

Prioritizing the Adaptation Fund: Peru as a Case Study

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The number one goal of the Poznan Climate Change Conference is to reduce greenhouse gas emissions. Despite high oil prices for the greater part of the past two years, a lot of talk about the importance of energy security and the development of green energy, the reality is that greenhouse gas emissions are still rising at about 3% annually. In order to keep the increase in average global temperatures below two degrees Celsius, according to the 2007 IPCC's 4th Assessment, global emissions of greenhouse gases will need to peak by 2020.

Adaptation

In every discussion about climate change, mitigation measures must always come first. However, many countries already are being forced to cope with climate change problems, which will get worse during the next few decades even if the temperature rise is kept below two degrees Celsius. Therefore, the Poznan Conference must address the issue of Adaptation in a comprehensive and effective way. To date, especially in Bali, the negotiation on the Adaptation building blocks have dealt mainly with the principles involved and the financial architecture of the proposed fund.

Concerns about Adaptation need to be progress beyond a discussion about what might be the most suitable scientific methods of assessment, to include issues of substance and, especially, of adequate financing. Increasing the scale of Adaptation requires establishing secure and predictable financial support, delivered through well-governed and effective funding mechanisms.

Peru and Adaptation

In September 2008, I spent two weeks in Peru, visiting my Columban colleagues, lecturing on ecology and creation theology, talking to people on the ground and visiting ecologically sensitive areas. While much of my focus was on the negative aspects of mining, time and time again I heard how climate change is affecting Peru at this point in time and will continue to do so in the future. The following reflections are based on my own notes and on data about Peru which I sourced here at the Poznan Conference.

Although Peru contributes less than 0.4% of global greenhouse gases, some people claim that Peru is the third most vulnerable country in terms of climate change impacts. These include melting glaciers, more extreme weather and the intensification of the El Nino currents.

It is estimated that the average global temperature increase in Peru will be 1.8 degrees Celsius by 2020, 4 degrees Celsius by 2050 and 7.5 degrees Celsius by 2080. To put it graphically, this increase will take place within the life-time of some of the children whose baptisms I witnessed on the third Sunday in September 2008 in Lima. Global warming has caused Peru's glaciers to shrink at an alarming rate. Over the past 35

years, almost a quarter of Peru's total glacier area has disappeared causing a 12% reduction of fresh water from mountains reaching the coastal planes. The retreat of four Cordillera Blanca glaciers has resulted in the loss of 188 million cubic meters of water reserves during the past 50 years. This has reduced water to towns and cities and to irrigated agriculture. Melting glaciers which form lakes known as water-bombs, have burst out from valleys and sent walls of water, mud, stones and vegetation ripping through villages and towns, destroying everything in their wake. It is estimated that since 1941, more than 30,000 people have lost their lives in such catastrophes

The projected increase in temperature is likely to cause many of Peru's tropical glaciers to disappear during the next 15 to 20 years. As a result, the water supply for 60% of the population will be seriously diminished. Energy generation will also be reduced. Forty percent of Peru's energy supply comes from hydro-electric generating plants on rivers such as the Mantaro River, which is fed by glacial melt.

Climate change is likely to transform much of the country's arid coastal plain into desert and, in the process, increase the salinity of the soil. This will lead to crop reduction and failure in many places. The warming of the ocean is likely to intensify the El Nino effect, causing flooding in the north western part of the country. El Nino will also lead to a collapse in the number of cold-water fish, especially anchovies. Despite such falls in food production, the population is poised to increase significantly.

Climate change is affecting Peru's agriculture in other ways. Livestock in the mountain areas are experiencing a lack of water and deteriorating health as some animals, such as Alpacas, are picking up infections because the water they are drinking is from muddy pools, rather than clean, running streams.

In Peru, the environmental, economic and health impacts of climate change are exacerbated by lack of knowledge about the impact of climate change and how to respond to it. Despite the seriousness of the problem, climate change has not yet entered into the political debate in the country in any serious way. One of the first official efforts to tackle climate change is the PROCLIM (Programa de Fortalecimiento de Capacidades Nacionales para Manejar el impacto del Cambio Climatico y la Contaminacion de Aire – Empowering national capacity programs to manage climate change impacts and air pollution). Improved irrigation technologies are also being introduced on a limited basis. The National Institute for National Resources (INRENA) is using its Glaciology and Water Resource Unit to monitor and evaluate the stability of glaciers and lakes in the high Andes. 1

Against such a background the Adaptation debate takes on a completely different importance. Peru is a poor country with little enough scientific, managerial and financial capacity to meet all the problems which climate change is creating from its own meager resources. When one considers that almost every country in Africa is in a similar predicament, one doesn't need to be a financial genius to realize that Adaptation budget needs to be increased dramatically. But the needs go much deeper than money.

Adaptation must be factored into all the technological discussions. Risk management in many parts of the developing world is at a very early stage. The Subsidiary Body for Scientific and Technological Advice (SBSTA), and the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LC), must be involved in building capacity in countries in the developing world to deal with a deteriorating situation. There is a need to foster global and regional expertise. After all, Peru is not the only country that is affected by glaciers melting in the Andes. Some are suggesting that there is a need for global and regional adaptation Centers of Excellence, where personnel from various countries can learn how to enhance the resilience of vulnerable ecosystems in their countries, so that they can support human populations. Every country in the developing world needs support in order to develop their National Adaptation Programs of Action (NAPA) and then the ability to be able to deliver it on a daily basis.

Action on Adaptation is an urgent priority here at Poznan. By taking Adaptation seriously, delegates at this Conference can foster trust and consensus on what needs to be included in the post-2012 agreement. For poor people in Latin America, Africa and Asia, it will be a question of survival. Now is the time to act.

¹ Friends of the Earth International, "Climate Change: Voices from Communities Affected by Climate Change," November 2007. pages 24 to 27.: