


# Improving Climate Change Resilience in Global South Cities Through South-South Climate Finance

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## ABSTRACT

Climate change is likely to exacerbate inequality and poverty in Global South cities despite the presence of international agreements and conventions to enhance sustainable development such as the Paris Agreement and the Sustainable Development Goals (SDGs). Moreover, replicating Global North development models in the Global South might not be sufficient to address the climate change and development aspirations in the context of Asia; hence, Global North innovation capabilities might not be sufficient to address Global South climate change challenges. This paper provides an inductive analysis of the innovations and policies that could facilitate improved climate change mitigation and adaptation in the context of developing Asian cities. The paper concludes that innovative climate change policies should utilise emerging climate finance mechanisms such as South-South climate finance modalities to promote community science/citizen science and social innovation rather than building hard infrastructure as this could improve the governance and distribution of resources in cities.

## KEYWORDS

Adaptive Capacity, Community Science, Informality, Sustainable Development Goals (SDGs), United Nations Framework Convention on Climate Change (UNFCCC)

## 1. INTRODUCTION

Climate change is likely to exacerbate inequality and poverty in Global South cities despite the presence of international agreements and conventions to enhance sustainable development such as the Paris Agreement and the Sustainable Development Goals (SDGs). For example, Bangladesh is projected to have increased temperatures and rainfall due to climate change thereby increasing the risks and prevalence of heat stress and diarrheal diseases in cities such as Dhaka (Shahid et al., 2016). Similarly, cities such as Kolkata (India), Palembang (Indonesia) and Johor Bahru (Malaysia) have the potential to initiate innovative Low Emission Development Strategies (LEDS) that can enhance climate change mitigation but are unlikely to pursue such strategies due to challenges in integrating different sectoral priorities and policies (Gouldson and Hall, 2016). Moreover, some reports are suggesting that between 1990 and 2014 rapid migration to cities and corresponding increases in the global urban population led to the actual number of people living in slums to increase from 689 million to 881 million (UN, 2018). Arguably, with all the aforementioned factors in mind, it can be argued that the impacts of climate change are adversely affecting the livelihoods and development agendas for city dwellers and policy makers respectively.

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Some of the factors that have been identified as contributors to the exacerbation of global and national inequality and poverty include the existing disconnects between global commitments on development and climate change and the human and technological capacity of various Actors to implement them (Bergman et al., 2010). Additionally, in most low and middle-income country cities, infrastructure backlogs, lack of appropriate mandates, and lack of financial and human resources severely constrain climate change actions (Revi et al., 2014). Consequently, from 1990 to 2013, almost 90% of mortality attributed to internationally reported disasters occurred in low and middle-income countries, many of which have seen rapid urban expansion in recent years (UN, 2018). With the aforementioned factors in mind, it might be argued that the Global South Asian countries are in dire need of new innovative policies and strategies that can simultaneously enhance climate change resilience and disaster risk management and preparedness with the ultimate aim of facilitating the attainment of the SDGs.

Some literature suggests that sub-national governments (cities, states, counties) can have a substantial part to play in ensuring that global commitments such as the SDGs and Paris Agreement can be successfully implemented. For example, during the era of the Kyoto Protocol, some sub-national governments took the lead to tackle climate change even in countries where national governments were reluctant to support international efforts for controlling the emission of greenhouse gases, as the case was in the United States of America (de Oliveira, 2009). Additionally, sub-national governments are also smaller and less bureaucratic than central governments thereby enabling them to have more flexibility and innovation in the implementation of new policies (de Oliveira, 2009). However, since not all cities can be expected to have the same degree of capabilities to address emerging climate change challenges, this study focuses on how cities in Asia can use South-South Climate Finance modalities (SSCF) to enhance their capabilities to foster climate resilient inclusive development. This paper therefore provides an inductive analysis of the innovations and policies that could facilitate improved climate change mitigation and adaptation in the context of developing Asian cities. The methodology used included analyses of case points, project reports, policy reviews and policy briefs focusing on the mobilisation and disbursement of climate finance.

## **2. ATTAINING SDG 11 (SUSTAINABLE CITIES) IN THE GLOBAL SOUTH: THE CHALLENGES AND OPPORTUNITIES**

SDG 11 calls for policymakers to ensure that cities and human settlements are developed to be inclusive, safe, resilient and sustainable. However, with the projected increases in urban populations, attaining SDG 11 might prove to be unrealistic in some cities due to rapid population growth and inappropriate governance structures. For example, some projections indicate that by 2050 global urban population will exceed 6.7 billion and that nearly 80% of population growth will take place in low and middle income countries, where populations are already rising by over one million people per week (C40, 2016). This means that by 2050 there will be 2.1 billion more people living in Asian and African cities (Barnard, 2015). Whilst urbanisation and population growth are not necessarily a bad phenomena, in the case of Africa and Asia urbanisation and population growth are oftentimes retrogressive as they perpetuate the growth of slums and informal settlements. Some estimates have pointed out that the world already has 1 billion slum dwellers, slightly less than one third of the global urban population. Slums and informal settlements are already areas of high climate change vulnerability because they are located in the hazard-prone areas of cities and they lack the provision of quality housing and basic services and infrastructure. With climate change anticipated to force approximately more than 140 million people in sub-Saharan Africa, South Asia and Latin America to move within their countries' borders as climate refugees by 2050 (Rigaud et al., 2018), it can be expected that a significant proportion of such people will move into slums or create new slums. There is therefore an urgent need to analyse how local government structures can build capacity in-order to

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