

## **Session 6: Linkages and Organizational Issues**

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The IDGEC will undertake the CMRA through extensive collaboration with other projects. Such partnerships can stimulate scientific progress, produce practical benefits, and increase the likelihood that research results will find their way into the policy stream. These collaborations include coordination with other IDGEC research activities and with other programs and research projects that have institutional dimensions, as well as other policy and natural science research efforts related to global carbon management. These include activities being undertaken by the International Geosphere-Biosphere Program (IGBP), the World Climate Research Program (WCRP), and other programs of the International Human Dimensions Program (IHDP), as well as policy research efforts being undertaken by the FCCC Secretariat, non-profit organizations, and industry groups.

Creating an organizational structure that would make these linkages effectively and satisfy the CMRA's objective of generating policy-relevant research presents a significant organizational challenge, however, as climate change policy is evolving at a faster pace than the research community can comfortably accommodate. With the Conference of the Parties meeting every year and the subsidiary bodies meeting every four to six months, policy-makers generally have time horizons of only six months or so. Researchers, however, tend to have time horizons of several years, as it generally takes this long to generate significant research questions, work out methodologies and acquire funding.

- CMRA Scoping Report

## **Needs and Constraints of the Policy Community**

Kilaparti Ramakrishna  
Deputy Director  
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Thank you. I will try to be very brief. When Gran asked me to speak at this session, he said that he was hoping to get someone from the FCCC Secretariat to talk about what they see as their needs and constraints in doing the job that they need to do. Then he and I went on to talk about whether that would be enough, and whether the needs and constraints of the Parties to the FCCC should also be considered. So my object here is to talk not just about the Secretariat but a number of other actors, including the FCCC Bureau, the leadership of the Subsidiary Bodies, the Parties, and environmental and industry non-governmental organizations. I want to focus in particular on the G-77 Parties, and will talk about why in a few minutes. In addition, one of the topics that has been part of this discussion from the outset is capacity-building, and I want to look at the needs and constraints that the policy community faces under that rubric.

### **The Secretariat**

The Secretariat exists to serve the Parties, and the mandates that it gets are from decisions of the Conference of the Parties. We know that once there is a mandate, the Secretariat can go and do its business. Oran and several others had looked at how Secretariats function and where they get their ideas. Do they wait for the Conference of the Parties to give them decisions or do they initiate them? If they were to initiate their own activities, how do they go about doing this? Do they try to build constituencies within the Parties? Do they try to build them outside of the Parties among the science and social science communities? The answers are quite revealing. Some said that they take a very literal interpretation of their role, which is that they receive the mandate, try to fulfill it, and the Parties say whether or not they have done the job. Others try to do things differently. If we were to limit our comments to the Climate Convention, then I would say that this is a Secretariat that does things differently than other Secretariats that began their work about the same time. They obviously listen to the Parties and their decisions, but they also went out about creating support for various initiatives. They have been doing this by reaching out to people like us and saying, "We need to get this done. Can you come up with a set of ideas?" They then take this information back to the Parties. This is all done informally in that they did not have any mandate to do this. But they have done it quite successfully. It is important to realize that whatever needs and constraints that we are talking about in a broad sense apply to the climate change secretariat as well. It may be that the climate secretariat is doing a better job than many others, but if you want to take a step back and look not just at climate change but at how the overarching principles of sustainable development and, more importantly, questions of equity and capacity-building are to be addressed, then we want to look at this as a candidate.

### **The Parties**

Once we are done with the Secretariat, we move on to the Parties. The Bureau is a group of individuals elected amongst the Parties to be, in some sense, the managers of the entire group of Parties. They are expected not to be playing the part that is assigned to them when they lead their country's delegation. They are expected to be discharging the functions assigned to the Bureau in the convention process. They also have very specific needs and constraints in terms of their ability to operate freely. This may not be very

obvious to us because we do not see how the bureaus function, as either the membership is restricted or meetings occur in a closed room. But if you are privy to those discussions, you would realize that some members are very well prepared and others are inadequately prepared.

*In the case of the leadership of the Subsidiary Bodies, the differences between those who are prepared and those who are not are very obvious because you can see them. You see them conduct the meetings, and you see how some do a very good job and others do a very poor job. The question again is how they get the tools and information they use in the performance of their functions.*

The specifics of what I am talking about come when we talk about the G-77 countries and its groupings. I said that I am going to talk about capacity building in particular. The reason I picked this topic is, first, the general interest we all seem to have in the topic, and, second, it is one of the major decisions that will be taken at COP 6. I know that it is terribly short-term, but what COP 6 is expected to do is put into place a long-term series of measures that would address the concerns, needs and constraints of the policy community in the future. The Secretariat sent out a questionnaire to all the Parties asking them to list their capacity-building needs and to indicate what they wanted the Conference of the Parties to do. They received three responses out of the 133 countries that comprise the G-77. So the Secretariat had to put out a document on capacity-building based on three responses. They also looked at the national communications of approximately 20 developing countries to get a sense of the capacity-building needs the countries had identified in those documents. So the reason that I am focusing on capacity-building is that, if there is going to be a major decision and the preparation for that major decision is very inadequate, we should think about how we might contribute to that.

To complete the picture from my point of view, the NGOs, both environment and industry organizations, also have a capacity problem. By industry organizations, I mean the so-called "green" industry groups that are often very friendly with environmental organizations. Groups such as the Global Climate Coalition have all the resources they need to participate effectively. But for these other NGOs, the complexity of the subject matter and the inability of all the NGO participants to follow the details of the negotiations, questions arise concerning the details of the various meetings and how to prepare for them. We often go through a lecture session before the meetings to go through the issues, point out where the environmental community stands on them, and suggest ways for the participants to keep track of what is going on.

#### Capacity-Building Needs of the G-77

Before we talk about the G-77, I think that it is useful to talk about the purpose of the G-77. The Group of 77 was created in 1964, and the membership has now nearly doubled to 133 countries. The G-77 was established in order to articulate and promote its collective economic interests in the international arena. However, while the G-77 was initially in such a way that it was prepared to deal with these economic issues, it has not been able to grow in such a way that these new issues are incorporated effectively. If you go to some of the G-77 proceedings in New York, you will get the feeling that you are still in the 1970s.

What are the needs here and how might we proceed with them? While I have tried to compile some of these here, I do not want to suggest that these are by any means exhaustive. That said, the first need is to identify issues of common concern to the membership. The reason I put this in is that when you look at the Secretariat document,

you will find a lot of needs identified with a reference to national communications. This is not surprising, as that is where the Secretariat got its information. But G-77 negotiators would say that they need negotiator training, and those people involved in the CDM and project development would say that they need assistance with that. Even as recently as in Montreal, where the IPCC Summary for Policy Makers of the Land Use and Forestry report was adopted, the capacity needs identified there were quite different. So you will get a completely different response depending on the subject matter and who is asked. Before we talk about a decision by COP 6, I think we need to come up with some broad, overarching needs that Parties can rally around. There is quite a bit of existing material that needs to be accessed for this.

There is also a need to build capacity to formulate individual country views. This is extremely important, but not all countries do so. In India, when delegations go to a negotiating session for which there is no official government view, the delegates have been known to go there and "wing it." When delegates do this, however, they are not protecting their interests and are not able to articulate what is in the best interest of their country.

It is also necessary to build a capacity to formulate group positions before global negotiations. These group negotiations are extremely important. There are quite a few different groups within the G-77, and these groups often have interests that conflict with each other. The G-77 needs to be able to determine what issues are of common concern to all such that they could have a common front and what issues need to be dealt with differently.

#### Elements of Capacity Building

I want to make just a couple of points on the elements of capacity building. One important element is institutional strengthening. When we talk about institutional strengthening, it is important to think about where these institutions are and how we plan to strengthen them. If you talk to UNDP personnel or look through the UNDP's Capacity 21 document to find out what they have done on climate change, you will find very little. There are enough institutions in developing countries that need to be strengthened in terms of resources. However, it is not in terms of creating positions in the Secretariat to sit in Bonn and coordinate these issues. That is not the way to further the issue in the long-term. Another element is the development of human resources at the country and regional levels to analyze technical data and design appropriate policy options. The South Center seeks to do this, but we need other institutions to do this as well.

One last point is that whenever there is a topic like this that is going to be a major issue in the future, it is important that this is not just a topic that we keep talking about, cutting up the meaning in the process, and then cannot say even if we have been with it for ten years or twenty years whether anything has been accomplished. Unfortunately, technology transfer has turned out to be one such topic. On conclusion that the IPCC came to in the special report that it adopted recently is that the reason why the developing countries still go to these meetings and say that nothing is done on technology transfer and the industrialized countries still go to these meetings and say that they give and give without any recognition is because there is no set procedure to say what is needed, establish a timetable for meeting these needs, and follow through with the assistance. So it is extremely important that we have a clear definition and program design, and then measure it so that at the end of the program we can say that we have done it. Now this is not going

to happen by COP 6. Clearly, however, the Parties that are trying advance this issue need guidance and help with how they might move forward with this.

One last point before I conclude. We should not see capacity-building needs in terms of having people in ministries responsible for the topic for one hundred percent of their time. It is not that. I do not think that this is the problem. I can tell you from our own experience with the climate negotiations, the fact that there was only one delegate from a country did not that person even though that person might be doing ten other things back in the capital. So it is not a question of the amount of time that is given to it. It is a question of the determination that is there at the national level to take this as a priority issue. It will not be a priority issue unless it is seen in the whole calculus of what the country needs in terms of its own development goals. Thank you.

## **Needs and Constraints of Social Science Researchers**

Dr. Jill Jaeger

International Human Dimensions Programme  
On Global Environmental Change (IHDP)

Thank you. As I mentioned this morning, the International Human Dimensions Program is one of three research programs at the present time that are dealing with the issues of global environmental change. If you look historically, the World Climate Research Program is the oldest of the research programs, starting after the first World Climate Conference in 1979. The International Geosphere-Biosphere (IGBP) Program is the second oldest of the programs. It started in the mid-1980s. The IHDP in its present form started in 1996, and is much younger than the other programs.

The reason why the IHDP program took off in 1996 was the recognized need for some coordination of research on the human dimensions as opposed to the research that was being conducted on atmospheric questions in the World Climate Research Program and the biogeophysical questions that were being raised in the IGBP. There is a need for this coordination of research largely from the social sciences that tackle human dimensions issues. It is not only the social science community that needs this coordination, and even now we are seeing a move to coordinate between the World Climate Research Program, the IGBP, and the IHDP. We recognize the need to carry on doing the projects that we have within IHDP on the human dimensions but at the same time to begin to work much more closely with the other partner programs on global environmental change.

As I said, there was recognition as we set up IHDP in the second half of the 1990s of the need to coordinate research. In terms of the needs of the community, we also recognize the need for information exchange. How do we find out who is doing what on these kinds of projects? There is a lot of human dimensions research being done, and there is a need to find out how much is being done, where it is being done, and who is doing it. We have found two particularly good ways of doing this. One is working through national organizations that do inventories of human dimensions research in their countries and collecting this information at the IHDP Secretariat. Slowly but surely we are accumulating an inventory of research that is going on at the national level or in particular countries or regions. We also communicate this information to the community at large by making it available on the IHDP website and through the IHDP newsletter.

The other way that we have been successful in finding out where interesting human dimensions work is being done is by sponsoring open meetings on human dimensions research. There have been three of these meetings thus far: one in 1995 at Duke University, one in 1997 at IIASA, and last year in Shonan Village in Japan. By bringing together on the order of 300 researchers to present their on-going research activities is again showing us the broad range of what is being done. The Japan meeting in particular has provided an up-to-date documentation of the breadth of human dimensions research in the form of a meeting report and a compilation of abstracts. The next open meeting on human dimensions research is to be held in Brazil in October, 2001.

In addition to finding out what is being done and coordinating what is being done, the other need is capacity building for social science research. The Human Dimensions Program has done various things to develop capacity both in terms of running workshops

and doing training workshops for scholars from developing countries. The next one will be held in September of this year.

The constraints facing the human dimensions community are fairly obvious. One of the biggest constraints that we have begun to discuss in quite a lot of detail is a data coordination effort. There are a lot of projects going on, and a lot are planned. But we have not done very well so far in the human dimensions research area for centralizing data and making it available for other scholars in the community.

The second constraint or challenge is the scale issue. This came up several times yesterday. A lot of research is being done at a very local scale, and we have to find interesting or useful ways for moving up and down among the different scales. This needs to be done in the spatial dimension as well as the time dimension.

The last constraint or challenge that I see is one that we see in this meeting. There is an obvious, near-term demand for quick answers to key policy questions, but at the same time a demand for a long-term, strategic research agenda on human dimensions. Trying to meet both of those demands with the small community of scholars that we have is a big challenge.

## **The International Carbon Research Project**

Dr. Josep Canadell

Executive Director, Global Change and Terrestrial Ecosystems (GCTE)  
GCTE International Project Office  
CSIRO Wildlife and Ecology

Thank you. Jill was talking earlier about the three international global environmental change research projects. The first was climate, many years ago. Then we realized after a few years that climate is not there on its own, but that it is modulated by the oceans and the terrestrial environment. So we created the IGBP. Then later on we realized that interactions among the climate and the biosphere were no longer natural and that there was a human dimension that was modulating these interactions as well. This brought about the establishment of the IHDP.

We now recognize that the planet is a complex system made out of these three components interacting in a complex, non-linear way. The IGBP, IHDP and the WCRP have agreed to develop a cross-cutting activity on the carbon cycle. Figure 1 shows the major components of this system, oceans, geosphere, land, and atmosphere, all within the circle of the troposphere, which is modulating all of these interactions. The IGBP has started a very complex process of working with geological societies to reach an agreement that the Holocene period ended about 50 years and that we are now in the Anthropocene period. This is in recognition that humans are now one more of the biogeochemical forces shaping the earth's system.

It is useful at this point to go through how global change research is coordinated. There are many international programs and national space and other agencies trying to monitor carbon dioxide, land use change, and other factors that contribute to climate change. Individuals engaged in these monitoring activities interact with the researchers participating in the WCRP, IGBP and IHDP programs to research the functioning of the climate system. Every three to five years, the IPCC compiles the information generated through this research in an assessment report. These groups are interactive, with the IPCC identifying all sorts of new gaps that the researchers can explore. At the same time, researchers put new issues on the table that they think should be included in the next IPCC assessment. The whole system is highly interactive, with each group having a niche. However, we need to coordinate even better.

The first thing that is being developed under this cross-cutting activity is to develop a carbon research framework. A number of overarching questions have now been developed for this framework. First, we want to know the spatial distribution of the current carbon sources and sinks? Second, we want to understand the patterns of temporal variability in the carbon cycle. Third, we want to know the nature of human perturbation of the carbon cycle. As I said, the carbon cycle no longer works as a system of feedbacks between the atmosphere, the oceans, and the biosphere. Finally, we want to know how carbon cycle dynamics will work in the future.

Institutions connect all the different points of the carbon cycle together. Figure 1 shows this cycle and these linking points. The black boxes are the components of the cycle: atmosphere, oceans, land and fossil fuels. There are major institutions associated with these, including energy, land use, and climate that modulate the transfer of carbon from one box to another and feeding it back. We want to understand how our physical carbon



cycle interacts with these institutions. Similarly, climate and climate change is filtered by human perceptions of climate change and its impact on human welfare, which in turn affect how institutions react to effect these transfers of carbon.

To investigate this, we will have to look at all sorts of linkages and scales. In particular, we need to think carefully about issues of scale. Institutions in the carbon cycle vary in scale, and include global institutions, nations, regional markets, local communities, and individuals. We want to explore how we can make linkages at various scales, linking, for example, global institutions with the biosphere. We must recognize, however, that we may not be able to establish an equal relationship with some of the scales that are important at both the human dimensions level and at the terrestrial or carbon level.

There are a number of specific institutional questions that we want to investigate as part of this effort. These include:

- What are the probable trajectories of fossil fuel and land-cover change emissions and uptakes of carbon dioxide over the next century?
- What institutions could manage the carbon cycle effectively at global to local scales?
- What are the key scales in time and space for linking institutions to the carbon cycle?
- How much historical land use information is needed to understand the current and future carbon cycle, and how can it be obtained?
- What techniques can be used to sustain and increase the production of food, timber and other benefits from the land, while continuing to take up and store carbon?
- What are the consequences for the global carbon cycle and global and local economies of partial (as opposed to full) carbon measurement and of making some or all of the carbon a tradable commodity?

What we want to do now is to establish a process by which the various research communities that would have a role in this research effort can start thinking about how they can contribute to the research plan. We are planning a big meeting in October where representatives from all of these communities can come together to elaborate this plan. We hope that by February of next year that the various Steering Committees of the WCRP, IGBP and IHDP will approve it, and we hope to publish in May, 2001, at the same time that the IPCC's Third Assessment Report is published. Thus at the same time that the IPCC assessment is put on the table, there is a reaction from the research community with a plan for how we are going to proceed for the next five years before a new assessment is prepared.

I want to make it clear that this is only an overarching framework for a research program that we want to carry out. We are not trying to prescribe the kinds of research that should be done. It is hard to develop a common ground that will allow all these different groups to work together, to integrate, and to really answer the questions that we know we can not answer from just a social science perspective or a natural science perspective. But this is a place to start.

Thank you very much.

**Figure 1. Institutions and Carbon Stocks**

