Vulnerability of Urban Poor to Climate Change in North East and South East Asia: Security Implications

D.Parthasarathy Professor (Sociology) Department of Humanities and Social Sciences Indian Institute of Technology, Bombay, India Email: dp@hss.iitb.ac.in

Concept Paper

In a context of increasing urbanization, and with a number of large high density settlements, Asian cities offer diverse perspectives on both vulnerability and adaptation to climate change and their security implications. In addition to existing urban, socio-economic, and ecological problems, cities – particularly coastal cities – are increasingly vulnerable and exposed to climate change related disasters. These challenges and problems are simultaneously similar and different from those observed in Europe and North America. As urban ecologies become more complex, it is more and more essential to integrate social and natural sciences to comprehend radically altered local environments as well as their regional and global consequences, and the converse impacts of global changes on Asian cities. In recent years a number of Asian cities have been affected by adverse climatic events and other natural and human induced disasters - from floods, landslides and earthquakes, to diseases resulting in high loss of lives and property. Studies show that while different sections of the population were affected, the poor and the socially marginalized - living in environmentally risk prone areas - were more affected than others. Children and women, the social marginalized and victims of discrimination and prejudice – these have been more affected, their problems and special needs usually ignored both in disaster management or risk reduction strategies, and in post-disaster relief and rehabilitation programmes.

Drawing on primary studies and an extensive review of the literature, seeks to bring out a more complex depiction of the links between poverty, power distribution in society, discrimination, and environmental changes and shifts that have made Asian cities more vulnerable and that complicate development and implementation of disaster mitigation and risk reduction strategies. It engages with some classical sociological perspectives on risk developed by Mary Douglas and Ulrich Beck, and critiques their applicability especially in non-western contexts. Arguing for a sociological understanding of vulnerability that is more nuanced and more appropriate in capturing the greater complexity of the social structures of Asian countries, it is suggested that this understanding will also enhance our grasp of classic sociological categories such as ethnicity, class, race and gender, the interconnections between these, and the larger relationship between forms of inequality and poverty on the one hand, and exposure and vulnerability to disaster on the other. Focusing specifically on urban areas in northeast and southeast Asian cities, it is proposed that notwithstanding significant developmental gains over the last few decades, these regions face new challenges arising from issues of urban primacy, population density, types of built environment, and regional and global population movements, that refract long standing problems of population and inequality in new ways and that affect the vulnerability context of these cities with critical security implications.

The role of the state (including local and national governments, other specialized agencies, and international bodies) is of great significance in ensuring and enhancing disaster preparedness of cities. However, given an increasing awareness of the "roles played by science, technology, and cultural constructions of risk" (Draper, 1993: 644), and questions regarding the applicability of the 'risk society' concept (Beck, 1995, 2000) in non-western and developing country contexts, doubts arise as to what the exact role of state agencies should be in disaster mitigation and sustainability strategies, and what role state agencies can / should play in reducing vulnerability of different social groups and categories, especially the urban poor. Does imitating / adapting global or international best practices and associated organizational infrastructure for sustainability and disaster mitigation lead to a kind of 'institutional isomorphism', wherein imported models and structures have little fit with local requirements and social processes? It is posited that issues of inequality along various axes (gender, ethnicity, income, class, education) as well as continuing ruralurban flows (population, capital, commodities disease vectors) operate in quite distinct and unique ways in Asian contexts which require non-isomorphic strategies of addressing adaptation and vulnerability problems. Arguing against Beck's thesis proposing that risk tends to substitute class as an organizing principle of society in modern technology driven risk societies, this presentation will propose an alternative

'prismatic vulnerability' approach— i.e., vulnerability as an outcome of the refraction of various inequities and adverse factors in society through a particular hazard - such as flooding, earthquake, war, or epidemic.

The definition of what constitutes risk, the ability to respond to risk, take decisions to transform a hazard into a risk – all these emanate from and are influenced by social structures in Asian cities where classical categories of industrial and pre-industrial society that Beck critiques continue to be significant. Hence, rather than leading to individualization where "forms and conditions of existence have now to be individually chosen and treated as such" (Mesny, 1998:169), we see that the emergence of the category of risk as a pervasive and omnipresent one is actually an outcome of a linked process of social and spatial marginalization which makes sections of the population vulnerable due to a forced choice between different types of risks. The emergence of a risk society in deeply hierarchical and iniquitous societies, the persistence of poverty and its extension on a regional / spatial scale, may further strengthen social cleavages in terms of risk management and mitigation strategies as well as post-disaster relief and rehabilitation strategies. The presentation will also reconsider certain sociological formulations of "reflexive modernization" in contexts of state failure and social inequality as well as in cases where an ostensibly highly efficient paternalistic state is unable to adequately respond to disasters due to reasons of institutional isomorphism, and the failure to incorporate social and civic concerns in institutional strategies for disaster risk reduction and management.

An understanding of risk in terms of cultural definitions is insufficient without a concurrent grasp of the issue of social and cultural choices that social actors are subjected to. Under conditions of risk, the question that arises is not just that of "deciding in a context of uncertainty" (Beck, 2000: 217), but also of deciding in a context of absence of choice, of inability to choose, or of distorted conditions of choice. A sociological understanding of vulnerability is important then to enrich our understanding of the dimensions of urban poverty, their implications for old and new axes of inequality, the intersections of these axes, their refraction through different kinds of prisms (disasters), and their implications for making Asian cities more secure places to live and work in.