

EDITORIAL

The Face of Climate Change: Why can't we talk about the environment, disaster risk reduction and development without talking about climate change?

By Pablo González¹

As we celebrate Earth Day, we remember the fundamental environmental concerns that prompted millions of Americans to demonstrate for a healthy and sustainable environment on that day of April 22, 1970. Their concerns then are our concerns today, as population growth and patterns of increasing consumption result in increasing pressure on our ecosystems and the resources and services they provide. Competing uses of land and water, in a changing climate, combined with growing inequity in the access to and use of natural resources are responsible for recurrent droughts and floods, landslides and mudslides that affect millions of people in the Americas every year. With about 80% of the population living in urban areas in the Americas and a trend that may take us to a 90% urban population by 2050², the situation can only get worse if we do not act now.

In concert with this year's Earth Day theme, The Face of Climate Change, I was asked to write about the impacts of climate change and community-based risk management and adaptation. However, I feel compelled to question why we can't talk about the environment, disaster risk reduction and development without talking about climate change? Is change not an intrinsic element of climate and the environment? What is the real issue here?

We all understand the urgency of reducing green house gas (GHG) emissions and the potential impacts of climate change attributed to human activities. But, we also know that droughts and floods are not natural events driven solely by climate; neither are land- and mud-slides. Dry seasons are natural phenomena, but droughts are not. They are the result of a deficit in water for multiple purposes, such as safe-drinking water systems, agriculture, energy, industry and the maintenance of ecosystems, among

¹ Pablo González is the Section Chief for Risk Management and Adaptation to Climate Change, RISK-MACC, of the Department of Sustainable Development (DSD) of the General Secretariat of the Organization of American States (GS/OAS). He holds a degree in Land Surveying Engineering and a post-graduate degree in Geodetic & Geophysics Engineering from the Universidad de Buenos Aires. He also holds a Masters degree in International Development and Geographic Information Systems (GIS) from Clark University, in Massachusetts. He has more than 15 years of experience in integrated water resources management (IWRM) in transboundary basins and in disaster risk management (DRM), as well as in applied GIS, remote sensing and image processing to natural resources management, with emphasis in conflict (over competitive uses of land and water) resolution. He is a guest speaker at universities and prestigious research institutions, such as the University of Virginia (UVA), the Université Laval of Canada, the Universidad del Salvador of Argentina, the Inter-American Defense College, the Florida International University (FIU), and the Brookings Institute, among others. He is the co-author of or contributor to several DSD publications, and the author of several white papers presented at international conferences and symposiums. He has spent some time studying the differential roles and conditions of women and men in IWRM and DRM –defined around gender-related social constructions. He has also a special interest in geopolitical strategies that define relationships among States and joint approaches to sustainable development. He is a certified Emergency Medical Technician (EMT) with the State of Maryland.

² UN-HABITAT, State of the World's Cities 2010/2011.

others. And heavy rains are natural phenomena, floods are not. Floods are the result of placing social and economic infrastructure, productive systems and infrastructure, in the way of natural drainage areas or of changing run-off coefficients and reducing the flow capacity of rivers and water streams with the consequent increase in flood areas. And land- and mud-slides kill people and destroy their homes, schools and health units, and recreation areas and facilities, when we settle on steep slopes, over fragile soils, or at the foot of naturally fragile mountain sides.

We may want to continue this argument among 'believers' and 'skeptics' of climate change or we may want to do something about it. And while we may all agree on the observed increase of the threat for climate-related hazards, we should also agree we cannot continue to build vulnerability, increasing the risk for disasters at a larger magnitude and higher recurrence. The complexity of climate and the processes and factors that drive climate change will continue to challenge scientists in understanding the contribution of human activities. But our planet will remain in a continuing state of unstable equilibrium, always seeking a balance that will never be reached. We will then have to adapt to those changes, just as we adapt to the changes in our own lives. Our body changes throughout the various stages of our life. And our social context changes; we lose friends and family, we move to different places, we make new friends and relationships, we change jobs, occupations, and what we do in our leisure time. We are afraid of change, and yet, we endure it and often it brings us opportunities and new adventures that fill our lives with joy.

In the end, when it comes to disaster risk reduction, the issue is not climate change, but reducing our vulnerability and building capacity and resilience to adapt to the changes that we will inevitably have to endure. And please, do not take me wrong. We must reduce emissions of GHG, just like we need to use clean energy technologies, preserve our ecosystems and reduce air and water pollution. And we must do this regardless of our contribution to climate change. We must do this for our own sake and that of the future generations'. We must do this for those who are less fortunate; those who do not have access to resources and opportunities; those who will not survive or will not live with dignity if we continue to destroy our ecosystems, degrade our environment and waste resources.

So now I can talk about 'the impacts of climate change and community-based risk management and adaptation'. But, can I?

I can tell you that environmental degradation affects particularly local communities whose subsistence systems depend directly on the services and goods of the ecosystems they live in. I can also tell you that a vicious circle occurs when communities are settled in low-lands prone to floods, on poor soils prone to extensive dry seasons, or steep slopes on fragile soils or the foot of mountains susceptible of land- and mud-slides. These conditions increase the risk of disasters that, in turn, result in environmental degradation, further loss of soil fertility and stability, and loss of personal property, subsistence systems, and often the own dignity of the members of the community. Add to this, interruptions in the education of children that often is presented unequally between boys and girls, as girls stay behind to help their mothers in the household; deterioration of health; and often the separation of family members, and even domestic violence. All this increases vulnerability that results in higher risk to disasters, with more negative effects. If we now increase the threat for climate-related hazards, these communities will have no chance of a worthy life and even less well-being and a prosperous future.

Underneath the observed issues lie structural issues such as land-tenure, land use planning, and the lack of integration of disaster risk reduction comprehensive programs at all levels, from national to local. Addressing these issues requires political courage and setting clear and attainable development goals. Reducing risk to disasters will never be a priority unless it is well understood as a critical, essential objective of development. By setting development objectives, measured in terms of education, health, employment and personal realization, we will not only reduce risk, but we will be better prepared. In the end, we will become more resilient societies, capable of dealing with climate change and the changes our societies and economies continue to experience.