Clark Panel: Questions & Answers

This panel was moderated by Kai N. Lee* and David Caron† and consisted of Walter Falcon,‡ Nicholas Robinson,§ and William Clark.**

Lee: We have two questions that go in similar directions. First: "How can academic researchers address the need for global interdisciplinary research for sustainability while faced with the increasing role of narrowly focused short-term research funding from corporate sources?" Let me also follow up with the second question, and I think this is a question that responds to Wally Falcon's remarks: "What could be done to restructure intellectual property rights and laws to permit greater freedom and efficiency in agricultural advances?" Both Walter and Bill spoke of the difficulties that are related to intellectual property rights—are there changes that could be made that would make a positive contribution?

Falcon: It will help if the Patent Office does not permit the patenting of tags. It will help if the Patent Office would raise the bar some—and it looks like they may be in the process of doing that—so that, in order to secure a patent, you really had to
know form and function and there had to be something more than just the gene per se.

Robinson: First, I will address the question: How can academic researchers address the need for global interdisciplinary research for sustainability when faced with the increasing role of narrowly focused short-term research funding from corporate sources? I do not think that is a challenge particular to sustainability issues. A lot of people encountered this issue when they were working in engineering or electronics and computers during previous eras when military funding in those areas was very large, corporate funding was not an alternative, and government funding (other than military related) was pretty scarce. I think this poses fundamental questions to researchers as to who they are going to do their research for. The right kind of funding to do the right kind of research is scarce, and the temptation is to focus on what a few people want for very narrow purposes. I think we have a marginal record in putting together packages of funding that can be competed for through normal competitive channels in interdisciplinary global change/sustainability work. The recent work in the United States, through the National Science Board Initiative in environmental sciences for the twenty-first century, is surely a step in the right direction, both in terms of the amounts of money involved and in terms of the focus on interdisciplinary collaborative policy and basic scholarship-based work.

Caron: What I would like to ask the panel members is this—part of Professor Clark's paper concerned changes in the communication between science and policy. It seems what those of you in this panel are trying to do is reduce the time it takes to make communication between science and policy clear. So, first, how can the scientists understand the questions that the policymakers are concerned about and help the policymakers understand the results? I am wondering if Professor Rowland would disagree that the ozone development was not fast enough. There was a decade lost there where his views were not really being followed. Second, how are you going to decide which science is authoritative? Because, as we know, there is a sort of politics of science that emerges. Third, who is in-between science and policy? We keep talking about policymakers and academics and there seems to be some need for some translator in-between—someone whose position as translator is recognized.
Robinson: This is actually an area where I am spending a ridiculous amount of time—trying to work out what we do. It does not seem very sensible to talk in terms of the science-policy interface when we are dealing with these issues: what are the systems by which you bridge between discovery of needs, say at the level of farmer applications in the field, and discovery of new knowledge, let's say in one of your international ag-research institutions? We must get away from what my colleague Bob Frosh calls science advising by the postal system—where you mail me your question and I will organize a committee and figure out the answer and mail you the report back. This does not work because all the stuff that makes us actually respond to what your needs really are gets lost in that process. All the stuff that might lead you to believe me (the scientist) or to have some way of weighting how seriously you should take what I had to say gets lost in that process. So, I think we are seeing a lot of experimentation in things like the Northwest Power Planning Council and the international ag-research systems. Things are moving from the extreme of, "you scientists go write a report to advise those decisionmakers," to a much more continuing conversation between people whose part in this whole process is mostly trying things out in the field, people who are in perhaps an advisory role to them, people doing research within that region on that particular set of problems, and people doing research someplace further away and in-between a lot of committees doing analysis. That conversation, when it works well, goes in both directions, iterates a lot, and people get good at listening—I think it generates useful advice that, if not authoritative, is at least something that the users can weigh. They can figure out how much the scientists have the policymakers' interests at heart when the research is conducted. I see us moving in that direction in all sorts of places.

Falcon: Yes, I agree with that, and I have a supplemental point really. One of the weak links is the national systems. International groups can do strategic work, but if you are moving varieties around, there are always the tail-end crosses, there is always the local adaptability stuff, and one of the things that you hope from the private sector is that they will be able to help with that, at least in countries where there are markets. What do you do in those other hundred countries? Many of them have inadequate systems hampered by structural adjustment loans which leaves the extension service sitting in the office because they do not have money for the petrol. Can NGO's and
governments and international institutions learn to talk more civilly with one another? That is an open question, I think, at this point, but a really important one.

Robinson: And I think the lesson, though, was that we tried to do this skipping that national capacity, and that doesn't work. The funders say, "But geez, this is going to be incredibly expensive," which is true. Building up the capacity chains, however, is not as expensive as not doing it; because by not doing it, nothing works.

Clark: We really need to create a continuum of intermediaries from the village or the bioregional area, right up through to the strategic international thinking. [IKSU] was very effective in getting Chapter 35 into Agenda 21, which is the basis for Our Common Journey. Most of the diplomats who negotiated Agenda 21 have been moved on to other assignments, they have nothing to do with it anymore, and Chapter 35 is ignored by most of the decisionmakers that try to implement Agenda 21. We have not nailed sustainability science to an action-forcing mechanism, and if we do not connect those two, Our Common Journey will be like Chapter 35, a great moment in time. I would agree with the criticism that it was not fast enough. The Vienna Convention should immediately have moved into an implementation stage, and yet the economic forces that Wally points out in the biotechnology area are enormous, and the economic forces that were there in the production and manufacture and sale of CFC's as solvents for electrical circuitry cleaning and other industries were enormous. Luckily, there were only about 12 countries that we had to deal with there. But when we come to a global phenomenon, like protecting biodiversity where every region's government sooner or later has to get engaged, you need this continuum. It is interesting to me that IUCN was just given observer status in the general assembly of the U.N. It took 18 months to negotiate; a number of nations vigorously opposed it, but IUCN is made up of 76 governments, 109 ministries, and 900 non-governmental organizations, so it is on the ground with its experts and its NGO members in 130 countries, and it actually has a model for this continuum. Now, it is a very weakly used model; but if we cannot build and sustain the little prototype models that exist, we are not going to nail Chapter 35 to an action plan.