

Program Workshop

Megacities-Megachallenge.

Informal Dynamics of Global Change.

25-26 February 2009

Bangladesh University of Engineering and Technology Dhaka, Bangladesh









### Introduction

Informality is an organizing urban logic
(AlSayyad and Roy 2004)

While concepts of *informality* or *informal* are frequently used by scientists as well as by practitioners and politicians, there is hardly a broader agreement, let alone a definition on what is denoted by the term.

Informality refers to the status of settlement structures as well as to the way, victims of flooding organize themselfes in order to retain a certain social order.

It describes the transaction modes within supply and trade networks, which are the backbone of urban food supply, as well as the organizing logic behind health care systems for large shares of the population.

There are industries that are to a large extent characterized by informal relations between small scale producers and suppliers, but also officially registered businesses often work partly informal, for instance keeping informal non-written working contracts with their employees.

Official and legal decisions on all levels are taken after informal consultations and under the influence of informal networks, and the most influential encounters of different actors within governance processes often take place informally.

At the upcoming workshop these theoretical as well as practical aspects of informality will be discussed and linked with various sectors and disciplines' research fields.

We are looking forward to enlightening prentations and to fruitful and productive discussions.

February, 2009

The organising committee

Prof. Dr. Roxana Hafiz

Prof. Dr. Jost Heintzenberg

Prof. Dr. Peter Herrle

Prof. Dr. Shahnaz Huq-Hussain

Prof. Dr. Frauke Kraas

Prof. Dr. Volker Kreibich

Harald Sterly

## **Updated** Program

	9:00 am	Registration and tea		
Wednesday, 25.02.2009	9:30 – 11:00 am	Inaugural Session Chair: Prof. Dr. Roxana Hafiz, Head of Dept. Urban and Regional Planning, BUET Chief Guest: Prof. Nazrul Islam, University Grants Commission Special Guest: Professor Dr. A.M.M. Safiullah, Vice Chancellor of BUET Special Guest: Prof. Dr. Shahnaz Huq-Hussain, Head, Dept. of Geography, University of Dhaka Special Guest: Salma A. Shafi, Centre of Urban Studies Special Guest: Prof. Dr. Frauke Kraas, University of Cologne		
	11:00 – 11:20 am Tea			
	11:30 – 1:30 pm	Session 1: Conceptualising informality Chair: Prof. Dr. Sawar Jahan Prof. Dr. Detlev Ipsen: Forms of Informality - the culture of improvisation Shahadat Hossain, Kirsten Hackenbroch: Conceptualising urban informality Benjamin Etzold, Markus Keck: Operationalizing informality: examples from food system research in Dhaka Md Musleh Uddin Hasan, Md Shakil bin Kashem: Planning for the poor and poor planning: the case of Dhaka		
1:30 – 2:30 pm Lunch				

#### The program of day #2 will take place in the **Meeting Room** of **Civil Engineering Building**, **BUET**.

	9:15 am	Tea	
.2009	9:30 – 11:00 am	Session 2 (former 4): Climate change and climate induced vulnerability Chair: Prof. Dr. Wilfried Endlicher Prof. Dr. Boris Braun, Prof. Dr. Clemens Simmer: Climate Change and informal dynamics in Dhaka Prof. Dr. A.Z.M. Shoeb, Prof. Dr. Mallik A. Hossain: Natural Hazard and informal settlements in Dhaka city: origin, vulnerability and adaptibility Prof Dr. Chen Xiaohong: Water system Changes due to Intensive Human Activities in the Pearl River Delta, South China	
6.0	11:00 – 11:20 am Tea		
Thursday, 26.02.2009	11:30 – 1:30 pm	Session 3: Urban health Chair: Prof. Dr. Alexander Krämer  Oliver Grübner, Dr. Mubarak Hossain Khan: Health inequalities in informal settlements: the Dhaka example  Katrin Burkart: Impacts of atmospheric condition on the morbidity of urban poor population groups in the Megacity of Dhaka, Bangladesh  Anna Lena Bercht: Appraisal of Stress and Coping – a Traditional Village and the Impacts of Rapid Urbanisation  Tabea Bork, Prof. Dr. Frauke Kraas: Governance challenges in China's urban health care system - the example of informal health care providers in Guangzhou	
	1:30 – 2:30 pm Lunch		
• Salma A. Shafi, Centre for Urban Studies: The survey of informal markets in k		Chair: Prof. Dr. Uwe Altrock • Prof. Dr. Shafique Uz Zaman: Industrialisation and urbanisation in Bangladesh • Salma A. Shafi, Centre for Urban Studies: The survey of informal markets in Karail • Ronny Staffeld: A different story: The survival economy and the growth-oriented informal	
		4:00 - 4:30 pm Tea	
	4:30 - 6:00 pm	Session 6: Panel discussion and open discussion Panelists to be confirmed	
	7:00 pm	Dinner and informal come together	

### **Inaugural Session**

#### **Inaugural Session**

Chair: Prof. Dr. Roxana Hafiz, Head of Dept. Urban and Regional Planning, BUET

Chief Guest: Prof. Nazrul Islam, University Grants Commission

Special Guest: Professor Dr. A.M.M. Safiullah, Vice Chancellor of BUET

Special Guest: Prof. Dr. Shahnaz Huq-Hussain, Head, Dept. of Geography, Univer-

sity of Dhaka

Special Guest: Salma A. Shafi, Centre of Urban Studies

Special Guest: Prof. Dr. Frauke Kraas, University of Cologne

### Conceptualising urban informality

Sabine Baumgart, Kirsten Hackenbroch, Shahadat Hossain, Volker Kreibich

Urban informality is no longer considered a residual and transitory category but a constituent element of the dynamics of poor societies in the Global South. Non-statutory management of property rights and land use, unauthorised supply of utilities and services, and social regulation of access to sites, facilities and open spaces shape the livelihoods of the poor at the local level.

The growing recognition of informality as a mainstay of poor economies does, however, not correspond with its consideration in major discourses in the development field. It is the aim of the proposed contribution, to identify docking stations for the inclusion of the informality phenomenon into leading paradigms by raising questions like the following:

- o New institutional economics: Does informality reduce transaction costs?
- o Property rights: Are there informally regulated public domains?
- o Governance: Can governance spaces be organised outside the state?
- o Civil society: Is social capital generated in informal social networks?
- o Structure and agency: Can informality have a positive impact in an unequal and resource dependent social field?
- o Urban hierarchies: Is informality an organising urban logic?

It is intended to support the discussion with reference to empirical cases. They will be drawn from the authors' own research in Dhaka, from other projects in the DFG priority programme, and from previous research by the authors.

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# Operationalizing informality: examples from food system research in Dhaka

Benjamin Etzold, University of Bonn, Markus Keck, University of Heidelberg:

Recent research on the informal economy no longer distinguishes 'the formal' and 'the informal' as distinct antipodes, but looks at a continuum of interwoven and intertwined socio-economic processes with different degrees of (in)formality. Empirical evidence from research on the food system of the megacity of Dhaka indicates that institutions and social practices play a crucial role for understanding informality. In the paper presented by Hans-Georg Bohle, Wolfgang-Peter Zingel, Benjamin Etzold, and Markus Keck, informality is taken as an aspect of agency that is negotiated in contested urban arenas. In order to capture informality, we thus look at institutions at different degrees of (in)formality and at actors' use of them as the rationale for their actions. While some empirical findings are shown, the focus is on discussing ways to operationalize our perspective.

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# Planning for the poor and poor planning: the case of Dhaka

Md Musleh Uddin Hasan, Md Shakil Bin Kashem, Bangladesh University of Engineering and Technology

About 40% of the people of Dhaka City are poor. And of them about 90% are slum dwellers. So, planning for the poor in Dhaka is always a burning concern. But the planning practices that have been done so far for this Mega City have failed to acknowledge this issue properly. Here the authors have reviewed the provisions for the poor that have been accommodated in different planning documents of Dhaka.

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### A different story: The survival economy and the growth-oriented informal economy in Dhaka's plastic recycling industry

Ronny Staffeld, Humboldt-University of Berlin

The rapid growth of mega-cities is often accompanied by a collapse of their solid waste management system resulting in a degradation of the urban environment and an increase health risk for their inhabitants. In Dhaka, however, much of the generated waste is reused again. This is especially true for plastic waste: out of the 124 tons discarded per day an astonishing 83% is recovered and eventually processed into new plastic items (PCI 2005). This is only possible due to the efficiency of the informal economy which plays a dominant role in Dhaka's recycling system. Based on the abundance of cheap labour and its informal organization, the recycling economy has not only generated income earning opportunities for thousands of mostly extremely poor people, but it has also led to the emergence of a dynamic processing industry with intense interlinkages between the formal and informal economy.

The presentation will discuss different approaches of how to conceptualize the informal economy. Using the example of Dhaka's plastic recycling and processing chain it will be argued that the informal economy should not be considered as one entity but has to be subdivided into two parts that differ substantially from each other. On the one hand the "survival economy" consisting of self-employed activities with the primary objective of generating enough income to survive on a day to day basis. On the other hand the growth-oriented informal economy, consisting of dynamic and competitive enterprises.

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### Health inequalities in informal settlements: the Dhaka example

Oliver Grübner, Dr. Mubarak Hossain Khan

Urban health is a complex issue which is influenced by a wide variety of factors. The environment in which we live is affecting our health, depending on the quality of the surrounding neighbourhood. Galea et al. (2005) are stating that public health is influenced by the social and physical environment. Most of the research has been done to compare urban and rural areas with respective health outcomes. To our knowledge, only few publications are focussing on a comparison of slums within the city. There is also a lack of information regarding the association between health outcomes in slums and variables related to the natural environment.

Therefore we attempted to compare health outcomes like well-being, self rated health, and number of diseases by four slums located in different parts of Dhaka. We also conducted multivariate analyses to identify the influence of the natural environment on health, controlled for age, sex, education, and wealth index. We analysed cross sectional data collected through a GPS based health and epidemiologic survey conducted in 2007/08. We mainly focussed on variables representing the natural environment namely nearness to parks, share of water, and share of vegetation, extracted by remote sensing techniques and Geographical Information Systems (GIS).

We found that the share of surface water in 100m around the households and nearness to rivers have a negative impact on mental health. Moreover, short distance of the households to park areas was found to be positively related to well being.

According to our results the variables representing the natural environment are not strongly influencing the health of the inhabitants living in slums of Dhaka. Perhaps this is due to small sample size and lack of variability among slums. However, further studies with large sample size collected from geographically well distributed areas, representing the whole city are recommended to validate our findings.

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# Impacts of atmospheric condition on the morbidity of urban poor population groups in the Megacity of Dhaka, Bangladesh

Katrin Burkart, Prof. Dr. Wilfried Endlicher, Humboldt-University Berlin

Climate and air pollution have major impacts on human health and wellbeing. In particular, urban climates are believed to be hazardous. Their influence and impact however, are complex. Major aspects of climate and urban climate in particular are physical and chemical in nature, both consequences of the modified urban meso-climate (urban heat island), and the high levels of air pollution. In many regions of the world a seasonal variation of morbidity can be observed. The heat-mortality and -morbidity relationship varies across time periods, regions, and population. The underlying reasons for these differences are only partially understood. The demographic composition and socio-economic status of population groups might be of importance, reflecting the level of economic and technological development, pre-existing health status and the quality and availability of health care. Further, the degree of urbanization, population density, the urban design and morphology, and housing factors could be crucial in determining the atmospheric impact. City dwellers are hypnotized to be most affected by the adverse impacts of a distorted atmospheric environment.

Although, the relationship between temperature and human health has been studied for various regions and cities in the developed world, there is still little knowledge about the atmospheric influences on the burden of disease in developing countries, in particular tropical climates. However, the increase in the speed and extent of worldwide urbanization, often referred to as 'urban turn', is leading to the emergence of so-called megacities, more than three-quarters of which are situated in the developing world. Dhaka, one of the largest fastest growing cities, is set to accumulate many of these anticipated public health problems. Our research is aiming at the assessment of the atmospheric impacts on urban poor population groups in the Megacity of Dhaka.

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# Appraisal of Stress and Coping – a Traditional Village and the Impacts of Rapid Urbanisation

Anna Lena Bercht, University of Kiel

This presentation will sketch the transformation process of a traditional Chinese village due to the construction of a new railway station in its close proximity. Research investigations address the issue of how the inhabitants of this village appraise the reconstructing of their living environment. What kind of demands or opportunities do they perceive? Do they feel stress with regard to "harm-loss", "threat" or "challenge" and how do they cope (informally) with the changing structures and processes? People living in the same environment perceive and appraise exposure to certain risks differently which explains different coping behaviour. In this regard, the question is considered whether coping necessarily results in "visible" outcomes (e.g. rebuilding a house after demolition) or whether it encompasses "invisible" person-related processes (e.g. change of attitudes or life goals). Coping is a complex, multidimensional process that is sensitive both to the environment and its demands and resources, and to personality dispositions, assets and internal demands.

The purpose of this presentation is twofold. First, it seeks to enrich the geographical debate on vulnerability and resilience from a psychological perspective by presenting the "Transactional Stressmodel" of Lazarus. This conceptual framework schematizes person and environment antecedents of stress and coping, appraisal and coping as mediating processes between the person and the environment at different points of times and short- and long-term adaptive outcomes. Second, it aims to deepen the construct of coping on the basis of research data collected in the transforming village. In reference to different social backgrounds of the village's inhabitants, examples of formal and informal modes of coping will be presented.

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### Governance challenges in China's urban health care system - the example of informal health care providers in Guangzhou

Tabea Bork, Prof. Dr. Frauke Kraas, University of Cologne

According to Yang and Shi (2006: 127) China's health care system today is characterized by a "defective governance framework" and "dysfunctional regulation". These are result of a row of major national reforms that were above all oriented towards cost recovery. The main argument of the presentation is that the increasing emergence of illegal and informal health care providers in Guangzhou is as well linked to these national reforms and the particular socioeconomic and health care sector development context in the city.

The presentation will focus on the following main aspects:

- 1. Diversification of health care providers especially due to privatization reforms
- 2. Stakeholder network and power relations within the health care system
- 3. The illegality informality continuum within the health care sector
- 4. Definition and operation of illegal and informal health care providers
- 5. Governance deficiencies in the Guangzhou health care system

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## Climate Change and informal dynamics in Dhaka

Prof. Dr. Bors Braun, Prof. Dr. Clemes Simmer

Similar to many megacities in the world, Dhaka is regularly threatened by natural hazards. Risks associated with floods and cyclones in particular are expected to increase in the years to come because of global climate change and rapid urbanization. Greater Dhaka is expected to grow from 13.5 million inhabitants in 2007 to 22 million inhabitants by 2025. The vast majority of this growth will take place in informal settlements. Due to the setting of Greater Dhaka in a deltaic plain, the sprawl of slums is primarily taking place in wetlands, swamps and other flood-prone areas. Slum dwellers and informal businesses are vulnerable, but have somehow learned to cope with seasonal floods and developed specific adaptation strategies. An increase of precipitation extremes and tropical cyclones, however, would put considerable stress on the adaptability of the social and economic system. Dhaka-Hazard, a joint research project of the Department of Meteorology at the University of Bonn and the Department of Geography at the University of Cologne, takes up these issues in an interdisciplinary approach. The project, which begun in November 2008, aims to achieve two main objectives:

- 1. To link analyses of informal social and economic adaptation strategies to models on future climate change and weather extremes.
- 2. To estimate more accurately the future frequency and magnitude of weather extremes and floods which are crucial for the future adaptability of informal systems.

To fulfill these objectives, scientists at the Meteorological Institute are studying the evolution of natural hazards in Bangladesh, while researchers at the Department of Geography are undertaking the task of assessing these hazards from a social point of view. More specifically, the meteorologists are identifying global and regional weather conditions resulting in flooding of the Greater Dhaka region, while possible variations in flood-inducing weather patterns are analyzed by evaluating their frequency and magnitude. Findings are then applied to future global climate scenario runs to obtain a first estimate of trends for the frequency and magnitude of weather extremes and their impact on spatial and temporal characteristics of floods in the Greater Dhaka region. From this estimate, a prediction method for the spatial patterns of flooding within the Dhaka area will be developed.

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### Water system Changes due to Intensive Human Activities in the Pearl River Delta, South China

Prof Dr. Xiaohong Chen, Sun Yat-Sen University

With the swift development of social economy and urbanization, hydrological conditions have happened dramatic changes in the river network of the Pearl River Delta during the recent 10 years. These changes are attribute to the combined effects in which the following human activities play a key role: sand dredge in the river, reclamation in the original flooding areas, dykes combination, dense construction of bridges and docks and sluices along the river and irrational regulation of water locks. Human activities along with strong flow scour in the river and rising of sea level give rise to the degradation of the river bed and descending of stage in the upper river reaches of the Delta but sedimentation and back water resistance in the river mouth. Discharge distributing from the Xijiang River to the river network of the Delta increases significantly. Both the natural and human induced effects result in the 'pile up water' with the anomalous high water level in the center area of the Pearl River Delta. With a 6-11m degradation of river bed, water surface in most upper river reaches of the Delta descended more than 2m at a same discharge in recent years. While the stages in center area often have an anomalous high recurrence time of 100 years though the recurrence time of upstream inflow is less than 50 years and even less for tidal level in the river mouth. The change of stage-discharge relationship in some river sections is also notable, e.g., at the key gauge of the Delta, Sanshui gauge, the discharge increased 50%-100% (about 3000-4000 cms) under a same stage. The change of hydrological regime increases flood risk in the center area of the Pearl River Delta and asks for reassessment of the hydrological responses to keep pace with current conditions.

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# Natural Hazard and informal settlements in Dhaka city: origin, vulnerability and adaptibility

Prof. Dr. A.Z.M. Shoeb, Prof. Dr. Mallik A. Hossain, Rajshahi University

The presentation will be concerned with the slum and squatter settlements in Dhaka city. It will attempt to explore the origin of the in-migrants, i.e. the slum/squatter dwellers, their vulnerable circumstances, their characteristics as informal business/ employment scope and to tell their coping strategies with the adverse situation. Finally, the presentation will propose some research fields in this area.

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# Informal dynamics, global change and the megacity: challenges for urban research and governance

Panel discussion

Chair: Prof. Dr. Frauke Kraas, University of Cologne

#### Panelists:

- Prof. Dr. Raquib Ahmed, Rajshahi University
- Prof. Dr. Li Yongning, Sun Yat-Sen University
- Prof. Dr. Shayer Ghafur, Bangladesh University of Engineering and Technology
- Prof. Dr. Roxana Hafiz, Bangladesh University of Engineering and Technology
- Prof. Dr. Shafique uz-Zaman, University of Dhaka

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### **Informal Dynamics of Global Change**



























































