ENVIRONMENTAL PLANNING IN THE CONTEXT OF DEVELOPMENT INVESTMENT

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Report of the
First Talloires Seminar
on International
Environmental Issues

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A collaborative project of the Tufts University Department of Urban and Environmental Policy, the Commission on Environmental Planning of the International Union for Conservation of Nature and Natural Resources, the Sierra Club International Earthcare Center and the World Resources Institute, in association with the EXXON Corporation and the Bird Company.

PREFACE

In May 1983, twenty-six senior professionals met at Talloires, France, for an unusual and intensive discussion of "Environmental Planning in the Context of Development Investment." This first Talloires Seminar focused on alternative approaches to managing the conflicts between development imperatives and environmental goals. It brought together a select group of corporate and government executives, officers of international lending agencies, environmental planners, scientists, representatives of host countries and environmental organizations.

The Seminar responded to international initiatives that in 1980 drew attention to the sharpening degradation of the global environment in the face of worldwide development pressures—in particular the *World Conservation Strategy*, prepared by the International Union for Conservation of Nature and Natural Resources, and a number of reports on global trends relating to resources, population and the environment. Seminar participants came saying, in effect, "We all agree with the broad outlines of the *World Conservation Strategy*. The issue is how to implement it. What specific actions are we prepared to take?"

The high intensity and spirit of our discussions were as important as any particular outcomes. Participants who are often opponents took good advantage of the opportunity to reflect with each other in a non-adversarial setting. We did not resolve fundamental issues, but agreed upon a plan of action. Moreover, part of our accomplishment

was to reframe the issues, building the kind of understanding across sectors that is required as a basis of more productive negotiations.

The Talloires Seminar will be an annual occasion for top-level representatives of different sectors to exchange perspectives and to forge new approaches. It will have a different topic each year, but will sustain a focus on dilemmas about international conservation and development and address processes through which progress can be made. We will be in active communication with participants throughout the year, helping to nurture joint efforts and continuing debate.

What happens between the Seminars is as important as the content of the actual gatherings. Therefore, we invite your critical response to this report and your contributions to the occasional "letters of correspondence" that we will be producing as a means of ongoing exchange.

Special thanks are due to the members of the organizing committee who participated in planning and carrying out the Seminar. Patricia J. Scharlin and J. Gary Taylor of the Sierra Club together with Peter Jacobs of the Environmental Planning Commission of IUCN provided the essential teamwork necessary to make such a meeting a success. We also want to note the contribution of the Sierra Club International Earthcare Center whose capable staff provided leadership and support throughout the planning of the meeting.

We greatly appreciate the generous financial support provided for this first Seminar by the Bird Foundation, the EXXON Corporation, and the World Resources Institute. We would also like to thank Donald and Charlotte MacJannet, donors of the Tufts University European Center, for their active encouragement, and to express our gratitude to the Center staff for their superb assistance.

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EXECUTIVE SUMMARY

Twenty-six public and private sector professionals gathered in Talloires, France, for four days of intensive meetings to discuss the state-of-the-art of environmental assessment and planning. Despite the significant differences in perspective and experience, participants agreed that environmental goals are as important as economic and social goals, and that, since this is true, we are now at a crossroads as we try to integrate the assessment process within existing institutions.

The professionals also agreed that environmental assessment as presently interpreted by many practitioners and governments cannot always carry the burden it is asked to, particularly in less developed countries.

No consensus was sought, but several themes emerged:

- Social and cultural impacts must be evaluated.
- Early assessment is essential.
- All actors should be involved at the outset.
- Each party should identify and acknowledge shared responsibility.
- Environmental assessment should be integrated into overall development planning.
- The environmental impact statement is a socio-economic phenomenon, not necessarily grounded in science.
- Environmental impact assessment works best on large capital projects, but different tools are needed to address developing country problems.
- Some development assistance agencies are striving toward integrated environmental assessment procedures, but success depends on much stronger host government capacity for implementation.
- Land use planning, land capability assessments and cost benefit analysis may be more appropriate in developing countries, where more formal western models are seen as too expensive, cumbersome or difficult to manipulate by untrained personnel.
- While institution strengthening, rational planning techniques, consciousness-raising and training are important in developing countries, the situation is so critical that action-forcing mechanisms at the policy level are essential.

The larger contexts of environmental deterioration as a function of population growth and of environmental difficulties compounded by short-term economic troubles touched the dialogue at many points. As important, there was agreement that some environmental issues transcended the "merely" economic; loss of genetic diversity was frequently mentioned as an example.

CONCLUSION

Environmental values were seen as crucial, but simplification of the assessment process, greater flexibility in application of methods and improved techniques of social assessment were seen as essential.

For the very difficult incremental problems, such as soil loss, tropical forest depletion and loss of genetic diversity, which are critically important in developing countries, simpler and more imaginative analytic and predictive techniques urgently need to be devised. Moreover, education and training at the grass roots, strengthening institutional capabilities, energizing non-governmental organizations and sustained dedication over the long haul are badly needed.

For the future, we should place less emphasis on the large, prestigious development projects and less focus on technique in favor of truly appropriate technology and the development of a reliable process for expressing social preferences.

ACTION PROGRAM

Participants were in accord that the excellent results of the seminar should not be allowed to dissipate over time. It was agreed that the multinational companies encourage acceptance of the main points raised in the seminar among medium- and small-sized companies in the private sector; that non-governmental organizations expand efforts to find productive ways to work in the field with their Third World counterparts; that development assistance agencies exert as much leverage as possible to encourage sound environmental policies in the Third World government sector; and that planning professionals and academicians redouble efforts to develop sound and practical tools for social assessment and to cope with incremental environmental deterioration worldwide.

SEMINAR REPORT

Seminar participants agreed from the outset that environmental considerations have now earned a place alongside classic economic and social goals. There was also a heightened appreciation for the cross-sectoral nature of environmental problems and considerable discussion with respect to the appropriate depth and breadth of integration of the assessment process within economic planning models and institutions.

Attendees agreed that sustainable development cannot take place without a prime focus on the prediction and mitigation of environmental impacts, but many felt that the relatively formal approach to preparing Environmental Impact Assessments required by United States law may not be totally appropriate for the rest of the world; and that environmental assessment as a practical tool for predicting and mitigating impacts has all too often been overly ambitious, cumbersome and misleading as a scientific tool for advising decision-makers. Simplification and flexibility were the watchwords.

The topic chosen for the first seminar, "Environmental Planning in the Context of Development Investment," required that knowledgeable professionals be invited to participate, but the focus of the meeting was purposefully designed to go beyond the narrowly technical. Attendees were invited to reflect on environmental assessment/planning in the larger contexts of national economic policy, social equity and sustainable development.

In order to assure an adequate range of perspectives, participants representing multinational companies, development assistance institutions and both developing and developed country governments were asked to give formal presentations on both projects and processes drawn from their experience in various parts of the world. Less formal presentations were solicited from the consulting engineers present, from the environmental planning community and from representatives of the governmental and intergovernmental sectors. The seminar was rounded out by a series of workshops. (The workshop proceedings and comments received from some of the participants are available upon request.) In the interest of brevity, this report will not

consider in detail the multitude of points raised and debated during the seminar, but instead will outline the principal thematic material which came gradually into focus as the proceedings matured. These themes do not necessarily reflect a true consensus of the seminar, since none was sought, but, in the opinion of the organizers, they do summarize the principal threads of thought.

MAIN THEMES

Social and cultural impacts must be evaluated

The environmental assessment process has increasingly been broadened to incorporate predictions of project impacts on human populations, settlement patterns and the like. Consensus was reached that such a broadening was appropriate and necessary, but that the available intellectual tools for a sophisticated assessment have not yet been fully developed on a par with those available for evaluating the physical, chemical and biological impacts. Development of such tools was seen to be an urgent priority. It was pointed out at the same time, however, that even relatively simple and easily predictable impacts on social systems have often been overlooked in the past.

Early assessment is essential

At the outset, and throughout the seminar, the desirability was stressed of beginning the assessment process at the earliest possible time during the project identification phase. From the perspective of the private sector, this was seen as being increasingly vital as the process has broadened to include social and cultural impacts in addition to the physical and biological. This essentially pragmatic recommendation was emphasized on the corporate side by a representative

of a multinational company who made the point that companies exert every effort to avoid surprises and delays which could result in significant cost overruns. From the perspective of the public sector, the earlier a developer makes his plans known, the more certain the community can be of shaping an adequate response.

Involve all of the actors at the outset

Closely related to the early assessment issue is the desirability of bringing together at the beginning of the assessment activity all of the parties who are likely to have an interest in the potential impacts. Clear communication as to intentions, expectations, hopes, fears, etc., among all parties is the best insurance against serious misunderstanding later in the project cycle which increases the potential for conflict, litigation, delays and costs.

Each party should identify and acknowledge shared responsibility

All projects bring the developer, government(s) and the community(ies) together one way or another. Each party has a responsibility according to its own interest. These several responsibilities need to be identified, acknowledged and discharged. None of the parties should be asked to bear a disproportionate burden. For example, if a community is concerned about a potential social impact of a proposed activity and will ultimately benefit from the project, it has some responsibility to assist in the identification of the impacts and to work with the developer and relevant governmental unit to devise mitigation measures or to assist in design strategies. By the same token, the developer has the responsibility to identify potential impacts of various kinds according to his technical and scientific competence. This sharing of responsibility is not an easy formulation; often the local community cannot devote the necessary resources to the process. Flexible

and creative developer/government/community mechanisms for identifying and addressing impacts need to be devised.

Environmental assessment should be integrated into overall development planning

This integration should be a continuous process in the entire project experience—from early identification and feasibility—through design, construction and post-project audit. Frequently, for example, sensitive design strategies can evolve from a multidisciplinary, integrated and flexible approach which can "engineer-out" some potentially severe impacts. Considerations of reversibility can enter into the planning of certain kinds of projects.

The environmental impact statement is a socio-economic phenomenon—it is not necessarily grounded in science

Close examination of a range of impact statements in Canada, for example, demonstrated that in general, as one consultant put it, the scientists were "unable to deliver on the technical stuff." It should be recognized (and acknowledged by the scientists) that there are some future events which cannot be predicted with any certainty. Governments and other interested parties should insist on the best approximations given the state of knowledge and the research constraints but recognize that often the most that can be achieved are "best guesses."

EIA works best on large capital projects, but different tools are needed to address developing country problems

When large multinational companies and development assistance agencies plan, construct and sometimes operate large capital projects, the state-of-the-art of environmental assessment is such that many impacts can now be anticipated and mitigated, or alternatives developed. Unfortunately, with the exception of large water control schemes, such

projects represent a very modest proportion of development activities worldwide. Small national companies, subsistence farmers, the vast number of people migrating to deteriorating urban centers, all contribute on a much larger scale to the loss of genetic diversity, incremental destruction of tropical forests, cumulative impacts of unrelated and unplanned development activities, soil loss, water degradation and the like. The assessment tools which have been developed for large projects are largely inadequate and inappropriate to deal with these increasingly serious and frequently intractable problems. More modest and relevant tools need to be developed—relying on the strengthened indigenous institutions, the people at the village level, local non-governmental organizations, women's and youth groups—energizing the local system from the ground up.

The larger development assistance agencies are striving toward integrated environmental assessment procedures, but success depends on much stronger host government capacity for implementation

Recent project evaluations, particularly in the United States Agency for International Development, suggest that project failures arise even when assessments are built in at the design stage and incorporated into engineering and economic planning. These failures seem to be largely based on institutional constraints at the country level, unrealistic time frames in country economic planning, inadequately trained personnel and a variety of factors not entirely within the control of the donor agency. On the other hand, institutional inertia and inadequate resources within the donor agency itself can contribute to project failures, and the very short deadlines for expenditure of donor funds frequently force funding for environmentally inappropriate projects or through unsympathetic, but more powerful and established ministries.

Land use planning, land capability assessments and cost-benefit analysis may be more appropriate in developing countries, where the more formal western models are seen as too expensive, cumbersome or difficult to manipulate by untrained personnel

Incremental environmental deterioration, impacts of small projects and other activities which are resulting in the increasingly rapid diminution of the natural resource base, while frequently associated with severe economic causes, are often the result of inadequate planning. Formal and rigorous environmental impact assessments, depending on elaborate check lists, modelling and matrices, should probably be replaced by more manageable land capability planning and other simple methods grounded in basic biology and natural resource management techniques, which can then become integral to a country or regional economic plan. One scientist felt, in addition, that arguments in favor of conservation and of land capability planning should be couched in economic terms, weighing the costs against the benefits in a thirty- to forty-year time frame in which conservation benefits may become apparent. In contrast, time frames of many bilateral development agencies are more typically three to five years.

While institution strengthening, rational planning techniques, consciousness-raising and training are important in developing countries, the situation is so critical that action-forcing mechanisms at the policy level are essential

Institutionalization of environmental concerns has taken root in developing countries but really at quite a low level: environmental ministries are often weak, legislation often *pro forma*, enforcement uneven and corruption too often a real factor. It is unrealistic to expect, therefore, that most developing countries will spontaneously undertake even the most minimal assessment of planning activities. Development

assistance agencies should make loans conditional upon real policy level commitments to sustainable development. Success will only come when the system accepts the message and acts at both the grass roots and at the policy levels. Institutional constraints should not be underestimated.

THE LARGER CONTEXT

The several themes elaborated here range in particularity and specificity and from the tactical to the strategic. There were a number of crucial junctures, however, when the group addressed these issues in the larger contexts in which they are necessarily embedded. Among these, population growth was touched on a number of times. The group was generally in agreement that population growth is a major contributor to environmental deterioration, especially in developing countries, but was understandably reluctant to address the problem strictly in terms of environmental assessment. Participants experienced in development assistance work pointed out the extreme sensitivity of the issue in countries where political successes are based on constituencies whose value systems do not recognize the virtue of smaller families, the reluctance on the part of some governments to share census or other vital statistics, the irony that improved health care lowers infant mortality but does not guarantee smaller families and the difficulty of selling population control to societies which cannot ignore the huge differences in per capita consumption between north and south.

As was inevitable in such a diverse group, some creative tension arose from time to time as all felt the frustration of discussing environmental assessment in the context of an uncertain global economy. Many developing countries will feverishly grab at any project which shows some vague promise of earning foreign exchange revenues. In this regard, attempts to influence national policies through development assistance agencies must recognize that these agencies are quite variable in the conditions they are willing to impose on recipient countries, thereby opening the door for recipient governments to choose a

project from an agency which may have fewer environmental scruples. Reform of global development assistance would seem to be a challenging task, indeed, but one not specifically on the agenda of this seminar.

Considerable discussion arose, too, around issues of conceptualization. Should environmental concerns be elaborated strictly in economic terms? Do not certain environmental issues transcend the "merely" economic? Are there not some environmental issues, such as the loss of genetic diversity, upon which society would not wish to put a strictly monetary valuation? Compensation for the last five of an endangered species would certainly be more than for the first five of an abundant species. It is of some interest in this connection that at least one multinational corporation spokesman present felt that his company, in the majority of cases, "brought the governments along" toward accepting higher environmental standards, often in the face of their short-term economic arguments.

Similarly, while governments are organized around various sectors, environmental matters cut through these sectors. How should the bureaucracy be organized to deal with this vexing problem, particularly in the context of extremely thin human resources? Will environmental values be lost if perfect integration is achieved? Should environmental ministries be strengthened? Abolished? If the economic ministers are in charge, should we not place our arguments at their feet and in their language?

Should there not be another calculus? Should we look at mathematical models from ecological theory? The science is certainly "hard" enough to convince a few.

CONCLUSION

Inevitably, the question arises: "Where do we go from here?" It was the consensus of the group that environmental values are and will continue to be crucial but that our tools for evaluating and predicting impacts are still largely inadequate. The trend seems to be toward

simplification, toward flexibility and toward a multidisciplinary approach to both planning and assessment in which we need to a) recognize and predict social impacts and b) create or refine the necessary tools.

With respect to large capital projects, proven environmental assessment techniques can work, provided potential impacts are identified at a very early stage in the project cycle, all of the actors are brought together at an early time, with clear and continual communication throughout the project, and provided respective responsibilities are discussed, assigned and discharged. This is somewhat more easily achieved in a developed country context, of course, where relationships do not have to carry an additional burden arising from mistrust developed over the long colonial period.

In the developing countries, tested methodologies can be used based on simplified North American techniques, but with any hope of success only on the large projects. For the rest—the seemingly intractable incremental deterioration, the cumulative impacts of small projects, loss of soil, of forest cover, of genetic diversity—while these effects may be relatively easy to predict, there is clearly no short-term way of mitigating the deterioration, which is often irreversible. Education and training at the grass roots, strengthening government and university capabilities, energizing the non-governmental organizations, attacking the more tractable problems first—all must be done over the longer haul and with a sustained dedication that so far has not been mounted.

In terms of new directions, less emphasis should be placed on the large, prestigious development assistance projects and less focus on pure technique in favor of really appropriate technology and the development of a reliable process for expressing social preferences.

The group agreed to return home and press some of these matters in their own sectors, to stay in touch and function in the interim as a fairly unique, surprisingly congenial and quite thoughtful cadre of concerned professionals.

LIST OF PARTICIPANTS

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SELECTED SEMINAR MATERIALS

Limited copies of these materials, together with the summaries of the seminar workshops, are available from the Department of Urban and Environmental Affairs, Tufts University, Medford, Mass. 02155.

Assessment for Development and Conservation, by Richard A. Carpenter, Environment and Policy Institute, East-West Center, Hawaii, December 1982.

Egypt: The Egyptian American Rural Improvement Service, A Point Four Project, 1952-63. US AID, April 1983.

Environmental Impact Assessment: A Concept at the Crossroads, by Gordon E. Beanlands, December 1981.

Environmental Planning Guidelines for Strategies and Plans, 03 IUCN/CEP Work in Progress, Environmental Planning Approaches to the Preparation of Conservation Strategies and Plans for Sustainable Development, Preliminary Version, September 1981

EXXON Checklist for Assessment (selections), 1983.

Guidelines for Assessing Industrial Environmental Impact and Environmental Criteria for the Siting of Industry, Industry and Environment Office, UNEP, 1980.

The Joint Review Process in Colorado and Its Application to AMAX Inc.'s Mount Emmons Project, 1983.

Sudan: The Rahad Irrigation Project, US AID Project Impact Evaluation Report No. 31, March 1982.

The World Bank's Environmental Program—A Short Summary, by James A. Lee, November 1982.