

SESSION III. REALIZING THE PROMISE OF BIOFUELS IN DEVELOPMENT

October 19, 2007 – 9:00 – 10:00 a.m.

Moderator: Ambassador Melinda Kimble

Speaker: Andrea Kutter

Ambassador Melinda Kimble

Senior Vice President, U.N. Foundation

Our first speaker today is Ms. Andrea Kutter from the Global Environment Facility. Ms. Kutter is a scientist; she has trained in Germany, and she has spent many years working on the environment. She joined the Global Environment Facility in 2002. What many of you may not realize is the Global Environment Facility is a new financing mechanism brought out of the promise of Rio and supports countries in their search for sustainable development.

And she is going to explain the potential for financing bioenergy and talk about the Global Environment Facility's priorities in using bioenergy or agroenergy for sustainable development.

Andrea Kutter

Senior Natural Resources Management Specialist, Global Environment Facility, Washington, DC

Good morning. First of all I would like to thank very much the organizers of this wonderful event, inviting the Global Environment Facility to discuss the issue of biofuels. Also from a wider perspective of the global environment agenda, and I think that's the mandate of my organization, is out-blending out of core sustainable livelihood issues.

So my presentation's title – as you see, our session, this event, is called “Biofuels – Realizing the Promise.” I've played a little with just the title and changed my presentation to “Biofuels – Realizing the Challenge.” Of course, I would like to put the biofuels debate a little bit in a broader perspective, in a global perspective, because I think we have to look at the full picture to really discuss the pros and cons of the biofuels debate.

So here is a short overview of my presentation, but I would like to go right into my first slide. Finding alternatives to fossil fuels is basically driven by two linked but different debates. One comes from the debate on global climate change, which was institutionalized in the U.N. Framework Convention on Climate Change, but the whole issue of the Kyoto Protocol is also linked to it. But also in many other countries the debate comes from a true economic point of view. Because fossil fuels are finite – we know that – they have some very negative impacts on

the economy but also on the health and livelihoods of people. So finding alternatives to fossil fuels is of utmost importance, also, from an economic point of view.

These two debates fuel the discussion, and it's commonly agreed that we need not only one strategy but actually a dual strategy. Number one is, develop clean sources for fuels. And the other one is, maximize energy efficiency and minimize energy use to address these issues.

Putting this in the macro-perspective, our major challenge right now is to put these two agendas basically into one agenda or align them properly, that they enhance each other instead of somehow debating each other or conflicting with each other.

And so what we have to do, and this is our job in the Global Environment Facility, is to link national development or economic or socioeconomic agendas with the global environment agenda. And as easy as it sounds, it is definitely not. But main issues – and I have just listed here four issues how to do this. What the international community is right now pushing very much for is integrated natural resource management. Some of you might say – well, that's a pretty old concept. But you have to show where it has been done successfully: What are the good practices, especially from a greater dimension point of view? Where has it worked right? Do we have to integrate other aspects of natural resource management into this debate?

Another point that is coming up very strongly in the debate since what you have heard about the emerging carbon market is that we have not only greenhouse gas emissions from cars or from big industrial plants, but there is also a 20 percent emission from ongoing land use, land cover changes, especially from deforestation. And I've heard about large-scale deforestation activities going on, for instance, in Asia, in Africa even, to fuel, basically, economic growth. But this has an impact on the environment. You release greenhouse gas emissions and at the same time you do pretty much other stuff to our ecological systems. I'll come to this point a little bit later.

Another point where the international community is pushing hard is the issue of technology development, very much linked to energy efficiency and the reduction of energy use. But also there are many countries pushing for alternative or diversified alternative sources of energy, such as concentrated solar power, wind energy and of course biofuels. And that's why we are all here.

The whole debate on biofuel is actually nothing new – right? I mean you can go in very different countries – for instance, in India, biofuels have been used for quite some time. It is not a new debate. What is new is the dimension. We are talking about large-scale industrial use of biofuels, or biomass production for biofuels.

The need to produce the biomass, the rush for biofuels, is absolutely incredible when you see what is going on. And I have just put up here two quotes I found in magazines and in *The Washington Post*. You can see what kind of expectations are actually raised by the debate on biofuels.

The next slide is called “Developing Countries” because we work specifically with developing countries and developing countries in transition. But our experience so far, what we

currently observe in our client countries, is the following. I have here some pictures. That is usually what the mandate of the GEF is – beautiful, natural landscapes and closed forests or beautiful animals, plant species; we try to protect what's going on in these countries where we have a big interest to maintain this.

And it is the following: as we observe large-scale conversion of natural landscapes, they look done this way – right? And these pictures are from Brazil. And Brazil, everyone knows, is seen as the positive example of biofuel production. But often people forget to tell you that this picture on the right is part of the equation.

When we look at these countries and as you have seen, the president of Senegal said, “Well, this is obviously the future, or one of the future positive elements, of Africa. Let's do it.” Why are these countries basically easy targets? Because we push them to move in this direction. It's seeing that these countries have available land. The right areas are not used right now, or are not used intensively. In many of these countries, we see that the land tenure rights are not very clear. So that, for instance, external sources can come in and really take hold of these land areas to, for instance, produce whatever they would like to produce. In many of these countries we have a very weak policy and regulatory environment for any sustainable production and integrated land-use planning.

We have limited institutional capacity and human capacity. These countries are usually very much focused on a short-term economic gain because they deal with this ravaging poverty in their own backyard. They have cheap labor, they have weak enforcement of human rights, and they have a very limited level of awareness of so-called cause/impact chains – so when you do one thing it has somehow an impact somewhere else.

Our position is not to say, “No way, we don't do biofuels; hands away from this.” No. You want to push this whole issue of – we have to discuss tradeoffs when we talk about biofuels. It is not a win/win situation. So whenever you do something that might have an impact on another side, we have to discuss it and discuss if these tradeoffs are viable, if they are acceptable. So we have to discuss, for instance, the old issue of energy supply versus food security in these countries. We have to talk about these large land conversions having, also, an impact on people that live there, so we have to deal with involuntary resettlement of local people and even creating other social conflicts.

We have to deal with the fact that production of biomass is linked to monoculture; you need large feedstock masses to produce your biofuels. And that is linked to, as I said already, large landscape conversions, destruction of habitats and carbon stock/carbon sequestration potential, loss of biodiversity, use of herbicides and pesticides, and of course they affect negatively water and soil quality, and some biomass species might become even invasive. And what that means for our ecosystems, I think we are pretty aware of this one.

Another issue is – I have put up here a very nice graph from the *Science* volume in August that clearly says, basically, that we have to take the full energy balance into account. So when you produce biofuels and you, for instance, convert your natural forests, your energy balance is probably negative. What this brings out is, basically, that the whole biofuels debate is

not only an energy issue, it's a land management issue as well. And I think that's what we have to discuss.

What should international and national investments do? This is what we try to do with our Global Environment Facility. And we work with ten international agencies to do this in our client countries that we have – currently 3,000 projects going on all over the world, dealing with very different issues of ecosystems, including land management issues.

We should invest and develop policy and institutional capacity to capture the challenges related to biomass production. We should create active partnerships with the private sector. I think that's where we all fail right now. We have these parallel processes going on – the private sector is doing one thing, ODA is doing another thing. We don't really come together. And there are reasons for this.

We have to invest in research and development and pilots for second-generation biofuels, and this has been, too, what many people already mentioned to direct cellulosic conversions. And we have to develop and enforce so-called sustainability criteria for biomass production for biofuels. Many countries don't like that. They don't want to have an obligatory system that regulates how biomass can be produced.

And in conclusion what I would like to bring to you is – we have to manage this hype going on with biofuels by discussing pros and cons. I think that's very important. We need an integrated approach to manage the entire lifecycle of biofuels in a sustainable way – if possible, right? We don't know if it's possible.

We have to engage countries in a discussion of tradeoffs. They have to know what they are getting into. Short-term economic gain might have long-term environmental damage issues related and an economic decline over time. We need to have more efficient technology and invest also in research on potential plant species. For instance, we know switchgrass has a lot of potential for biofuel production, and also algae. And as I said, the development of standards of sustainability criteria for this production of biomass is very important. There are discussions already ongoing.

With this slide I would like to finalize my presentation and would like to give the word back to Melinda. Thank you.