RI’s growing climate change challenges

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Climate change has undeniably become one of the greatest global issues in decades.

There is no such single issue that has brought so many countries to sit together to talk about the problem, even though from many different points of view and perspectives. Along the way, apprehensions about rising global temperatures, which initially were purely scientific, have now become more political (see Anthony Gidden, The Politics of Climate Change, 2009).

Early this December the climate change Conference of Parties (COP) 16 was undertaken in Cancun, Mexico. Although many are doubtful about the outcomes of the Cancun meeting, this COP is still an important milestone for dictating the future direction after the Protocol Kyoto ends in 2012.

Indonesia is also facing growing climate change challenges. For example, throughout 2010 we have been experiencing the real affects of climate variation. Unpredictable weather and a prolonged rainy season caused huge agricultural losses.

Extreme weather also directly impacted the fishery sector. This weather anomaly is hypothesized to be linked with the very real and growing threats of climate change.

Global warming could potentially damage our economy. Agriculture in general is the backbone of the Indonesian economy, and consequently the devastation of this sector will significantly impact the nation’s economic capabilities for providing food security.

Climate change is also believed to affect the health sector by causing conditions for certain tropical diseases to proliferate. As poverty reduction is one of Indonesia’s development focuses, global warming may complicate the severity of the problem.

Climate-linked agricultural problems have actually given a perfect simulation for Indonesia to prepare itself for the worst scenario.

Authorities may prepare more appropriate plans if extreme weather continues in 2011. As the global warming problem is predicted to be much worse in the future, we desperately need a long-term plan for climate change adaptation. Vulnerable and important sectors, such as agriculture, have to be prioritized.

David Lobell et al. (Science, Vol. 319 2008) projected the impacts of climate change on food security in 2030. They predicted that the Southeast Asia region, including Indonesia, is among 12 regions which would be potentially vulnerable to food insecurity caused by global warming unless sufficient adaptation measures are taken.

According to this projection, insecure regions have similar fundamental characteristics: Lack of awareness of the possibilities of climate change impacts on food security and insufficient knowledge and understanding of the responses of food crops to climate variation.
Consequently, essential policies and actions may not be taken.

Indonesia is actually not only among the nations most affected, but also significantly adds to global carbon emissions. Our total annual carbon emissions almost doubled within less than a decade, from just about 267 million metric tons in 2000 to 434 million metric tons in 2008.

A large portion of these emissions come from the removal of flora, which serves as carbon stocks, from natural forest and the conversion of peatlands.

We believe that some land conversions are needed and unavoidable. We need land conversion to make a room for economic activities. However, a large portion of conversions are also illegal, unnecessary and poorly planned.

This nation must have more controlled exploitation of natural resources, including forests. We need sustainable growth that could ensure long-term benefits and prosperity. Uncontrolled exploitation of natural resources will only lead to future suffering.

Therefore, our participation in nature-based solutions for climate mitigation and adaptation is the right pathway to follow. Indonesia’s active involvement in reducing emissions from deforestation and forest degradation (REDD) is part of our shared responsibility to save our planet.

The development of REDD to REDD-plus is a good sign of the changing paradigm on the plan itself. REDD-plus does not just view natural forests as carbon stock, but far more importantly, as natural ecosystem service resources. However, the development of nature-based solutions should not reduce developed nations’ responsibility to cut their emissions.

Tropical biodiversity itself is also vulnerable to climate change. There are many tropical species that live in a narrow habitat range. These species are especially vulnerable to temperature and habitat changes.

On the other hand, species occupying extreme habitats have more capability to adapt. Thus, a plan such as REDD-plus not only gives us a chance to contribute to global warming mitigation, but also plays a significant role in conserving the tropical ecosystem itself.

In the World Development Report 2010 issued by the World Bank, there are several key issues needed to be addressed with regard to development and climate change. Those issues include the fact that economic growth alone is not equitable enough to reduce threats from climate change.

The report also highlights that effective global climate management is needed. There is also a need to change behaviors and shift public opinion.

Indonesia needs to rethink its approach to development. Yes, we need development to provide more jobs and prosperity for the people. Nonetheless, we need to reconsider our manner of exploiting our natural resources, whether it has been aligned with a sustainable development approach or not. We need nature-based and climate-smart development policies.

Climate-smart policies, which means allowing growth to thrive with low-carbon emissions, could bring us more benefits in the future. As the main source of emissions in Indonesia is natural ecosystem degradation, the policy has to underline harmonization between growth and conservation of natural resources, particularly forests.

Climate-smart policies would allow us to reduce our vulnerability to climate change, which would
consequently enhance development. So, in 2011 we need to commit to building nature-based and climate-smart development. Surely it is time to share our burden of responsibility by acting now with measurable actions.

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photo caption:

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Where is the forest?: An aerial view of deforestation on Sumatra Island. Deforestation is deemed a major contributor to greenhouse gas emissions.

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