some of the developmental goals of the Sustainable Development Goals (SDGs), and the additional financial resources that will be required assuming that savings, foreign direct investment (FDI) and official development assistance (ODA) stay at their current level. It particularly focuses on the first SDG on ending extreme poverty by 2030. However, it also experiments with alternative scenarios on reducing poverty and inequality. The results show that ending poverty will almost be an insurmountable task, unless effort is made to strengthen the responsiveness of poverty with respect to income. Africa will require a growth rate of 16.6 per cent per year between 2015 and 2030 to end extreme poverty by 2030. This corresponds into investment to GDP and financing gap to GDP ratios of 87.5 and 65.6 per cent per annum, respectively. However, the results vary widely across sub-regions, levels of development and individual countries. Countries and sub-regions with low initial poverty levels and higher responsiveness of poverty to income will be able to end poverty with relatively a low growth rate, and their corresponding financing gap is quite narrow. Further experiments suggest that targeting halving poverty and inequality simultaneously
will require quite attainable growth and financing targets. The innovative aspect of this study is the computation of the continent’s financing needs to address both poverty and inequality simultaneously unlike similar previous attempts that focus solely on halving the former. In addition, the paper outlines the potential policy implications of these findings for mobilizing resources to finance the post-2015 agenda.
Theme 7

SOCIAL
INCLUSION
Encouraging Affirmative Action in the Private Sector in India

Abdul Muheet Chowdhary, Legislative Aide to Mr. B Vinod Kumar, Member of Parliament

There is a growing demand in India for extending the system of reservations to the private sector. This proposal is fiercely resisted by Indian industry which has said that it will resist it with ‘all the forces at its command’. The key question therefore is what policy strategies can be adopted which offer a way out of this stalemate. This paper examines the historical experiences of four countries which have grappled with similar situations - Malaysia, South Africa, United States and Canada. Based on this comparative study, it concludes that the way out of the dilemma is the passage of an ‘Equal Opportunity Act’ which makes it necessary for private sector employers above a certain threshold to prepare and implement annual ‘equal opportunity plans’ which are aimed at removing entry barriers for marginalised sections of society.

These plans are to be prepared in consultation with the employees belonging to the marginalised sections or their representatives. For the purposes of this paper these marginalised sections are Dalits, Tribals and Muslims (DTMs), the three most backward communities in India. The law also criminalises unfair discrimination and enables employees or any aggrieved person to hold employers accountable for unfair discrimination.

The enforcement of the Act is the responsibility of an Equal Opportunity Committee (EOC) which is to be constituted under the National and State Human Rights Commissions. This Committee is tasked with training employers on preparing and implementing equal opportunity plans. Complaints of unfair discrimination are to be addressed by the Human Rights Commissions primarily through mediation and conciliation and through adjudication as a last resort.

The key thrust of the Act is to sensitise employers to the needs of marginalised groups like DTMs and institute policies and practices that result in positive discrimination towards them and facilitate their inclusion into the private sector. The practice of preparing equal opportunity plans, taken from the Employment Equity Acts of Canada and South Africa, is meant to facilitate this sensitisation.

The underlying assumption of the Act is that ‘learning comes through doing’ and that employers must be trained on how to run socially inclusive businesses and such learning will only come through practice, with the State playing the role of a facilitator.
Medical Management of Intersexuality and Marginalization of Non-normative Gender Identities

Asilata Karandikar, Centre for Enquiry into Health and Allied Themes, Mumbai

‘Intersexuality’ broadly refers to non-conformity of an individual’s body to prevalent ideas of maleness and femaleness. It is used as a blanket term for different biological possibilities and variations. It opens the possibility of critically examining the question of how gender gets constituted in the interplay of scientific knowledge and cultural norms along the axis of corresponding chromosomes, gonads, genitalia and the psycho-social self.

Intersexuality is associated with the experience of social ostracism. There is lack of agency to the individuals in their having to undergo surgical intervention to ‘correct’ genital ambiguity in infancy. Hence, this paper aims to study,

- The construction of normative gender in medical discourse through focus on case management of intersex infants,
- The social and cultural assumptions underpinning this medical decision-making,
- The ways in which these practices reiterate the marginalized status of gender non-conforming bodies.

Given feminism’s investment in divesting sex/gender of its perceived immutability, this research proceeds from the feminist conceptualization of gender as distinct from biological sex. The project participants are health care practitioners from Pune, Mumbai and Lucknow, who work with intersex children. Snowball sampling method was used as some of the doctors were approached through personal contacts and some others through the contacts of the former. The sample size of doctors interviewed is eight and they belong to the fields of paediatric endocrinology (1), paediatric surgery (2), gynaecology/obstetrics (1), urology (1), psychiatry (3). In order to go beyond statistics on incidence of intersexuality in the population, semi-structured interview method has been used to qualitatively study the conditions governing sex assignment at birth and the need, prevalence and practice of genitoplasty.

Case management of intersex infants reveals how social expectations about gender identity and sexuality come into play in decision-making and the medical response to intersexuality. Appearance of genitals and preservation of reproductive function are considered important, but primacy is given to chromosomal structure in assigning gender. There is consensus on early gender assignment as well as conducting genitoplasty in infancy or early childhood.
Feminist engagement can help reconstitute intersexuality as a point of entry to revisit feminist methodology through the conundrum of breaking up the analogical positing of sex/gender with nature/socioculture. On the question of inability of intersex infants to consent to gender assignment and surgery, the underlying issue to be tackled is the non-recognition of intersexuality as a legitimate and socially acceptable way of being. There is a need for engaging with the law on the idea of legal recognition of gender beyond the binaries.

The sex/gender binary, invisibilizes the presence of intersex variations among human beings. The medicalisation of intersexuality and the pathologization of even its non-life-threatening variations, amounts to scientific reiteration of the socially constructed gender binary and precludes the possibility of gender identity expression beyond the categories of male and female.

Exclusionary Urban Space: Class, Gender and Marginalities in Delhi

Bhim Reddy and Manoj B. Balsamanta, Institute for Human Development, New Delhi

In an emerging economy like India, it is only natural that mega cities like Delhi have witnessed massive economic expansion and ensuing rapid urbanization and challenges therein. Sweeping urbanization combining with a quest for competitive cosmopolitanism has brought in noticeable fault lines in the capital city, of which class is a significant part. Class based exclusionary geographies and practices can be found in Delhi, as is the case anywhere else. Exclusion of poor forms a continuum across various sites, which severely restricts their livelihood opportunities and life possibilities. Attempts at self-inclusion even in urban margins are thwarted with routine evictions and everyday harassment of the vulnerable sections. This paper, as a part of the IDRC supported research under safe and inclusive cities programme, seeks to discuss some details about these exclusionary conditions and practices as well as the constraints that the marginalized groups encounter in their attempts at self-inclusion in the urban peripheries.

While elaborating on the exclusionary geographies and practices, this paper focuses on multiple sites where poor live and earn their livelihood. Key issues discussed are slum infrastructure, displacement and vending troubles, and the way exclusion is diversely lived in different milieus inflecting poor’s responses, resistance and
daily negotiations. At issue is the larger question of poor’s full citizenship rights to pursue their livelihood opportunities and their access to, and exclusion from, urban space and infrastructure. Citizenship practices, and the way they are variously conducted by poor in the face of their everyday exclusion, are also discussed here. In short, the extent of institutional and infrastructural violence that poor groups are perennially subject to is central to this paper. Finally, while probing the shifting levels of vulnerability and marginality, this paper also dwells upon the gendered urban spaces and practices, and the way they considerably limit women’s access to, and their right over, city spaces. Moreover, this paper pays a particular attention to the manner in which class and gender intersect resulting in differential risks and risk perceptions across class lines.

Based on an extensive field work in Delhi as a part of IDRC-supported ‘Inclusive City Research’ Programme, this paper argues that lower class and women marginalities are significantly (re)produced in the city by way of infrastructures, state institutions and entrenched patriarchy. In slums, the lack of adequate functional infrastructures marginalizes poor in a double sense. Slum dwellers struggle over their basic needs in their daily life, particularly around issues like water, toilet, open defecation, drainage, garbage etc., frequent associated disputes owing to infrastructural inadequacy also make these poor localities appear as conflict zones and add to the cultural bias of others (including state) against slums. Similarly, this research also reveals state contradictions in slums, vending sites and among displaced population wherein indifference of state is enmeshed with its negative penetration. As to women in Delhi, the research demonstrates how inadequate infrastructures (both general and safety), cultural bias and rooted fear work in tandem and drastically curtail women’s rights to, and claims over, city spaces.

**Occupational Segregation by Race in South Africa after the Apartheid**

*Carlos Gradín, Universidade de Vigo and EQUALITAS, Spain*

The aim of this paper is to investigate the extent to which the end of the apartheid produced a sustained process of racial desegregation of the distribution of occupations, thus dismantling one of the core elements of racial inequality in South Africa. This has strong implications in the inclusiveness of Africans as citizens, as well as in improving their material living conditions.
We documented the extent and nature of the segregation of black and white workers across occupations based on post-apartheid census and labor force data. For that, we first used the conventional framework using segregation curves and indices such as Gini and Dissimilarity (i.e. Jahn, Schmid and Schrag, 1947, Duncan and Duncan, 1955). We also analyzed the vertical or ordinal dimension of segregation, measuring the extent to which the labor market was stratified by race, with Africans being systematically segregated into low-paying occupations, using concentration curves and indices when occupations were sorted by average wage (Gradín, 2013b, 2016). Additionally, we attempted to identify the driving factors of this segregation at each moment of time by measuring the level conditional on workers characteristics using a counterfactual distribution in which black Africans were given the characteristics of whites (Gradín, 2013b). More precisely, we analyzed if segregation was driven by workers’ endowments such as the lower level of education of Africans or their over-representation in rural and poorest provinces of the country. Alternatively, segregation would result from the labor market being intrinsically segreagative among workers with similar characteristics on the basis of their race. Both sources of segregation might be the result of discrimination (actual or anticipated) but their distinction helps to better understand its nature.

The empirical analysis was based on census microdata and labor force surveys. With all the necessary cautions that data limitations imposed, we have not found strong evidence supporting that the distribution of occupations had been effectively either desegregated or de-stratified in post-apartheid South Africa. There was limited evidence of such a process over short periods, such as 1994-97 or 2001-07, but not the needed sustained path over time. It seems, in fact, that the situation in 2012 was not better than it was in mid’1990s. Not only has segregation remained high, but the nature of that segregation still implies a strong racial stratification with an over-representation of Africans in the lowest-paying jobs. Inequality in the distribution of worker’s characteristics, especially attained education, explains less than a third of segregation and about a half of segregation into low-paying jobs. There persists, however, a large unexplained part, that generally drove the segregation trend, and that one could roughly relate with a gap in the quality of schooling and prevailing discriminatory practices. This indicates that the progressive catching-up Africans made in that matter was not being effective enough to revert this important source of racial inequality.
Human Inclusion as Capability Expansion

Iris Macculi, Social Development Policy Division of the UN Economic Commission for Africa (ECA), Addis Ababa, Ethiopia

Despite two decades of remarkable and sustained economic growth, Africa is still struggling to translate its economic gains into positive social outcomes. Rising incomes have often gone hand in hand in rising inequality – undermining the efforts made by many countries to reduce poverty, and fuelling social and economic instability in the region. The structural transformation under way on the continent – largely driven by capital-intensive sectors – has not created sufficient and decent jobs to be able to lift many individuals from poverty and vulnerability. Unequal access to social and economic opportunities as well as inadequate social protection has also limited the capacity of individuals to both contribute and benefit from economic growth. In line with Africa’s aspirations of “leaving no one behind”, this paper introduces the African Social Development Index (ASDI) as a tool for assessing progress in the reduction of human exclusion across different groups of population and dimensions of well-being, including survival, health, education, employment, means of subsistence and life expectancy. By adopting a life-cycle approach, the proposed tool builds on the important premise that development should be reflected in improved human conditions. One of the key features of the index is that it can be measured across time and disaggregated by gender and geographical location, thus helping to capture patterns of inequality and exclusion within and between countries. As such, the ASDI offers a new conceptual framework for identifying the drivers of human exclusion in Africa and linking them to better policies in nutrition, education, employment and social protection. An empirical application of the ASDI is carried out in Malawi. Initial results show that human exclusion has increased over time, mainly driven by poverty and child stunting. Malnutrition in particular has a critical bearing on human exclusion, with irreversible effects on the individual physical and cognitive development. Large differences are also found across subregions, pointing to decentralization challenges and budget allocation in social services. These initial findings are instrumental in guiding development planning and improving policy targeting at sub-national level and on different population clusters. The paper further expands the application of the ASDI within the Sen’s Capability Approach. In this context, human exclusion is seen as capability deprivation, and each dimension of the ASDI defined as a set of individual functionings (“doing and beings”) that people have reason to value. Issues of agency and freedom, and the interconnections between the different dimensions of exclusion are also discussed. The paper shows how the capability approach can provide a relevant basis for analyzing human
exclusion in the context of Africa, with a view to expand individual capabilities and choices, and promote a more inclusive and transformative human development in the continent.

Development and Exclusion: Intergenerational Stickiness in India

Rajarshi Majumder and Jhilam Ray, University of Burdwan

The concept of development has matured from being indicative of aggregative progress to being sensitive to inequality and exclusion within the whole, giving rise to the coinage Inclusive Development. This notion speaks of bridging gap between ethnic/social groups within a nation in domains like livelihood, social status, political empowerment, cultural freedom, among others. Intergenerational mobility can act as a mechanism to achieve this social fluidity and greater inclusion. Present paper explores the role of intergenerational stickiness in perpetuating such disparity across social groups in India. We argue that economic status is intrinsically linked to what a person does for livelihood, i.e. her occupation, and what remuneration she receives for it, i.e. her wages. In the present world system, occupation and wages are also critically determined by the human capital quotient of the individual, marked generally by her educational level. Therefore, the socioeconomic structure of a country and its temporal movement would be shaped by intergenerational mobility in education, occupation and income for different social groups. Higher (upward) mobility for the lagging classes would lead to catching up and convergence while lower mobility for them would lead to widening gaps. It is our contention that persistence of economic inequality across social groups in India is associated with high parental impact and low intergenerational mobility for the historically lagging and excluded social groups. Technically both Transitional Matrix and Regression based econometric techniques are used to estimate parental impact on respondent’s status as well as the role of social background in influencing the magnitude of the parental impact itself in the Indian context during the last two decades. Aggregate mobility is transformed and decomposed into Structural and Exchange mobility to facilitate comparability across time using Altham-Ferrie technique. Covering unchartered territory, this paper also looks at possible linkages of stickiness/mobility with several micro- and macro-economic indicators to comprehend how stickiness acts as barrier to development or how it can be scaled down. The paper therefore is relevant for shaping policies related to inclusion of marginalised social groups and bringing up
a coherent developmental agenda for the country. The study has used the National Sample Survey Office (NSSO) database on employment and unemployment (unit level records) for the 66th Round, pertaining to the year 2009-10 which is the culminating point of two decades of relatively high macroeconomic growth for India. As a contrast we have also presented results for the NSSO 50th round data for the year 1993-94, the beginning of the structural adjustment process in India. Results suggest that moderate educational mobility has been achieved which sadly has not translated to occupational or income mobility. There are significant differences in mobility across social groups with the upper castes benefitting the most while the scheduled tribes are stuck in their parental occupation/income groups. Existing State policies seem to perpetuate traditional family occupations among marginalised groups creating occupational stagnancy and vulnerabilities for them.

Marginalization and Adverse-inclusion in India’s Urban Labour-Markets: A Gender-Caste-Community Approach

Simin Akhter Naqvi, University of Delhi

This paper looks at various theoretical notions of Exclusion contrasted with the alternative concept of ‘Adverse-Inclusion’, in the context of the Indian Labour-Markets. Education is discussed as a capability-attribute and deprivation in access to education, is explored as a determinant of limited/restricted/adverse labour-market inclusion. The first section looks at the historical evolution of the concept of ‘Social Exclusion’ and how notions of ‘Residuums’, ‘Underclasses’, ‘Redundancy’ came to be defined in the context. The Second Section looks at data from various governmental reports on access to education and work-force participation. Results from a primary survey are discussed to gain an insight into discrimination and segmentation within urban informal labour markets by regressing ‘wages’ and ‘probability of being employed’ on demographic characteristics and socio-religious identity traits of respondents, in the third section. In the data examined, high incidence of employment in ‘Traditional’ Occupations is reported. Dalits are found concentrated in sanitation-work, Muslims in self-employment and Women in low-paying informal domestic-care and help. Discriminatory treatment during early years of schooling and limited access to mostly low-quality private and public education is also reported by Dalits and Muslims coming from Dalit-majority and Muslim-majority areas. Women in the sample (mostly working as casual labour/domestic help) consistently reported early
marriage (in the age group) and societally motivated drop-out from school after primary and middle school across religions and castes. In terms of probability of being employed, the likelihood of a respondent being employed in low-paying jobs and traditional occupations was much higher for Dalits, Muslims and Women. Results from the qualitative regression of wages on age, education, gender, caste and community reveal significant adverse returns to gender and caste, and though the coefficient for the community ‘Muslim’ does not turn out to be significant controlling for capabilities, Muslims in the sample are found concentrated on the low end of the spectrum in terms of both ‘Occupation’ and ‘educational attainment’. The last and final section concludes with theoretical implications and possible policy-impact of using the ‘Exclusion-Inclusion’ dichotomy, along with the need to incorporate a more nuanced understanding of ‘Adverse Inclusion’ in wider academic discourse.

Indian IT Workers in USA and Their Transnational Practices

Uma Sarmistha, University of Florida

Asian-Indians represent an important component of the professional and ‘high-tech’ workers in the USA. Majority of these workers are temporary workers working on a contractual job. Further, it is not unusual for Indian immigrant workers to get married and have children while in the U.S. As such, they must learn to negotiate the U.S. cultural terrain in both their place of work and home life. This provides the potential that they will become transnational by developing identities and engaging in cultural and social practices from two different nations, India and the U.S. With this background, drawing from quantitative and qualitative survey of Indian Information Technology (IT) professionals working in the US on a temporary work visa in the city of Bloomington, Illinois, the paper explores the prevalence and practice of transnationalism in their day-to-day life. The study describes some important aspects of the transnational lives of Indian IT professionals, who try to maintain a fine balance between faster assimilation of American culture which might help them at the workplace while simultaneously retaining much of their ‘Indian-ness’ so that going back to India never poses a problem when their visa expires. The study reveals that the temporary stay of these professionals in the U.S. along with their families necessitates day-to-day negotiations between two cultures in terms of their food, clothing, recreation, and daily activities, creating a transnational life style for them. In a
way, the lives of this particular group of professionals can be viewed as those of temporary-enclave, residential workers. A temporary enclave is where workers work in the same office and resides in and around the same neighborhood to form an enclave on a temporary basis. While living in the temporary enclave residents share a common basis by having evening chai (tea) and samosas together, discussing life in America and India and helping each other maintain their ‘Indian-ness’ while at the same transitioning into transnational lives.

Public Goods Provision and Upward Intergenerational Occupational Mobility: Empirical Evidence from China

Ziming Li and Abhinav Alakshendra, University of Florida; Shengfeng Lu and Bo Xiong, Wuhan University

Public goods provision influences a vast majority of the population in China. It directly affects the quality of life in general and has a strong effect on future socio-economic outcomes, directly affecting prosperity of the next generation of the Chinese people. However, the remaining rural-urban dual public welfare institutions challenge the public policy goal for inclusiveness. Level of access of public goods vary a great deal for residents of urban sub-districts and rural villages, there are prominent differences in the public goods provisioning among urban sub-districts and rural villages across China. It investigates the impact of public goods provision, on social mobility, particularly on upward intergenerational occupational mobility between 1989 and 2009 in China.

This paper utilizes China Health and Nutrition Survey (CHNS) questionnaire data to calculate the upward intergenerational occupational mobility by categorizing occupation hierarchies in three patterns: 1) from lower to middle or to advanced class and from middle to advanced class occupation, 2) from informal to formal occupation, and 3) from non-public to public occupation. Regression analysis using 60836 representative household samples, covering 9 provinces demonstrates low intergenerational occupational mobility within the study period. The upward intergenerational occupational mobility lowered down annually and in underdeveloped regions it is lower than the prosperous regions.

Further, the empirical analysis shows that despite the differences of public goods provision (education, hospital/health services, toilet, tap water, transit services, etc.) between rural and urban re-
regions and the differences across four regions, public goods can facilitate upward intergenerational occupational mobility. However, the difference among sub-districts or among villages matters: residents with public goods available in their sub-districts or villages experience higher upward intergenerational occupational mobility between 2% to 30% as compared to those with limited access to public goods and the difference is stark in rural areas.

The findings imply significance of equitable distribution mechanism of public goods and its role in achieving a more inclusive society in developing countries in general and China in particular. The local governments should focus more on enlarging coverage of public-goods beneficiaries at micro (household/neighborhood) level than on smoothing regional gap or rural-urban gap in terms of total amount of public goods provision at macro level.
Panel on Governance for Sustainability in Global Value Chains

Panel Organiser: Natalie Langford, University of Manchester

Under the globalisation of production, the regulation of labour and environmental conditions in global value chains have posed considerable governance challenges. The fragmented and geographically disparate nature of production has demonstrated the limitations to nationally created, public forms of regulation. This regulatory deficit has led to the creation of diverse, privately-governed standards in which civil society organisations and firms have developed novel modes of regulation, spanning global value chains. Yet, multiple governance challenges continue to exist within the development of standards, which the members of this panel explore. Themes explored include the intersection between actors in the Global North and Global South, potential for complementarity between public and private actors and complexities of inter-firm relationships. Across the presentations, governance for sustainability is considered across diverse contexts and sectors. Topics cover cotton garments, electronics, tea and tourism across the UK, the Netherlands, Germany, India and South Africa.

Abstracts of Presentations

Standards as Drivers of Sustainable Development Processes – The Case of “Fair Trade in Tourism”

Annika Surmeier, Marburg University, Germany

Tourism is often described as a driver of economic development and has the potential to facilitate sustainable development processes (Rogerson, 2004; Saarinen et al., 2011). However, this can only be achieved if tourism businesses implement sustainable management practices. Standards and certification systems have gained importance in facilitating sustainable development processes in global production networks (Nadvi, 2008). By translating the abstract concept of sustainability into organizational practices that can be implemented locally, they have the potential to drive organizational change and enforce sustainable practices at the micro-level.

However, most standards are still developed in the so-called Global North while actors from developing countries mostly remain passive standard takers (Nadvi, 2014; Ponte & Cheyns, 2013). Currently, the majority of sustainability standards in tourism are primar-
ily resource-oriented, while social criteria are less integrated (Font & Harris, 2004). As a result, the standards’ implementation can be challenging and their impacts ineffective because of their lack of local embeddedness and legitimation (Strambach & Surmeier, 2013). Which requirements standards have to fulfill in order to facilitate sustainable development processes locally is still widely unanswered.

The standard “Fair Trade in Tourism” (FTT) proves to be an exception. It was developed in the Global South, namely South Africa and focuses on the social dimension of sustainability. It aims to reduce poverty and inequality and contribute positively to the socio-economic transformation in the South African tourism industry. Using the case of FTT, this paper intends to contribute to a deeper understanding of how sustainability standards that integrate the interests of diverse stakeholders from different spatial scales can be developed. Further, it sheds light on the effects of their implementation at the firm-level, especially for the creation of decent work. Conceptually, it combines the scientific debates on global production networks (GPN) and social upgrading with neo-institutional approaches in organizational theory and research on innovation and knowledge dynamics. Empirically, it is based on a longitudinal analysis and a mixed methods approach, including 79 qualitative interviews with different stakeholders, document analysis and participatory observations over a period of seven years.

The Role of Indian Civil Society Organisations in Shaping the Governance of Labour Standards in Emerging Markets

Natalie Langford, University of Manchester

Civil society organisations (CSOs) have been shown to play a pivotal role in the development of labour and social standards within global production networks (GPN) where goods that are produced in the Global South are consumed in the Global North (Bartley, 2003; O’Rourke 2006). Such privately-led efforts have attempted to promote sustainable livelihoods for workers and producers in labour intensive industries, such as agriculture. Moreover, some CSOs claim their efforts are part of a wider strategy to promote higher-value work as producers who cannot comply are encouraged to diversify their means of securing income. Yet, the increase in South-South trade and the growth of emerging markets have meant that the geographies of consumption are changing. Therefore, it is vital to understand how Southern CSOs are shaping the governance of labour standards in these new markets. This leads to the overall question: What is the role of Southern CSOs in shaping the governance of labour and social standards in Southern markets?
Empirical evidence demonstrates that Southern CSOs have attempted to play a role in the development of labour and social standards within the domestic market for Indian tea. Yet, their success in creating formal institutions of governance has been affected by the conflicting interests of global actors who also seek to govern labour standards. Moreover, local CSOs demonstrate a much more nuanced understanding of how informal labourers and producers fare under insertion into global value chains (Maguire, Hardy & Lawrence, 2004). Using insights from the GPN literature as well as institutional and organisational studies can help to theorise how local and global actors intersect and challenge how labour standards are governed and regulated in the Indian context.

Using examples of voluntary multi-stakeholder initiatives in the domestic market, this paper will present a case study methodology which investigates the interplay between Southern CSOs and Northern actors in their responses and reactions to ‘global’ privately-governed labour standards in the European and Indian markets. It will demonstrate how Southern CSOs have attempted to engage with, challenge and (re)construct contemporary configurations of public and private institutions involved in the governance of labour standards for Southern markets.

Large Retailers’ Role in Governance for Sustainable Production: The Case of UK Retailers Selling Cotton Garments Produced in India

Rachel Alexander, University of Manchester

Global production networks (GPNs) connect producers across the world in the creation of manufactured products. UK brands and retailers, considered as lead firms, selling products made through GPNs are under increasing pressure to ensure these products are sustainable. Life-Cycle analysis highlights that environmental impacts take place at all stages of products’ life-cycles. This paper focuses on the production stage of the life-cycle and seeks to understand the role of lead firms in controlling production processes from raw material production to the creation of final products. Theories of governance developed to understand the dynamics in global value chains and GPNs can provide insight into this issue (De Marchi et al. 2013; Gereffi et al. 2005; Gereffi 1994). However, these theories and related empirical research have often focused on relationships between lead firms and upper tier suppliers. When manufacturing involves multiple stages that are fragmented across multiple locations using different forms of
technology, understanding the role of lead firms becomes more difficult. More research is needed on how lead firms connect with businesses in lower tiers of their supplier networks. The proposed paper is based on a case study examining how UK retailers are connected to Indian producers of cotton garments, from cotton farming to final garment assembly. The ways in which lead firms connect to lower tier producers and the forms of governance for sustainability that take place through these connections are considered from the micro, meso and macro scales proposed by Ponte and Sturgeon (2014). The analysis focuses on how producers are embedded in both network and territorial locations (Henderson et al. 2002), each involving vertical and horizontal governance pressures. Vertical and horizontal connections between lead firms and producers are identified and found to be associated with multiple forms of governance across the network.

**Governing Sustainable Informal E-Waste Management: The Indian Reality**

*Somjita Laha*, Institute for Human Development, New Delhi

Electronic and electrical waste or e-waste is the latest addition to the increasing global waste production. While in the industrialised world it constitutes the fastest growing waste stream (Mundada et al., 2004), the consumption of electronic gadgets and subsequent waste generation are mounting in the emerging economies like China and India (Widmer et al., 2005). E-waste contains various toxic elements whose treatment requires high degree of technological sophistication and enormous capital investment. But in the developing nations, the e-waste gets typically channelized into the unregulated informal domain for backyard disposal and recycling operations (Nnorom and Osibanjo, 2008, Williams, 2005, Manomaivibool, 2009). In India the informal sector can be attributed with the processing of 90% of the e-waste generated in the country (MAIT-GTZ, 2007). Through sorting, dismantling and recycling, the informal sector derives secondary resources like second hand electronics and metals from e-waste. In India, the informal sector can be attributed with the processing of 90% of the e-waste generated in the country and the new legislation on E-waste Handling and Management enforced in May 2012 aims at formalization of the sector.

Contemporary understanding of the informal sector at the legislative and policy level informs governance strategies that target formalization of the sector. This is evident in the new E-waste legislation in India that strives to ensure environmentally sustainable waste management practices through registration and licensing. A similar outlook informs legislation on waste generation and processing in developed nations.
In this paper the landscape of e-waste management in India is investigated with particular focus on the role of the informal economy using the field research undertaken in the National Capital Region (NCR) of India in 2011/12. The spatial linkages of the Indian e-waste industry with the international network of e-waste transfer and treatment is brought out by the application of the Global Production Network (GPN) framework to an apparently dispersed system of waste generation, collection, recycling and disposal across sectors and borders. This paper questions the understanding of the role and potential of informality in e-waste processing vis-a-vis the formal sector and challenges the efficacy of governance mechanism, both at the international and national levels.
Panel on "Sustainability and Inclusive Urban Development in Global Perspective"

Panel organisers: Abhinav Alakshendra and Christopher Silver, University of Florida

With the world undergoing the largest wave of urban growth in history, urbanization has started receiving increasing attention in the international arena. Governments, around the world though attracted by the economic benefits of cities, are wary of rapid urbanization. Often the response of the government is reflected in a processing urbanization that excludes those people who are most needy, both from and within the cities. Environmental sustainability then becomes a matter of affordability as it is assumed to be at the cost of economic growth. This is especially true for developing countries that have to face a plethora of problems such as poverty, inequality and unemployment. As such it is widely felt that there is need of sustainable inclusive urbanization that demonstrates the value of going ‘green’ without aggravating social inequalities. Most notably, one of the goals of the Sustainable Development Goals (SDGs) is to make the cities inclusive, safe, resilient and sustainable. Inclusive urbanization is a three-pronged strategy involving assignment of clearly defined property rights to the rural migrants in general and to slum dwellers in particular, development of rural areas and restriction of urban spatial expansion. This panel will discuss the challenges of achieving sustainable inclusive growth, with special attention to reducing inequalities and exploring alternative ways to make cities more inclusive.

Abstracts of Presentations

Can slum-free India be inclusive India?

Abhinav Alakshendra, University of Florida

The idea of sustainable development has taken a center-stage in growth-centric debates in developing countries in general and India in particular. Recent higher rate of urbanization caught India completely unprepared resulting in unplanned growth in majority of urban centers. Historically, Indian policy regime has not supported urbanization and migration. Most of the policies were designed to halt migration process. In India, urbanization brought higher consumption demand and rapid environmental degradation, negatively affecting quality of life of urban dwellers. For instance, 13 out of 20 most polluted cities in world are in India, 2 out of 5 world’s most polluted
rivers are in India, and as well India is one of the unhealthiest countries in the world. India has added 17 new million plus cities between 2001-2011, however, they are not necessarily livable, sustainable, and inclusive.

This paper focuses on the slum population in Urban India and evaluates the role of formal slum rehabilitation program. We also look at the political economy of slum formations. Slums are often looked upon as an eyesore and slum dwellers have been treated unfairly in the name of resettlement. Various state governments are actively pursuing policies to make India ‘slum-free’. Recently, various cities have witnessed violent clashes between slum dwellers and police during evictions. This paper discusses the strategies to make slums part of sustainable development goals and policies which could work in achieving inclusive cities rather than ‘slum-free’ cities. One of SDGs slum target, (target 11 later renamed as target 7D), was to achieve significant improvement in the lives of slum dwellers. The idea was to improve the living conditions by improving access to clean water, sanitation, and durability of housing. A large body of research has demonstrated the higher productivity of slums compared to city as a whole and upgrading and integrating slums in the city may reduce poverty, inequality, and unemployment and may bring host of other benefits.

This paper argues that the slum upgrading will make cities more inclusive than other strategies such as unwarranted rehabilitation. Also, clearly defined property rights will ensure fewer conflicts and will make slums more productive.

Regional Collaboration & Sharing as Pathway to Sustainable, Just & Inclusive Cities in Europe

Andrea Frank, School of Geography and Planning, Cardiff University, Wales

Discourses on sustainable (urb, an) in European planning are often centered around striking a balance between economic development, social well-being and generational equality, and environmental protection. The metaphor of the three pillars of sustainability and Brundtland’s 1987 definition remain cornerstones invoked in many policy documents. Yet, economic rhetoric remains dominant and as a result environmental-ecological sustainability and social well-being are reduced to affordability. In this perspective enhancing environmental or indeed social sustainability is seen to come at the detriment of economic growth. In other words, without constant economic growth, social and environmental sustainability cannot be paid for. The re-
sulting either/or paradigm that tends to emerge from this triangular dilemma is unhelpful in progressing sustainability. On one hand this viewpoint ignores ecological limits and fails to acknowledge that humankind can thrive only in an ecologically healthy environment. On the other hand, it also ignores evidence that suggests that inequality and poverty (the opposite of social sustainability) is detrimental to environmental sustainability. As a result scholars have been looking for new models and approaches.

One such approach involves the quantifying or monetizing of ecological benefits (i.e., ecosystem services). The rationale here follows the Stern report (2006) on the economics of climate change and the TEEB reports (2010, 2011 etc) on the economics of ecosystems and biodiversity. The approaches hope that by valuing natural assets in monetary terms, stakeholders and politicians can be swayed to justify the expense of environmental protection. There are also efforts to reconceptualize economy as part of society and society as part of the environment. These high level concepts are increasingly matched with practical approaches on the ground. These new emerging policy narratives embrace progressive regionalism, or ideas of regenerative cities, circular economies, together with new non-statutory innovative tools such as landscape parks and green infrastructure interventions. In the case of the landscape parks the policy moves beyond mere environmental protection toward active enhancement of biodiversity and environmental aspects of the landscape in and near cities. In the case of green infrastructure it is harnessing actively the synergistic characteristics of for example wetlands and green spaces to manage water and mitigate climate change. Examples of the use of these new instruments and tools in European cities will be examined with an aim to evaluate whether they could offer new pathways to progress sustainable thinking.

Social Sustainability: The Quest for Equality in Post-Apartheid South Africa

Brian Boshoff, School of Architecture and Planning, University of the Witwatersrand, South Africa

Even in post-apartheid South Africa (SA), life for many in the so-called “Rainbow Nation" is nasty, brutish and short – only 49% of girls and 40% of boys born in South Africa in 2013 are predicted to survive to the age of 65 or over (World Bank 2015). Moreover, many sub-Saharan countries generally exhibit high mean and median levels of inequality.

There are also “African Outliers” - countries such as Angola, the Central African Republic, Botswana, Zambia, Namibia, Co-
moros, and South Africa, which are deemed to have exceptionally high levels of inequality (Bhorat 2015). Indeed, SA’s Gini co-efficient is variously reported as being one of the highest in the world and in 2011 it was recorded as 0.65 (Stats SA 2014). (Disappointingly, South Africa’s target under the Millennium Development Goals set in 2000 was to attain a Gini co-efficient of 0.3 by 2015 and The National Development Plan has an ambitious target of a Gini co-efficient of 0.6 by 2030 (City Press 2015)).

Could this target be achieved and what is the import of the sustainable development (and resilience) discourse in this regard? SA actually has a plethora of policies and strategies to address the litany of developmental woes, including the inimical interaction of poverty, unemployment and inequality. It is also regarded as having one of the most progressive constitutions in the world.

However, some critics have argued that SA is in fact guilty of “over-strategizing” and has a poor record of policy and strategy implementation, which is due to, inter alia, institutional shortcomings, a lack of information and a lack of political commitment (Rennkamp 2013).

Accordingly, this paper, through the lens of sustainable development, explores the political, economic and social arguments for reducing inequality in SA. Furthermore, after Philip et al., (2014) it will address the multi-dimensional nature of inequality, by examining the structure of the SA economy, spatial inequality, inequality in opportunities and human development outcomes, and income inequality. Lastly, in the context of an increasingly fractious political milieu, with dire repercussions for “social sustainability”, the paper will attempt to navigate a way for SA to approximate “sustainable” outcomes regarding the above.

**Reconciling Inequalities and Sustainability in Southeast Asia Megacities**

*Christopher Silver, University of Florida*

Recent trends in urbanization in South East Asian countries, most notably in Indonesia, Singapore, Malaysia and Thailand, have been accompanied by a push to advance sustainability objectives while at the same time confronting the ongoing challenges of inequality. In the case of Jakarta, for example, sustainable development to address the challenges of flood control, traffic congestion, and environmental degradation, has been shown by critics of prevailing planning strategies...
as exacerbating inequalities owing to transformations in its vulnerable communities. The dislocations of low income residents has generated conflict in the process redeveloping the historic waterfront and challenges to the prevailing development paradigm from a civil society empowered by a more robust democratic regime. At the same time, there are models of sustainable intervention being proposed in the region that minimize the negative impacts of change while advancing the goals of a more ecologically sound city. Malaysia and Singapore have in their own way demonstrated the value of going ‘green’ without exacerbating social inequalities. Malaysia has important green policies such as utilization of renewable energy, adoption of energy efficiency, and promotion of green technology for sustainable development and towards environmental protection. An important policy for going ‘green’ is the National Green Technology Policy launched in 2009 which marked an important point at spurring the country’s green development. Thailand has also been recognized for notable reductions in inequality overall, although it confronts in Bangkok, as in the case of Jakarta, the challenges of environmental management that minimizes displacement of vulnerable populations. This paper will examine the challenges and select initiatives from the region as a way to demonstrate potential interventions that address ongoing urban inequalities within the context of a more sustainable city.

Inclusive urbanization in the 21st century China

Jieming ZHU, Department of Urban Planning, Tongji University, China

China’s urbanization since the late 1970s has been one of the greatest historical phenomena in terms of the economic and social changes brought to the populace of this enormous developing country. The transition from central planning to market orientation is the key factor underpinning the change. Opening up to the world economy and turning to market-mediated production and consumption have fundamentally changed the way economy and society are managed. Rapid urbanization has ensued ever since. In about 30 years (1982 – 2011), 475 million people were urbanized. Decentralization, both from top-down central planning to bottom-up market orientation and from the centralized control to local governance in the management of local economies, has put incentives in place for the local actors and emergent land markets to coordinate land development. In three decades (1980s – 2000s), 36,000 square kilometers were converted from rural land to urban uses in the whole country, and cities, especially those in the East Region, have been seeing dynamic and drastic spatial ex-
pansion. Concurrently, the annual growth rate of GDP achieved an extraordinary 16.5% during 1981 – 2011, and the size of national economy in 2011 was 96.7 times of that in 1981 (inflation included).

There are two fronts in urbanization. One is urban projects managed by the urban state; the other is rural non-agricultural developments initiated by the village collective. Because of high population density and acute land scarcity, villages tend to be small in area. Autonomous and compartmentalized village land development results in fragmented urbanization due to diverse interests in land and thus various modes of land development. This bottom-up urbanization may have reflected the interests of individual rural communities. However, very limited land resources are not productively utilized in the best interest of long-term sustainability. Poor quality industrialization jeopardizes the fragile ecological environment. Income gaps are widening between those villages at the periurban areas and those at remote locations.

Inclusive urbanization suggests a significant shift from the earlier mode of city-centered urbanization where developers and urban governments were only interested in conversion of rural land to urban uses and urban spatial expansion. It is argued that rural peasants have not been socially and beneficially included in the process of urbanization. Huge social cost has been imposed on rural migrants during the transition. Inclusive urbanization is a three-pronged strategy. Firstly, peasants’ right to their collective land should be delineated clearly so that the village collective and peasant households have a clear idea how much landed assets they can claim as their own. Rural migrants working in cities should be able to have an access to urban services and welfares so as to equalize entitlements between rural hukou and urban hukou. Secondly, rural development and village improvement, which have been ignored because of urban-rural divide, should be incorporated into municipal planning as one of the priorities. Thirdly, urban spatial expansion should be restricted so as to curb urban sprawl, to make cities compact and to save the countryside.