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Improving Sustainability Concept in Developing Countries

People's Risk Perceptions and Responses to Climate Change and Natural Disasters in BASECO Compound, Manila, Philippines

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Abstract

The research probed the residents' awareness of climate change, perception of risk and their preparedness for natural disasters in the urban poor community of BASECO in Manila, Philippines. Using a structural equation model (SEM) for predicting building resilience and increasing adaptive capacity validates the hypothesis for risk perception in the context of the urban poor and the structural constraints that subjugates the high level of risk perception. The study highlights the importance of understanding the risk perceptions and responses to climate change and natural disasters with social, economic, political and cultural perspectives to ensure participation in building resilience and increasing adaptive capacity.

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Keywords: climate change; disaster risk; urban poor; risk perception; urban sustainable development; urbanization; poverty

1.0 INTRODUCTION

1.1Problem Rationale

In a country that is always at the crosshairs of natural disasters[1, 2]. It comes to no surprise that its people have learned to adapt albeit with great loss to life and property. Natural disasters have helped shaped human societies. Climate change and natural disasters aggravates inequality. A study on the Philippines argued the lacunae between the elite and the lower class is the consequence of the frequency and magnitude of its natural disasters thus aggravating social inequalities[3]. They cripple and erode the development gains of the impoverished areas and shackle the most

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vulnerable into poverty. The rich are able to recover right away but the poor falls deeper into the poverty trap. At the present the country is experiencing exclusive growth on elite based governance riddled with corruption[4, 5]. There is much more to natural disasters and the heaving burden it always leave to the people as a study on Eastern Luzon, Philippines argued that what it makes it even worse are the causal factors which are political, socio-economic and demographic which include 'unmanaged population growth, difficult access to land and resources, corruption within the government, and power of the elite'[6]. The onslaught of Climate Change has brought the risks of natural hazards even higher. Floods, cyclones, earthquakes and tsunamis, droughts and heat waves, hurricanes have claimed hundreds and even thousands of lives in urban areas. Countries who are least responsible for climate change are the ones bearing the brunt of natural disasters[7].

Super typhoon Haiyan struck the poverty stricken areas of the Philippines with heavy casualties that send ripples around the globe on the effects of climate change[8]. The poor has always been relegated to the side lines. They have always been integral part of the urban landscape and yet they have always got the shorter end of the development stick. The vicious cycle that results from the assignment of substandard resources to people who are poor. Housing needs are more often than not is met. Low income housing is generally located in geographic areas that are disaster prone, lack quality resources such as good public schools and access to quality health care. The lack of quality resources results in further social disadvantage which perpetuate poverty. Present day policies have eschewed the views of the poor notably in developing countries. Government and policy makers focused on top to bottom approaches. They have missed out on one of the prime components of increasing adaptive capacity: how the urban poor perceive and respond to climate change and natural disasters. Urban growth must be inclusive to all sectors that contribute to its development.

1.2 Theoretical Framework

Several approaches and theories have explored risk perception. There are three major groups of approaches in risk perception: Psychology approaches which are heuristics and cognitive[9, 10, 11, 12], anthropology / sociology approaches[13, 14, 15, 16] which is the cultural theory of risk and the interdisciplinary approaches[17, 18] which includes the social amplification of risks framework. Risk perception has been a vital tool for mitigation and adaptation strategies[19, 20, 21, 22, 23, 24, 25]. The three groups of risk perception approaches provided the theoretical anchorage for the study. The theories validated the importance of risk perception in the acceptance of effectual disaster mitigation strategies, building resilience and increasing adaptive capacity. Risk perception is still a very dynamic field of research. The group approaches has its share of weaknesses as not all the approaches can fully elucidate the nuances of risk perception. The approaches can focus its lens on different measures or variables and with different methodologies as researches on cognitive biases or social trust may anchor its findings on spatial and demographic variables[26, 27] and on the other hand cognitive models can harness heuristics or cultural biases[28]. The study will try to gain from the strengths of the three approaches in exploring risk perceptions through the lens of the Filipino urban poor and propose means of improvements in policy formation and implementation of building sustainable resilience and increasing adaptive capacity.

1.3 Research Hypothesis

The urban poor of BASECO compound have a high risk perception of disasters and yet chose to live in a high risk area because the immediate threat of poverty comes first than the threat of natural hazards and there is simply no other option for them[29]. Peoples risk perception is constrained by economic – it is their source of livelihood, social – it is their sense of community, political – it is a rich source of votes thus a source of power and cultural – it is their sense of identification, perception and civilization. All of these forces seem to be beyond their control.

High level of risk perception is a very important factor in building sustainable resilience and increasing adaptive capacity but it is not enough. It will need the concomitant attention to break the shackles of structures that have contributed to the legacy of inequality and negligence and stop the perpetuation of poverty in BASECO. It is imperative as well to understand these through the lens of culture and harness these shared values and norms to build sustainable resilience and increase adaptive capacity of the people in BASECO. Overall risk perception must then be considered rather than focusing climate change and disaster risk perception alone. The people in BASECO should be given that fair chance through a sustainable livelihood approach coupled with community involvement – community based disaster risk management. Studies have shown that an effective climate change adaptation and disaster risk