LOCALIZING THE MEASUREMENT OF THE IMPACT OF CLIMATE CHANGE

by

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Ondoy and Pepeng, the twin tropical storms that wrought havoc in a number of regions of the Philippines in October 2009, typhoon Basyang, that caused a large tract of blackout and left a trail of wreckage in the National Capital Region in July this year, and the water crisis in Metro Manila resulting from the El Niño phenomenon brought to the fore once again the inconvenient truth about climate change.

In the global arena, preparations are underway for the conduct of the sixteenth Conference of the Parties (COP 16) to the UN Framework Convention on Climate Change to be held in Cancun, Mexico in November 2010. Unfortunately, the Bonn Climate Change talks held last June 2010, a prelude to the Cancun Summit, was perceived to be a big disappointment in its effort to pick up the pieces and pave the way for firmer action after the Copenhagen Summit produced the legally non-binding, controversial and perceived-to-be-weak Copenhagen Accord.

But many agree that the threat of climate change on people’s lives has reached alarming proportions. Based on a study made by the Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA), the country’s average annual mean temperature is projected to increase by 0.9°C to 1.2°C by 2020 and by 1.7°C to 3.0°C by 2050. The PAGASA simulation study also projected

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a change in annual precipitation from negative 0.5 percent to 17.4 percent in 2020 and negative 2.4 percent to 16.4 percent in 2050. A rise in sea level has been experienced in many parts of the world, which will increase the risk of flooding and storm damage. In the Philippines, the National Mapping Resource Information Authority (NAMRIA) estimates that a one-meter sea level rise can translate to a land loss of 129,114 hectares.

Clearly, climate change warrants a comprehensive strategic planning on the part of international, national and local policy and decision-makers to address the vulnerability of various sectors and to come up with mitigation and adaptation strategies. Planning to be effective, however, should be based on evidence, on statistics. Unfortunately, despite global initiatives that have been started towards the measurement of the impact of climate change, there are very few available and timely official statistics at the country, not to mention at the sub national level. This is true not only in developing countries like the Philippines but even in developed countries.

Before climate change became a hot global issue, the National Statistical Coordination Board (NSCB) had actually undertaken a number of initiatives to mainstream the monitoring and measurement of climate change and its impact. Under the Philippine Economic-Environmental and Natural Resources Accounting (PEENRA) project implemented in 1998-2001, the NSCB compiled Asset Accounts of five resources as well as the degradation/depletion accounts resulting from economic activities in five sectors. In September 2007, the NSCB created an Interagency Committee on Environment and Natural Resources Statistics (IAC-
ENRS) to serve as a forum for discussion and resolution of concerns/problems and issues on the compilation of ENR statistics and environmental accounts. The NSCB has also developed a statistical framework that was originally intended to be presented during the Conference on Climate Change and Official Statistics in Oslo, Norway in April 2008. It was presented in Seoul, Korea during the Conference on Climate Change, Development and Official Statistics in the Asia-Pacific Region on 11-12 December 2008. The said framework was also presented in the Expert Group Meeting on the Framework for the Development of the Environment Statistics organized by the United Nations Statistics Division and Statistics Canada held in New York from 10 to 12 November 2009.

This paper takes off from the NSCB statistical framework and localizes it to two regions and a province of the Philippines, namely, the National Capital Region (NCR), the Ilocos Region and Albay Province. More precisely, the paper assesses the available statistics and information system dealing with climate change and its impact in the two regions, noting that they were badly hit by Ondoy and Pepeng in 2009. Moreover, it will illustrate the differential impact of climate change, if any, between an urban and a rural setting in the island of Luzon.

From the impact and vulnerability statistics, some adaptation and mitigation strategies will be discussed using the successful model developed in Albay, i.e., disaster management preparedness, environmental sustainability, etc. The last part of the paper will deal with recommendations on Integrating climate change and related matters into the official statistics in NCR, Ilocos and Albay.
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