

Senate Committee on Foreign Relations
Senator Richard G. Lugar
Opening Statement for Hearing on Climate Change
January 28, 2009

I thank the Chairman for holding this hearing, and I join in welcoming Vice President Gore back to the Senate.

In President Obama's inaugural speech last week, he declared his intention to "restore science to its rightful place" in the operation of our government. He has demonstrated his commitment to scientific excellence by appointing respected scientists like Steven Chu to be Energy Secretary, John Holdren to be Assistant to the President for Science and Technology, and Jane Lubchenco to be Administrator of the National Oceanic and Atmospheric Administration.

This is an excellent start that hopefully will facilitate an emphasis on science and technology in addressing the threat of climate change and global energy demand. We should recognize that energy issues are at the core of most major foreign policy, economic, and environmental issues today. Technological breakthroughs that expand clean energy supplies for billions of people worldwide will be necessary for sustained economic growth. In the absence of revolutionary changes in energy policy that are focused on these technological advancements, we will be risking multiple hazards for our country that could constrain living standards, undermine our foreign policy goals, and leave us highly vulnerable to economic, political, and environmental disasters with an almost existential impact.

The United States should recognize that steps to address climate change involve economic opportunities, not just constraints. Thanks to new technology, we can control many greenhouse gases with proactive, pro-growth solutions. Such technology represents an enormous opportunity for U.S. exports.

But we have to have the will to develop, test, and implement these technologies on a truly urgent basis. President Obama must demand that research projects related to battery technology, cellulosic ethanol, carbon capture and storage, solar and wind power, and dozens of other technologies receive the highest priority within his Administration.

I am concerned that even as we discuss ways to limit carbon emissions, too little is being done in the area of adaptation to changes in climatic conditions that have already started and will continue even with successful mitigation programs. We should not wait to implement adaptive policies out of fear that embracing such policies will be an admission of defeat or undermine support for mitigation measures.

I am especially concerned that even as prevailing science is accepted as the essential reference point for the debate on climate change, too many governments and climate change activists reject scientific advancements in the area of biotechnology that are necessary to address dire projections of declining food production due to climate change.

The important report by Sir Nicolas Stern estimated that a 2 degree Celsius increase in global temperature will cut agricultural yields in Africa by as much as 35 percent. This would be a catastrophic outcome that would lead to massive starvation, migration, and conflict on a continent that is already suffering from severe hunger.

Genetically modified crops have the potential to improve agriculture production in the poorest regions of the world and help poor farmers contend with increased drought, new pests, and other consequences of a changing climate. Yet many developing countries, especially in Africa, worry that if they adopt GM crops, they will not be able to export to markets in Europe. They also are deeply influenced by the direct advocacy of European government agencies and NGOs that are hostile to biotechnology. As Robert Paarlberg documents in his book, “Starved for Science,” many European development agencies and NGOs campaign overtly against the use of GMOs in Africa and elsewhere. They have done so even as global investment in African agriculture has declined significantly in recent decades. The ironic result has been that African nations have developed stifling, European-inspired regulations on GM technology, even as they continue to struggle to ensure adequate food supplies and they rightly worry about the coming impact of climate change on their agricultural productivity.

The governments and people of Europe must understand that their unrelenting opposition to cutting edge biotechnology has consequences far beyond their own countries. Opposition to safe GM technology contributes to hunger in Africa in the short run and virtually ensures that these poor countries will lack the tools in the long run to adapt their agriculture to changing climatic conditions that could create chaos. As a wealthy continent with a relatively secure food supply, Europe has the luxury to reject the benefits of GM technology without fear that its domestic populations will suffer intensifying hunger. But most African countries have no such luxury. If Nicholas Stern’s estimates are correct, Africa is looking at a very bleak future. We must not allow an aversion to modern agricultural technology to doom a part of the world’s population to chronic hunger and poverty.

Overcoming agricultural deficiencies in Africa requires refocused attention on increasing investments in better seeds and fertilizers, improved and sustainable farming techniques, and farmer access to small loans and extension support. But even if donor countries expand conventional agriculture assistance to Africa, as I have advocated, African nations are likely to fall far short of satisfying long-term food demands without sensible GM regulatory frameworks that facilitate the use of safe biotechnology.

When Committee staff has raised this issue during international climate change conferences, European negotiators have responded that GM technology cannot be on the agenda. But the depression of global food production is, potentially, one of the most deadly and disruptive consequences of climate change. An international fund for climate change adaptation that does not include cutting edge advances in biotechnology will be unnecessarily limited. If we are rejecting scientific methods for preventing a food catastrophe without even allowing them to be on the agenda, it is difficult to project much optimism on other climate change proceedings.

Yet when it comes to these issues, we cannot succumb to exasperation or despair. I am heartened by President Obama’s forthright inaugural pledge to work with poor nations to “make your farms flourish and let clean waters flow, to nourish starved bodies and feed hungry minds.” I am also heartened by the excellence of research at U.S. universities and other research facilities that are using plant genetics to increase farm yields, adapt seed to challenging conditions, and decrease pesticide use.

Addressing climate change will require extraordinary leadership by the Obama administration. The President’s team must consistently promote good science to address both the causes and effects of climate change. I appreciate the work that our Committee has done under Chairman Biden on this issue. I thank Chairman Kerry for continuing our examination, and I look forward to our discussion with Vice President Gore.

###