

MEETING REPORT

Environmental policy and conservation: from theory to practice*

The role of a responsible environmentalist, in charge of establishing environmental policies is a daunting one indeed. Not only is he or she faced with the tremendous task of trying to protect an environment whose state deteriorates from day to day, he also needs to be capable of understanding and applying the knowledge from a large array of disciplines. It is not enough to be an expert in ecology to decide what to conserve. Without a deep understanding of the customs, history and social-economic status of the people that live in and around the area suggested for conservation, the chances that the conservation attempts will fail increase dramatically. In a similar manner, no biologist will be able to predict the outcome of a conservation effort without the aid of mathematical models, and despite the fact that successful implementation of environmental policies has to be legislated, most scientists, regardless of how brilliant they are will not be able to find their way in the intricate maze that is politics without assistance.

Thus, moving conservation forward from theory to practice requires expertise in many disciplines which may only be achieved by an interdisciplinary approach, combining the knowledge of many different scientists and professionals. But here lies the challenge – getting scientists from different disciplines to communicate, cooperate and produce viable solutions.

The Swiss Institute for Dryland Environmental Research (SIDER) is a part of the Jacob Blaustein Institutes for Desert Research, located in the Negev Desert of Israel. Its mission is to foster integrated, interdisciplinary approaches to the study of the environment in the drylands of Israel and of the world. Three departments operate within the SIDER: Department of Man in the Desert, Mitrani Department of Desert Ecology, and Department of Solar Energy and Environmental Physics.

The aims of the first SIDER symposium were to create such a space in which ecologists, social scientists, physicists, architects, economists and even lawyers could share their views and thoughts about environmental challenges and even-

tually try to come up with some common language that can connect them.

The main guest of the symposium was Mahesh Rangarajan (University of Delhi, India). Rangarajan has been studying the interrelations between society and nature conservation for many years and thus was the perfect choice to bridge the gap between the different disciplines, a gap not created by lack of will to cooperate, but rather by different approaches to the same questions, which in many cases may lead to different answers.

Sixteen guest lecturers from all over Israel were invited to share their views and experiences on how to protect the environment. The guests represented different important aspects of nature conservation: ecologists, politicians, mathematicians, physicists, social scientists, architects and community representatives who stood for the bottom-up initiatives that do not necessarily involve professionals of any kind.

The symposium was divided into four sessions. In the first, the important question of 'what to conserve' was discussed. This is probably the first and most important question that comes up when approaching the subject of conservation policies, and already at this stage the different points of view between different scientists and professionals arose. One such debate dealt with evaluating conservation priorities by giving conservation efforts a non-use market value. This approach was presented by Nir Becker (Tel Hai Academic College, Israel) who claimed that only by 'speaking the language' that policy makers and financiers understand, can the efforts to conserve nature stand a chance against other more 'profitable' development plans. Others disagreed arguing that the danger of giving nature a price tag, is that eventually someone will be willing to pay the price to advance his or her own personal agenda. Both sides agreed that only by understanding each other's needs and motivations could a successful and long-lasting conservation plan be initiated.

The second session dealt with the unavoidable linkage between politics and environment. Case studies of both failures and successes from Asia and Israel were discussed. By understanding how politics work, 'playing the game' if you will, environmentalists can increase the chances of any environmental initiative

to succeed. The third session dealt with the use of mathematical models for conservation. Discussions were held on how physicists and mathematicians could help improve planning and monitoring of our conservation efforts. Examples include the use of space-use models for reserve design and disease control, the use of statistical tools to create a better design of protective nets above commercial fish ponds, that will minimize collateral damage to passing birds and using GIS analyses to evaluate the effects of landscape structure on the distribution and abundance of protected animals.

During the last session, discussions were held on communities, environment and their co-existence. These led to the conclusion that successful conservation politics needs both the strong involvement of small communities whose future is intertwined with that of the environment surrounding them, and strong government led urbanization movement, as urbanization will be the only chance of protecting open areas in a world whose population is rapidly growing.

One of the special features of the symposium was that it was planned and organized entirely by the Ph D students of SIDER. It is the students, the next generation of scientists, who will undoubtedly face new environmental challenges and have to fully understand that these challenges cannot be dealt with alone. The future of our environment lies in cooperation – cooperation between scientists, between disciplines and between countries. The first SIDER symposium has been a small step towards this future, and we hope that many more will follow.

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