

## **CLIMATE CHANGE AND DISASTER RISK REDUCTION: THE HARD CHOICES**

Antonio G. M. La Viña, Eunice Aagsaoay, Joanne Dulce, and Johanna Jambalos<sup>1</sup>

In this paper, we provide an overview of recent policy and governance developments that are relevant climate change and disaster risk reduction. There are three such developments that merit attention in that together they can frame what the next administration must need to do when it takes over on June 30, 2010. These policy and governance developments are:

- The outcomes of the Copenhagen Conference on Climate Change held last December 8-18, 2009, in particular the implications of the Copenhagen Accord;
- The passage and signing into law of the “Climate Change Act of 09” last October, 2009; and finally;
- The imminent enactment into law of the “Philippine Disaster Risk Reduction and Management Act of 2010;

Governance practitioners sooner or later learn to accept the adage – “The enemy of the good is the perfect.” Everyone agrees that all these policy instruments – the Copenhagen Accord, the Climate Change Act, and the DRRM bill – are imperfect. But are they good enough for now? Our answer is No, most definitely not. The facts are sobering: climate change is certain; disasters will increase in number and severity; yes, it will get worse; and the poor will suffer first and most. Ambitious responses that correspond to the great scale of the problems of climate change and disasters are therefore needed. Unfortunately, in this respect, the Copenhagen Accord, Climate Change Act, and the DRRM bill are simply too modest and fails to make the hard political choices that must be made if we are to adequately address the twin and related challenges of climate change and natural disasters.

But, and it is important to stress this caveat, in the absence of other alternatives, these are what we now have and we must utilize what they allow and provide while working to improve them or later on replace them with better agreements and laws. Concluding that they are inadequate is not to say that these policy and governance instruments are entirely useless. We will point to the opportunities they do provide and in the case of the Climate Change Act, and the DRRM bill, to their strengths such as its correct analysis that in the end adaptation measures and disaster risk reduction are the primary responsibility of local governments.

### **Criteria for Evaluating Policy Responses**

In responding to climate change and natural disasters, difficult political choices have to be made. Hard decisions have to be made

For climate change, decisions must be made about complex issues: on the mitigation targets and actions by all countries but especially by the developed and the big developing countries; on putting into place adaptation measures and setting up the international and national support structures for these measures; and, on the financing arrangements to help developing countries both mitigate and adapt to climate change.

To address disasters at the national level, four priorities are needed: First, we need to radically change the way we look at natural and environmental disasters and put into place a new organizational framework that would make us more prepared, government and communities more responsive, and most all help us reduce the risks of the damage that disasters bring; Second, we must ensure excellence in the way our public and private scientific institutions gather and analyze information, link them to each other to maximize synergies, and the highest priority of all, make sure that the best available scientific information and analysis is available to decision makers; Third, we have to approach disaster risk reduction, preparedness, rehabilitation, and emergency response as a national project, a non-partisan undertaking that will involve the government as convener and enabler but will require cooperation and collaboration by all sectors of society; and, fourth, we must, in the long run, address the deep roots for the havoc that like Ondoy and Pepeng caused.

For disasters in urban areas, the following have to be prioritized: Improving land use planning; strict implementation of environmental rules; reversing rural-urban migration patterns; finding just solutions to human settlement challenges, and establishing a metropolitan authority that has real power. As for the impact of disasters in the rural areas, there may be a need to review the necessity of constructing and maintaining dams for irrigation and power generation purposes. Given the plausibility that typhoons like Pepeng will visit the Philippines more frequently due to climate change, the presence of dams may well increase the amount and aggravate the effects of floods. Alternative sources of irrigation and power generation should be explored. Land use planning and strict implementation of environmental regulations are also solutions that will address the vulnerability of rural communities to disasters.

### **The Copenhagen Accord**

Those of us who were there can never forget what happened in Copenhagen, Denmark, in the early hours of December 19, 2009. Together with thousands of government officials, academics, environmental advocates, social activists, and ordinary citizens, we had come to Copenhagen with optimism that the world could come together and finally agree on how to address climate change, the most serious environmental problem we face. But like many others, we were disappointed with what the result of Copenhagen. Not only were we not able to bring home to our countries a legally binding and effective agreement on climate change but the last hours of the Copenhagen talks was a disaster characterized by a destructive blame game. A Copenhagen Accord was noted, not adopted, by the Conference, and it remains uncertain if this weak agreement will even be implemented.

The meeting in Copenhagen was the 15th Session of the Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC)<sup>2</sup>. There were actually a number of meetings simultaneously going on within the Conference of the Parties. These included meetings of the regular bodies of the Convention (called the Subsidiary Body on Scientific and Technical Advice (SBSTA) and the Subsidiary Body on Implementation), meetings of two Ad-hoc Working Groups on the Kyoto Protocol (called the AWG-KP) and Long term Collective Action (AWG-LCA), and the Meeting of the Parties (called CMP) of the Kyoto Protocol. The real action however were in the many contact/negotiation groups that were created to address

specific issues that needed to be resolved so agreement on how the world can respond to climate change can be reached. The goal was to be able to present a comprehensive agreement that world leaders can adopt when they would come together for a Heads of State summit in the second week of the Conference.

But what was so important about climate change that many world leaders, including the most powerful, have decided to come to Copenhagen? Why did over 15,000, maybe even 20,000 government officials, negotiators, scientists and other academics, environmental activists, business lobbyists, indigenous peoples and other stakeholders, and ordinary citizens congregating in Copenhagen? The answer lies in the nature of the challenge of climate change as described by some authors<sup>3</sup>:

"Climate change represents the most serious, most pervasive environmental threat that the world faces. It is the confluence of humanity's improvident past, its difficult present, and its uncertain future brewing into one of the world's biggest challenges. The issues are not merely scientific; climate change spans political, social, and economic dimensions, crosses national boundaries, and will reach beyond the present generation. It will aggravate the complex problems of development that we struggle with today like poverty, food security, and water availability that threaten to ignite large-scale political and social upheavals. Climate change is inexorably linked to economic activities crucial to most modern societies – energy production and consumption, transportation, agriculture and forestry, real estate, marine resource utilization, industry and manufacturing, insurance, and so on. As such, it cannot be separated from the fundamental concerns of human society: national economic planning, public administration, and the quality of life for individuals, families, and communities. Finally, the irrelevance of national boundaries in dealing with the challenges presented by climate change provides the ultimate demonstration of global interdependence. Indeed, climate change negotiations involve the very foundations of global security and the development of nations. Ultimately, the issue of climate change goes beyond science and technology and is about ethics. It poses a question to all of us about what kind of world we want to live in."

That climate change is the most serious environmental threat the world faces has been recognized as early as 1992 when the UNFCCC was adopted. The Convention laid down the following objective: the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. It further said that such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to insure that food production is not threatened, and to enable economic development to proceed in a sustainable manner."

The Convention is a good agreement but it is inadequate as it provides only general principles to guide future action as well as establishing the processes under which further agreements will be made. Most stark in its absence in the UNFCCC is the lack of legally binding targets for developed countries (called Annex I parties) to reducing greenhouse gas emissions. That is why in 1995, in the first Conference of the Parties held in Berlin, it was decided to negotiate a protocol that would mandate such reductions. It took nearly three years but in December 2007, the Kyoto Protocol to the United Nations Framework Convention on Climate

Change<sup>4</sup> was adopted by the parties in Kyoto, Japan. The Kyoto Protocol's main feature is that it sets binding targets for 37 industrialized countries and the European Union for reducing GHG emissions by an average of 5% against 1990 levels which these countries should achieve within the commitment period of 2008-2012.

The Kyoto Protocol was a good start but also clearly inadequate. Moreover, after its 2000 elections, the United States withdrew from the Kyoto Protocol rendering it even more inadequate. Thus the stage was set for the 2007 meeting in Bali, Indonesia where governments, once again acknowledging that global efforts were not enough, adopted the Bali Action Plan. In Bali, a negotiating process was launched with the expectation that a new agreement (it did not specify whether it would be a new protocol or something else) would be adopted by December 2009 in Copenhagen. It was hoped that this new agreement would be adopted in Copenhagen. For two years, diplomats, government officials and scientists from nearly 200 countries negotiated to arrive at such an agreement. In 2009 alone, they met seven times for a total eight weeks of negotiations. But in spite of this big effort, the Parties of the Convention remained far apart even as the Copenhagen meeting drew nearer.

In Copenhagen itself, for 12 days, negotiators worked hard to address the many disagreements that prevented consensus on how to move forward on climate change. Real progress was being made in some areas (forests, adaptation, technology transfer) while major difficulties continued to be insurmountable in other issues (especially mitigation targets by developed countries, mitigation actions by developing countries, and finance related concerns). But, in the last three days of the Copenhagen conference, the negotiations continued to be stalemated in many respects. Time was running out as Presidents, Prime Ministers and other heads of states started arriving in Copenhagen.<sup>5</sup>

This is the context under which the process that resulted in the Copenhagen Accord should be understood. By the middle of the second week in Copenhagen, it was clear that a comprehensive agreement was no longer possible. The best scenario was to declare that progress had been made and that a final agreement will have to be postponed to the next meeting in Mexico. Seeing what they thought was the likely failure of Copenhagen, the Danish hosts, through its Prime Minister, resorted to a much criticized but frequently used practice in international negotiations, that of convening a smaller group of countries that would make the decisions for the rest of the Parties. Presumably, they could do this because they represented all the interests in the issue being dealt with and thus their decisions will be ratified when brought back to the conference. This did not happen in the case of the Copenhagen Accord because four countries, the ALBA group – Venezuela, Bolivia, Nicaragua and Cuba – formally objected to its adoption by the Conference of the Parties. These objections were enough because the current rules of the Conference of the Parties to the UNFCCC require consensus which usually interpreted as unanimity or the absence of a formal objection. Thus, the Copenhagen Accord was not adopted by the Conference of the Parties; instead it was merely noted, allowing Parties to join the Accord by communicating their accession and commitments by January 31, 2009.<sup>6</sup>

In our view, the Copenhagen Accord was not adopted first because it was not arrived at in a transparent and participatory manner. But second, and more important, the Accord is a weak

agreement and thus did not give countries, including those that did not object to it, reason to be enthusiastic about its adoption.

In essence, the Copenhagen Accord<sup>7</sup> has the following elements:

- The Parties recognized that deep cuts in global emissions are required according to science, with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet this objective consistent with science and on the basis of equity. Countries should cooperate in achieving the peaking of global and national emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.
- The Parties acknowledged that Adaptation to the adverse effects of climate change and the potential impacts of response measures is a challenge faced by all countries. Enhanced action and international cooperation on adaptation is urgently required to ensure the implementation of the Convention by enabling and supporting the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing countries, especially in those that are particularly vulnerable, especially least developed countries, small island developing States and Africa. Developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries.
- Developed country (Annex I Parties) committed to implement individually or jointly the quantified economy-wide emissions targets for 2020 and they will submit pledges by January 31, 2010. Their performance with respect to these targets will be measured, reported and verified in accordance with existing and any further guidelines adopted by the Conference of the Parties. Accounting of such targets and finance should be rigorous, robust and transparent.
- Developing countries will implement mitigation actions in the context of sustainable development. Nationally appropriate mitigation actions seeking international support will be recorded in a registry along with relevant technology, finance and capacity building support. These supported nationally appropriate mitigation actions will be subject to international measurement, reporting and verification in accordance with guidelines adopted by the Conference of the Parties.
- The Parties acknowledged the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agreed on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries. \
- Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant

provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development and transfer and capacity-building, for enhanced implementation of the Convention. The collective commitment by developed countries is to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010-2012 with balanced allocation between adaptation and mitigation. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.

- The Copenhagen Green Climate Fund is created and a High Level Panel is established under the guidance of and accountable to the Conference of the Parties to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal.
- In order to enhance action on development and transfer of technology, the Parties decided to establish a Technology Mechanism to accelerate technology development and transfer in support of action on adaptation and mitigation that will be guided by a country-driven approach and be based on national circumstances and priorities.
- Finally, the Parties agreed to assess the implementation of the Accord to be completed by 2015, including in light of the Convention's ultimate objective. This would include consideration of strengthening the long-term goal referencing various matters presented by the science, including in relation to temperature rises of 1.5 degrees Celsius.

What is missing and inadequate in this agreement that many have rejected it and even those who have accepted it, like the Europeans, the island states and the BASIC countries, are not enthusiastic in their embrace of it?

First, the adoption of 2 degrees Celsius is criticized for not being sufficiently precautionary. For many, the safer target is 1.5 degrees; anything higher than that is too risky especially for the most vulnerable countries.

Second, for similar reasons of not being in the end responsive to the demands of addressing climate change, the system of pledging and reviewing mitigation targets of developed countries is controversial as it is likely that the necessary levels of emission reductions will not be achieved through this approach. The same can also be said for mitigation actions by developing countries.

Third, for the REDD-plus actions, while welcome by many Parties, there are no safeguards acknowledged in the Copenhagen Accord. But since these environmental, social (including recognizing the rights of indigenous peoples), and governance safeguards are more or less agreed already, the Accord could tentatively adopt those agreements in the early implementation of REDD-plus.

Fourth, the financial and technology transfer agreements are too uncertain and general in nature. Details would have to be worked out in the future to make this work.

Finally, the Copenhagen Accord has been criticized for not being legally binding and therefore countries cannot be compelled to implement it or to be faithful to the commitments they have made.

Incidentally, the Philippines, in Copenhagen, supported the adoption of the Accord but with reservations based principally on the above-mentioned criticisms. In a recent communication to the UNFCCC Secretariat, the Philippines have also indicated its intention to support the Accord provided that its concerns were met.<sup>8</sup> No national mitigation actions have however been offered for the time being pending consideration by the newly created Climate Change Commission. The Alvarez letter is a wait and see and "no regrets" approach which preserve the options for the country. In our view, the crunch time will be in June when we can assess whether the Copenhagen Accord is a "living documents" where our non-participation is harmful to Philippine interests. For example, if all our ASEAN neighbors associate with the Accord, it is probably foolhardy for us not to join as all the available resources for adaptation and mitigation will flow to those countries at our expense.

Whatever the Philippines ultimately decide on association with the Accord, it probably makes sense to follow always a no-regrets approach – committing only those mitigation actions we already want to do because they bring with them many co-benefits for the country. Association should be designed in such a way that it is not interpreted as abandonment of the Convention and the UNFCCC processes. Because the Accord is clearly not adequate, Philippine involvement in it, following the BASIC countries, should be to make the Accord processes and mechanisms converge with the UNFCCC processes preferably as early as the Cancun, Mexico Conference of the Parties in December 2010. In any case, the Philippine should continue to prioritize the UNFCCC negotiations and play both advocacy and facilitative roles on strategic issues that matter to the country. These, in order of priority based on relevance to the Philippines as well as the openings the processes provide, include:

- Adaptation, with emphasis on agriculture, marine and coastal resources, and disaster risk reduction;
- Mitigation in general, both developed country and developing country commitments;
- REDD-plus, including its social, environmental and governance safeguards;
- Agriculture, both its mitigation and adaptation aspects; and,
- Financial resources and capacity building, which should be understood as cross-cutting;

### **Climate change in the Philippines**

The story of Ondoy and Pepeng, two storms that hit the country in 2009, illustrates what could be in store for us because of climate change.

Ondoy makes a landfall on September 26, 2009 and drops an unprecedented volume of rain. After one week, Typhoon Pepeng hits Luzon. Lakes and rivers overflow and water from dams are released, exacerbating floods occurring in residential areas and agricultural lands. Floodwaters engulf vast tracks of land, with some areas submerged in 10 feet of floodwater. Thousands of residents are stranded on rooftops, with no food, water, and electricity; others flee

to evacuation centers. Landslides and mudslides occur in the northern region, burying people, houses and property, and blocking roads. Lives are lost – children, parent, kin, friend, and colleague. Many houses are destroyed. Roads and bridges are damaged or blocked. Agricultural crops are devastated. Livelihoods are wrecked. Rescue and relief operations are mobilized and get stalled in some areas due to impassable roads. Crowded evacuation centers created an overwhelming demand for clean water and toilets. Children, elderly people, and adults contract diarrhea, particularly in areas with no water and proper sanitation. Cases of leptospirosis increased, overwhelming available testing kits in hospitals. As calamity funds are spent, the government begins to feel the strain on financial resources.

An ADB Study states that the Southeast Asian region is highly vulnerable to climate change and identifies a host of factors for its vulnerability<sup>9</sup>:

- (a) Concentration of SEA's 563 million people along coastlines;
- (b) Heavy reliance on agriculture for livelihood, which accounts for 43% of employment in 2004 and contributed about 11% of gross domestic product in 2006;
- (c) High dependence on natural resources and forestry; and
- (d) High poverty incidence.

All these the Philippines shares with its Southeast Asian neighbors. One factor though remains unique to the country: its geographical location. Situated on the Pacific typhoon belt, the country is hit by an average of 20 typhoons every year, seven of which are highly destructive. Damage on infrastructure and agriculture caused by typhoons has cost the country up to Php20 billion in a single year. This has led the Philippines to become one of the world's most disaster-prone nations, topping the list of countries hit by disasters in the decade of 1990 to 2000.<sup>10</sup>

For the Philippines, the priority on climate change has to be adaptation. Whether we like it or not, climate change is already happening; it will probably worsen before it gets worse. It will have the earliest and most serious impacts on the poor. Because of this, we should invest resources into helping our framers adapt, reduce risks brought by disasters, build a public health system that helps the poor, conserve our forests, etc. We should still do mitigation but mainly those that are consistent with our adaptation goals.

The Philippine has taken strides in addressing the challenge of climate change. As early as 1991, the National Government has created the Inter-Agency Committee on Climate Change (IACCC), preceding even the signing of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. In 1994, the country joined the band of nations that ratified the UNFCCC. Four years later, the Philippines ratified the Kyoto Protocol, signifying further its commitment to address climate change. In 1999, the government established the Climate Change Information Center (now known as klima Climate Change Center), the first of its kind, which was done in partnership with the Manila Observatory, IACCC, and US Agency for International Development. And much more recently, in 2007, the government formed the Philippine Task Force on Climate Change (PTFCCC). Galvanizing the government's commitment to climate

change was the passage and enactment of the Republic Act No. 9729 (RA 9729) or the Climate Change Act of 2009 in October 2009. The Law is designed to mainstream climate change into government policy and establish the framework strategy and program for addressing climate change.

### **The Climate Change Act of 2009**

This latest policy move by the National Government is both timely and responsive for a good reason. Copenhagen did not produce a legally binding deal that everyone hoped for and with negotiations resuming to ensure that everything is agreed on, it may take some time before one can see an international agreement that bears the signature of all UNFCCC parties. Meanwhile, global temperature is escalating at a rate much faster than IPCC's projections. While it is disturbing to imagine what it can further do to climate system and the environment, what is certain is that the temperature rise also gives way to further increase in the vulnerability of developing countries to the adverse effects of climate change *as well as* to increase in the cost of adaptation. In the absence of a giant leap from the international community, a small step in the form of a domestic policy initiative may do for the moment.

Policy, however, is only the first step; the rest is action. And the Climate Change Act of 2009 certainly has created opportunities waiting to be grabbed by any of the country's major stakeholder who care to act. The Act lays down the following as the Philippine policy in climate change<sup>11</sup>:

It is the policy of the State to afford full protection and the advancement of the right of the people to a healthful ecology in accord with the rhythm and harmony of nature. In this light, the State has adopted the Philippine Agenda 21 framework which espouses sustainable development, to fulfill human needs while maintaining the quality of the natural environment for current and future generations.

Towards this end, the State adopts the principle of protecting the climate system for the benefit of humankind, on the basis of climate justice or common but differentiated responsibilities and the Precautionary Principle to guide decision-making in climate risk management. As a party to the United Nations Framework Convention on Climate Change, the State adopts the ultimate objective of the Convention which is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system which should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. As a party to the Hyogo Framework for Action, the State likewise adopts the strategic goals in order to build national and local resilience to climate change-related disasters.

Recognizing the vulnerability of the Philippine archipelago and its local communities, particularly the poor, women, and children, to potential dangerous consequences of climate change such as rising seas, changing landscapes, increasing frequency and/or severity of droughts, fires, floods and storms, climate-related illnesses and diseases,

damage to ecosystems, biodiversity loss that affect the country's environment, culture, and economy, the State shall cooperate with the global community in the resolution of climate change issues, including disaster risk reduction. It shall be the policy of the State to enjoin the participation of national and local governments, businesses, nongovernmental organizations, local communities and the public to prevent and reduce the adverse impacts of climate change and, at the same time, maximize the benefits of climate change. It shall also be the policy of the State to incorporate a gender-sensitive, prochildren and pro-poor perspective in all climate change and renewable energy efforts, plans and programs. In view thereof, the State shall strengthen, integrate, consolidate and institutionalize government initiatives to achieve coordination in the implementation of plans and programs to address climate change in the context of sustainable development. Further recognizing that climate change and disaster risk reduction are closely interrelated and effective disaster risk reduction will enhance climate change adaptive capacity, the State shall integrate disaster risk reduction into climate change programs and initiatives.

Cognizant of the need to ensure that national and subnational government policies, plans, programs and projects are founded upon sound environmental considerations and the principle of sustainable development, it is hereby declared the policy of the State to systematically integrate the concept of climate change in various phases of policy formulation, development plans, poverty reduction strategies and other development tools and techniques by all agencies and instrumentalities of the government.

RA 9729 provides for the creation of a Climate Change Commission which will serve as the sole policy-making body of the government tasked to coordinate, monitor and evaluate the programs and action plans of the government relating to climate change. The Commission shall be composed of the President of the Republic of the Philippines who shall serve as the Chairperson, and three Commissioners to be appointed by the President, one of whom shall serve as the Vice Chairperson of the Commission. The Commission shall have an advisory board composed of most Department Secretaries and it shall also assisted by a Technical Panel of Experts. The Commission shall have the following powers and functions<sup>12</sup>:

- (a) Ensure the mainstreaming of climate change, in synergy with disaster risk reduction, into the national, sectoral and local development plans and programs;
- (b) Coordinate and synchronize climate change programs of national government agencies;
- (c) Formulate a Framework Strategy on Climate Change to serve as the basis for a program for climate change planning, research and development, extension, and monitoring of activities on climate change;
- (d) Exercise policy coordination to ensure the attainment of goals set in the framework strategy and program on climate change;

- (e) Recommend legislation, policies, strategies, programs on and appropriations for climate change adaptation and mitigation and other related activities;
- (f) Recommend key development investments in climate- sensitive sectors such as water resources, agriculture, forestry, coastal and marine resources, health, and infrastructure to ensure the achievement of national sustainable development goals;
- (g) Create an enabling environment for the design of relevant and appropriate risk sharing and risk-transfer instruments;
- (h) Create an enabling environment that shall promote broader multi-stakeholder participation and integrate climate change mitigation and adaptation;
- (i) Formulate strategies on mitigating GHG and other anthropogenic causes of climate change;
- (j) Coordinate and establish a close partnership with the National Disaster Coordinating Council in order to increase efficiency and effectiveness in reducing the people's vulnerability to climate-related disasters;
- (k) In coordination with the Department of Foreign Affairs, represent the Philippines in the climate change negotiations;
- (l) Formulate and update guidelines for determining vulnerability to climate change impacts and adaptation assessments and facilitate the provision of technical assistance for their implementation and monitoring;
- (m) Coordinate with local government units (LGUs) and private entities to address vulnerability to climate change impacts of regions, provinces, cities and municipalities;
- (n) Facilitate capacity building for local adaptation planning, implementation and monitoring of climate change initiatives in vulnerable communities and areas;
- (o) Promote and provide technical and financial support to local research and development programs and projects in vulnerable communities and areas; and
- (p) Oversee the dissemination of information on climate change, local vulnerabilities and risks, relevant laws and protocols and adaptation and mitigation measures.

Through the Commission, the National Government has the opportunity to set a clear and firm direction for addressing climate change through the formulation of a sound and coherent Framework Strategy and Program on Climate Change and a National Climate Change Action Plan, to create an enabling environment which will allow green industries to flourish, and to mobilize key players to contribute in both mitigation and adaptation efforts. The Framework Strategy and Program on Climate Change<sup>13</sup> shall include, but is not limited to, the following components:

- (a) National priorities;
- (b) Impact, vulnerability and adaptation assessments;
- (c) Policy formulation;
- (d) Compliance with international commitments;
- (e) Research and development;
- (f) Database development and management;
- (g) Academic programs, capability building and mainstreaming;
- (h) Advocacy and information dissemination;
- (i) Monitoring and evaluation; and
- (j) Gender mainstreaming.

The National Climate Change Action Plan, on the other hand, shall include, but is not limited to, the following components:

- (a) Assessment of the national impact of climate change;
- (b) The identification of the most vulnerable communities/areas, including ecosystems to the impacts of climate change, variability and extremes;
- (c) The identification of differential impacts of climate change on men, women and children;
- (d) The assessment and management of risk and vulnerability;
- (e) The identification of GHG mitigation potentials; and
- (f) The identification of options, prioritization of appropriate adaptation measures for joint projects of national and local governments.

It is in the area of national leadership where the Climate Change Act of 2009 can be criticized for being wanting and inadequate. After much deliberation, the Congress adopted a national governance model for climate change that is heavy on policy making and planning but not strong in enforcement and implementation. In fact, the Climate Change Commission has very little say in the latter as these remain with the main departments – The Department of Environment and Natural Resources, The Department of Science and Technology, The Department of Energy, The Department of Agriculture, and the Department of Transportation and Communications. Without

oversight on how these departments implement their climate-change mandates, the Climate Change Commission could end up a toothless tiger that is unable to lead the country to meet its climate change mitigation and adaptation objectives.

One good thing about the Climate Change Act though is that it has encouraged multi-sectoral coordination and collaboration thereby multiplying opportunities for change among NGOs, the private sector, and the academia. For the NGOs, including civil society organizations (CSOs) and people's organizations (POs), there is opportunity to work hand in hand with the government in increasing public awareness and understanding on climate change issues and providing crucial technical information and introducing technologies that will enhance national and local responses to climate change.

In the end, responding to climate change requires local action. The Climate Change Act recognizes this and has empowered local government units (LGUs) to serve as the "frontline agencies in the formulation, planning and implementation of climate change action plans in their respective areas," consistent with the objective of the Local Government Code to decentralize and devolve governmental functions. As a deliverer of basic services to its constituents, LGUs will play a more crucial role in adaptation than in mitigation and in the coming years, will need to pursue adaptation vigorously. Because as global warming worsens, the hardest hit will be communities relying on agriculture for livelihood, living in coastal and low-lying areas, or those subsisting only on less than Php200 a day. As climate change will manifest differently in each locality, LGUs need to conduct vulnerability assessment as basis for developing programs and projects, and encouraging appropriate technologies. The goal is to find a solution that squarely meets the needs of the locality.

Several LGUs are considered pioneering in pursuing local measures to address climate change. The Provincial Government of Albay has adopted a climate change-based policy for the province and implements the Albay in Action for Climate Change (A2C2) Program to address its vulnerability to typhoons. The small town of Dumangas has recently become the top rice producing municipality in the province of Iloilo and Iloilo's Provincial Agriculture Office credits it to the town's Climate Field School, which helped farmers track the changes in weather and climate patterns and adjust their farming practices.<sup>14</sup> The Davao City Government has issued ordinances that created the city's local task force on climate change and a Climate Change Office. These local initiatives will have to be constantly supported by capacity building and financial resources, a big, but not insurmountable, challenge for the National Government.

### **Disaster Risk Reduction and Management**

For more than three (3) decades now, the Philippines' Disaster Management System (DMS) has been governed by Presidential Decree (PD) 1566, "Strengthening the Philippine Disaster Control, Capability and Establishing the National Program on Community Disaster Preparedness". Promulgated on 11 June 1978, PD 1566 established the authority, units concerned, and process required to manage disasters. The government's response to disaster is focused on emergency relief measures, while rehabilitation and mitigation are carried out rarely, and if so, comes in the form of technical and structural measures only.

With the emergence of the view that disasters should be viewed not largely from the angle of natural hazards but mainly through the standpoint of people's capacity and vulnerability, the flaws of the traditional approach become apparent. In the traditional approach, the aim of restoring things to normal implies a re-creation of the conditions that led to the disaster. The problem with this is that because disasters which have mainly natural hazards involved are perceived to be unforeseen events, government and aid agencies neglect the real source of the disaster, the root cause of the people's vulnerability.

Given the history of the country's response to disasters, it would take a comprehensive effort to transform the prevailing emergency-oriented paradigm to the paradigm of risk-reduction and participatory community-based disaster risk management. Institutionalization of disaster risk reduction and management (DRRM) and participatory risk management requires a broad set of strategies and actions that should include the development of a national framework that is embodied in national legislation. In order to successfully pursue this, DRR should be elevated as a national policy priority. National policies reflect firm commitment of the government to address development priorities at hand and establish the mandate to decision-makers, planners, practitioners as well as civil society organizations. Elevating the importance of risk management at the policy level should simultaneously include (1) development of a DRR national policy, and (2) mainstreaming DRM/DRR into development policy and planning. Mainstreaming DRR/DRM into the development process will avoid the creation of parallel structures and ensures that development does not give rise to newly created risks. A firm and effective policy statement underscores the importance of disaster risk reduction in achieving sustainable development, and sets out the broad goals and strategic objectives for reducing disaster vulnerability and risks, as well as for strengthening people's capacities.

Underpinning the DRR/DRM framework is the concept of promoting disaster risk management as a multi-sector responsibility. DRM is a cross-cutting issue that needs to be considered in many areas and sectors and at all levels of policy, society and economy. This requires inter-disciplinary and multi-sectoral approaches which depend upon institutionalization and the creation of appropriate mechanisms to stimulate and advance inter-agency and inter-sectoral cooperation at all levels.

Following from this analysis, many of us have been advocating for a policy shift from disaster response and preparedness to disaster risk reduction and management through the development and establishment of a national framework that will foster and enabling national policy environment anchored on multi-stakeholder action.

In this 14th Congress, Senate Bill No. 3086 otherwise known as the "Philippine Disaster Risk Reduction, Management and Recovery Act of 2009" was approved on third reading on September 2, 2009. Its counterpart bill at the House of Representatives (HOR) was in the last few days also approved by the relevant committees of the HOR. Thus the stage was set for the bicameral conference which last week approved the consolidated and reconciled version of the bill. In essence, the Senate version was adopted although many of the provisions of the House version were incorporated into the final bill which will likely be enacted into law soon.

The Disaster Risk Reduction and Management (DRRM) Bill recognizes that disasters are functions of three factors: exposure to hazards, conditions of vulnerability, and insufficient capacity to reduce or cope with the potential negative consequences. It thus shifts the paradigm, from the traditional disaster relief and response under Presidential Decree No. 1566, to DRRM. This new paradigm reduces risks through systematic analyses and management of the abovementioned causal factors of disasters, and uses organizational and operational skills and capacities to implement strategies and policies that lessen the adverse impacts of hazards and the possibility of disaster.<sup>15</sup>

The DRRM framework takes a comprehensive, integrated and proactive approach and covers all aspects, including good governance, risk assessment and early warning, knowledge building and awareness raising, reducing underlying risk factors, and preparedness for effective response and early recovery.<sup>16</sup> It likewise adopts the following internationally accepted principles of disaster risk management:

- Addressing the root causes of vulnerabilities to disasters;
- Strengthening the country's institutional capacity for DRRM;
- Strengthening the capacity of local government units (LGUs) for DRRM through decentralized powers, responsibilities and resources;
- Building the resilience of local communities to disasters, including climate change impacts;
- Engaging the participation of all sectors – including civil society and the private sector – and stakeholders at all levels; and
- Strengthening the capacities of vulnerable and marginalized groups to mitigate, prepare for, respond to, and recover from the effects of disasters.<sup>17</sup>

The DRRM principles will be incorporated into national and local sustainable development strategies, policies, plans and budgets. The mainstreaming into national policies will be done by the National DRRM Council, which will be created from the present National Disaster Based on this National DRRM Framework, the Office of Civil Defense (OCD) – as the secretariat of the National Council and the lead agency in the implementation of the DRRM Law shall formulate and implement a National DRRM Plan.

The DRRM Bill also transforms the current Regional Disaster Coordinating Councils and Provincial, City and Municipal Disaster Coordinating Councils into Regional DRRM Councils<sup>18</sup> [Sec. 10] and Provincial, City and Municipal DRRM Councils<sup>19</sup>, respectively. Meanwhile, Barangay Disaster Coordinating Councils are abolished and their functions transferred to existing Barangay Development Councils (BDCs) which shall serve as the Local DRRM Councils in every Barangay. The aforementioned councils will be responsible for ensuring DRRM-sensitive local development plans, whereas the newly created Local DRRM Offices will be tasked with the implementation of the local DRRM programs.<sup>20</sup>

The present Calamity Fund appropriated under the annual General Appropriations Act will become the National DRRM Fund and shall be used for disaster risk reduction or mitigation, prevention and preparedness activities. It may also be utilized for relief, recovery, reconstruction services in connection with calamities which may occur during the budget year or in the past two

(2) years from the budget year. On the other hand, the present Local Calamity Funds will become the Local NDRRM Funds. Not less than five percent (5%) of the estimated revenue from regular sources shall be set aside by the LGUs for these Local Funds that will support DRRM activities. Thirty percent (30%) of the National Fund and of the Local Funds shall be allocated as Quick Response Funds or stand-by funds for relief and recovery programs in order that situation and living conditions of people in communities or areas stricken by disasters, calamities, epidemics, or complex emergencies, may be normalized as quickly as possible.<sup>21</sup>

Unexpended Local DRRM Funds will accrue to special trust funds solely for the purpose of supporting the DRRM activities of the Local DRRM Councils within the next five (5) years. Any such amount still not fully utilized after the five (5) years shall revert back to the general funds and will be available for other social services to be identified by the local sanggunians. Local DRRM Councils will also have to option, upon the recommendation of the Local DRRM Offices and approval of the sanggunians concerned, to transfer the said funds to support DRRM work of other LDRRMCs which are declared to be under the state of calamity.<sup>22</sup>

The DRRM Bill also provides for the:

- Grant to the National DRRM Council Chairperson of the authority to call upon government and non-government entities for assistance in terms of the use of their facilities and resources for the protection and preservation of life and properties, including the power to call on the reserve force to assist in relief and rescue during disasters or calamities<sup>23</sup>;
- Accreditation of volunteer accreditation and entitled to compensatory benefits and individual personnel accident insurance of volunteers who incur death or injury<sup>24</sup>;
- Integration of DRRM education in the secondary and tertiary levels<sup>25</sup>;
- Mandatory training of public sector employees in emergency response and preparedness<sup>26</sup>;
- Immediate and mandatory undertaking of remedial measures (imposition of price ceiling on and monitoring of basic necessities and prime commodities; fund reprogramming for repair and safety upgrading of public infrastructures and facilities; and granting of no-interest loans to the most affected sections of the population) upon a declaration of a state of calamity<sup>27</sup>; and
- Allocation of a PhP 1 Billion revolving fund for the OCD.<sup>28</sup>

The DRRM bill is a step forward in addressing natural disasters in the Philippines. Its emphasis on the role of local governments, community and civil society organizations is particularly welcome. The inadequacy of the bill is with respect to national leadership and intuition building. Congress was faced with the policy choice of creating a permanent, separate agency, the National Disaster Risk Reduction and Management Authority or retaining the current system (albeit with reforms intended to make it more effective). The House version of the DRRM bill provided that option but unfortunately did not prevail. It remains to be seen, probably as early as the next big disaster next year, whether Congress made the right decision or not.

## Conclusion

The enemy of the good is the perfect. The Copenhagen Accord, the Climate Change Act, and the DRRM law – are not perfect; in fact, they are not even good enough. But these are what we now have and we must utilize them while working to improve them or later on replace them with something better.

In a way, Copenhagen was an experience of despair. And this can also describe the experience of those of us who wanted to have a better Climate Change Act and the DRRM Bill. But, if we learn the lessons from this experience, all these experiences could turn out to be positive, indeed even liberating. What should become clear to us is what needs to be done both in our country, the Philippines, and what we need to do internationally.

For the Philippines, the priority on climate change has to be adaptation. Whether we like it or not, climate change is already happening; it will probably worsen before it gets worse. It will have the earliest and most serious impacts on the poor. Because of this, we should invest resources into helping our framers adapt, reduce risks brought by disasters, build a public health system that helps the poor, conserve our forests, etc. We should still do mitigation but mainly those that are consistent with our adaptation goals. This is what has been called an integrated adaptation-mitigation approach.<sup>29</sup>

An integrated adaptation-mitigation framework identifies key strategies, establishes clear responsibilities between and among sectors, and provides a clear picture of the interdependence between mitigation and adaptation efforts. It allows the identification of “no regrets” options that can serve best the long-term interests of the country. Fortunately, many response measures to climate change move towards achieving other important objectives, including infrastructure goals, disaster risk reduction and mitigation objectives, food security concerns, energy development and independence, and biodiversity conservation.<sup>30</sup>

On that last day in Copenhagen, it was tempting to give up on the United Nations. But that is not an option. It would be foolish, it would be wrong to do that as climate change is in fact a global issue. But things would have to be changed: we have to drastically modify the way we negotiate, so there is less brinkmanship and stalemates, and more innovative thinking and brainstorming.

As for the inadequacies of national governance, this does not come as a surprise. The saving grace is that the two new laws recognize the importance of local governments in climate change adaptation and disaster risk reduction. At least, on that point, our law makers have got it right for that is where most of the action will be.

Addressing climate change and disasters effectively is impossible without good governance. Good governance in turn require effective leadership that include embracing the tools that science and technology provide us and use them to drive governance. Good governance demands that evidenced-based decision-making underlie the design of inter-locking adaptation and mitigation strategies.<sup>31</sup>

The enemy of the good is the perfect. What we have is not perfect. It is not good enough. But there is something there to build on. Our hope is that the next administration will take on this challenge.

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<sup>1</sup> Antonio La Viña (JSD, LLM) is Professorial Lecturer at the UP College of Law and Dean of the Ateneo School of Government. His co-authors work for the Climate Change and Disaster Risk Reduction Team of the Ateneo School of Government.

<sup>2</sup> United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, entered into force 21 March 1994. For the complete text of the Convention, see [http://unfccc.int/essential\\_background/convention/background/items/2853.php](http://unfccc.int/essential_background/convention/background/items/2853.php)

<sup>3</sup> Jose Ramon T. Villarín, et. al. *In the eye of the perfect storm: What the Philippines should do about Climate Change*, Ateneo de Manila University, July 2008.

<sup>4</sup> The Kyoto Protocol to the United Nations Framework Convention on Climate Change, adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. For its complete text, see <http://unfccc.int/resource/docs/convkp/kpeng.pdf>

<sup>5</sup> See Earth Negotiations Bulletin at [http://www.iisd.ca/process/climate\\_atm.htm](http://www.iisd.ca/process/climate_atm.htm) for accounts of the Copenhagen Conference. Two of the authors were also in Copenhagen and rely on their experiences and impressions.

<sup>6</sup> Id.

<sup>7</sup> The Copenhagen Accord was not adopted but noted by the UNFCCC Conference of the Parties on 18 December 2009. See [http://unfccc.int/files/meetings/cop\\_15/application/pdf/cop15\\_cph\\_auv.pdf](http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf)

<sup>8</sup> See letter of Secretary Heherson T. Alvarez to the UNFCCC Secretariat dated 26 January 2009.

<sup>9</sup> Asian Development Bank, *The Economics of Climate Change in Southeast Asia*, April 2009.

<sup>10</sup> This is based on the records of the Center for Research and Epidemiology of Disasters (CRED) in Belgium. See <http://www.cred.be/>

<sup>11</sup> See Republic Act No. 9729, Section 1.

<sup>12</sup> Id. at Section 9.

<sup>13</sup> Id. at Section 12.

<sup>14</sup> Francis Allan L. Angelo, *First climate school helps increase rice production in Iloilo*, Business World, January 13, 2010, <http://www.bworldonline.com/main/content.php?id=4498>

<sup>15</sup> Disaster Risk Reduction and Management (DRRM) Bill, consolidated version dated 28 January 2010, Section 3.

<sup>16</sup> Id. at Section 4.

<sup>17</sup> Id. at Section 2.

<sup>18</sup> Id. at Section 10.

<sup>19</sup> Id. at Section 11.

<sup>20</sup> Id. at Section 12.

<sup>21</sup> Id. at Sections 21-22.

<sup>22</sup> Id. at Section 21.

<sup>23</sup> Id. a Section 7.

<sup>24</sup> Id. at Section 13.

<sup>25</sup> Id. at Section 14.

<sup>26</sup> Id.

<sup>27</sup> Id. at 17

<sup>28</sup> Id. at 23.

<sup>29</sup> See Villarin, *supra* note 3.

<sup>30</sup> Id.

<sup>31</sup> Id.