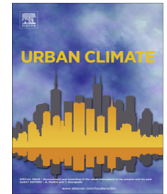




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From global ‘North–South’ to local ‘Urban–Rural’: A shifting paradigm in climate governance?



Mahendra Sethi ^{a,d,*}, Jose Puppim de Oliveira ^{b,c,d,e,1}

^a National Institute of Urban Affairs, India

^b Fundação Getúlio Vargas (FGV), São Paulo School of Business Administration (FGV/EAESP) and Brazilian School of Public and Business Administration (FGV/EBAPE), Brazil

^c COPPEAD/UFRRJ – Instituto COPPEAD de Administração, Universidade Federal do Rio de Janeiro, Brazil

^d United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), Japan

^e United Nations University International Institute for Global Health (UNU-IIGH), Malaysia

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ABSTRACT

As the world takes an unprecedented rural–urban population tilt, the 21st century poses a challenge in further tinkering the internationally evident disparities in access and allocation of carbon. Traditionally, inequalities have been negotiated from economic or ‘state of development’ perspective. This research, to our knowledge is the first of its kind that plots carbon emission of over 200 nations/territories against a spatial framework. The study argues that existing dualities in the international climate change governance, evident in the so called global ‘North–South’ economic divide, has a stronger component of ‘Urban–Rural’ spatial disparity in the making, which is likely to further precipitate into a much local but complex dynamic, particularly relevant to the developing world, that face the double challenge of rapid urbanization and environmental sustainability. The paper discusses the ethical, empirical and governance gaps in climate governance related to the urban–rural carbon dynamics and conclude with a future pathway, committed to procedural justice and sub-nationalization of carbon governance, fairly acknowledging carbon flows at the local level through standard inventories based on consumption criteria. The research offers a shifting paradigm in global climate governance, in view of the inclusion of cities as Goal 11 within the upcoming sustainable development goals and the UNFCCC COP21 to be held in Paris in 2015 and beyond.

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1. Introduction

There is a general consensus climate change is proceeding at an unprecedented pace and scale (IPCC, 2013). There is much less consensus on how to solve the climate imbalance in an effective, efficient and fair manner. The main principle settled in the United Nations Framework Convention on Climate Change (UNFCCC) is the “common but differentiated responsibilities” (CBDR) based on the historical and current emissions and the technological and financial capacity to contribute to the solutions. Traditionally, the most visible distinction of the CBDR cuts the globe across the lines of developed countries (or North)

* Corresponding author at: National Institute of Urban Affairs, Core 4B, India Habitat Centre, Lodhi Road, New Delhi 110003, India. Tel.: +91 11 24643284, 24617517.

E-mail addresses: mahendrasethi@hotmail.com, msethi@niuua.org (M. Sethi).

¹ MIT-UTM Malaysia Sustainable Cities Program.

and the developing countries (or South) collectively termed as the North–South (NS) divide. This has also divided the countries legally (e.g., Annex and Non-Annex 1) and largely the negotiation dynamics (G77+China versus OECD countries). Indeed, there is a greater degree of correlation between cumulative emissions and global warming (Meinshausen et al., 2009; Allen et al., 2009), thereby corroborating the historic responsibilities of developed countries to climate change. On per-capita basis, some proposals like Climate Debt quantify this emission divide between developed and developing countries as 10:1 (UNFCCC, 2009). However, in the last decade or so, the climate science about greenhouse gas stabilization is rapidly advancing and so is the emission contribution from the developing world. A growing consensus is now emerging that any globally stabilization targets cannot be achieved without the participation of developing countries, which today emit about half of global CO₂ emissions and whose future emissions increase faster than the emissions of industrialized countries under “business as usual” (BAU) scenarios (den Elzen and Hohne, 2008). Thus, the initial division between NS to share the responsibility to solve the climate problem is changing.

In addition to the traditional NS distinction, there is an increase in responsibilities in another less explored line of the CBDR: the *urban–rural divide*. More than half of the world’s population has become urbanized for the first time in the human history (UNDESA, 2011) with huge implications for climate change, as well as for dividing the responsibilities for the solution. While across the globe, there is an unprecedented demand of fossil-carbon to fuel national economies, it is their urban centers that act as the guzzling engines of energy and carbon. Indeed, urbanization is historically correlated with the massive use of fossil fuel with the industrial revolution. Some accounts are strongly associated with production and consumption of energy within cities indicating that more than 70% of the global greenhouse gases are produced within the urban areas (Stern, 2006) and consume 60–80% of final energy use globally (GEA, 2012). The issue is of a serious concern for urban areas located in the developing world, because as these countries urbanize, the contributions of carbon emissions and greenhouse gases (GHG) from cities starts becoming disproportionately high in comparison to their population share (Satterthwaite, 2009). For example in China, while China attained 50% urbanization in 2011, 40% of the country’s CO₂ emissions came from the largest 35 cities, though their population was only 18% of the total (Dhakal, 2009). Moreover, the majority of future population growth for the remainder of this century is reported to occur in urban areas of low- and middle-income nations (UN, 2012). Asia alone added 1 billion urban dwellers in 30 years (1980–2010), more than the population of Western Europe and USA together, and it is expected to add another 1 billion in the next 30 years (ADB, 2012). Africa is expected to urbanize rapidly in the next 20 years adding another 500 million to its cities until 2040 (UN-Habitat, ICLEI, UCLGA, 2014). The International Energy Agency (IEA) expects that 89% of the CO₂ emissions growth in cities between 2006 and 2030 will come from non-OECD countries (IEA, 2008). Hence the growing urban–rural divide poses a formidable challenge to global change and its governance.

The literature on global environmental change has for long highlighted that the present system of environmental governance- *microscopic* or *incrementalist*- is not adequate to address the intensity and spread of global environmental change that the Earth faces today (Young, 1999, 2002; Biermann, 2007; World Bank, 2009). In this research, we examine how the carbon access and allocation (CAA) issues within and beyond the conventional duality of the NS within the existing climate regime has limited our understanding of the global state of affairs and its needed transformations. We argue that the urban–rural disparities are fundamental to shed light on CAA issues concerning climate change, i.e. within the climate governance what is the role of ‘urban’ and ‘rural’ as local and sub-national actors and units, from ethical, empirical and governance perspectives. This research argues that *the existing dualities in the international environmental policy, evident in the so called global ‘North–South’ economic divide, is actually an ‘Urban–Rural’ spatial disparity in the making. It is likely to further precipitate into a much local but complex dynamic, particularly relevant to the developing world, which faces the double challenge of rapid urbanization and environmental sustainability.*

While this statement is theoretically investigated in Sethi (2015) to formulate a conceptual framework, this paper corroborates it with empirical evidence from international panel dataset for over 200 countries/territories over several decades. The knowledge gaps, conceptual framework, data and research method relevant to this study are presented in Section 2. The results (emerging patterns) are reported in Section 3. This is followed by delving on their implications in Section 4, on issues that influence fair allocation of emissions and its governance at the local level. Section 5 concludes the findings and suggests a way forward.

2. Analyzing the role of global urbanization in climate governance

2.1. Knowledge gaps

Climate governance reveals that there are three major knowledge gaps to improve our institutions and instruments to deal with urbanization and its impact of climate change. First, the *empirical gap* that seeks to scientifically understand the complex transformations at play from diverse perspectives, beyond the obvious norms of economy (GDP) or NS bi-polarity. Second, the *ethical gap* looking into what could be fresh insights from our understanding of ethics and equity to this practical challenge of global change and third, the *governance gap*, in search of appropriate institutions, means and regimes by which we could attain sustainable governance to tackle the climate challenge in a way that is scientifically sound, efficient and socially fair. For more on these intermittent research gaps within the prevailing knowledge domains of three cross-cutting themes, viz: (i) Access and allocation of carbon, (ii) governance and (iii) ethics, fairness and justice refer our theoretical research, Sethi (2015); a short summary of which is presented below:

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