

GUEST COMMENT

The Threshold for Action*

The relationship between SCOPE and UNEP is of crucial importance, as we in the latter rely on scientific evidence of the highest calibre to reinforce our actions to control environmental conditions and minimize deterioration world-wide. For SCOPE—being the Scientific Committee on Problems of the Environment of ICSU, the International Council of Scientific Unions—is a leading authority on fundamental research into a number of the worst problems with which UNEP has to deal.

Many major environmental problems confront us more or less globally: climatic change due to the 'greenhouse effect'; reduction of land productivity; depletion of tropical forests; erosion of genetic diversity; impacts of the ever-increasing use of chemicals; and other problems, all too familiar to us, constitute a superproblem—the problem of Mankind and its environment. It is not by chance that, when discussing the problematic survival of Mankind, so many people from all over the world say nowadays that the environment is the world's second most important superproblem, preceded only by the ominous threat of nuclear war.

I am convinced that SCOPE's study of the environmental consequences of nuclear war† was a considerable contribution to the present progress in international relations leading to the possible elimination of nuclear armaments. That study was an excellent example of solid scientific research which influenced public opinion and led to the selection of policy options at the global level. Now we need something rather similar in dealing with the second most important superproblem of the survival of Mankind, namely the environment.

Strategy for Action Needed

To attack a superproblem one needs a well-thought-out, long-term strategy. On one flank there must be fundamental research leading to improved understanding of natural processes in their interaction with Mankind, and, on the other, due knowledge of people and actions by their governments. In between there come socio-economic impact analysis and a search for policy options which should be suitable for people and their governments. This very simplistic but logical sequence is to some extent cyclical.

There is no need to dwell on where the role and place of SCOPE is; it is obviously in the forefront, as *the* source of pertinent fundamental research. Therefore, what I would like to address is the threshold for action, by which I mean coinciding points in time and space where a decision has to be made on what to do next—otherwise it may be too late.

The usual, and very natural, behaviour of scientists is to delay suggestions for action because the knowledge required to give it a sound basis is not yet complete. But, don't we know how often politicians use the same argument to postpone a decision? How often have we heard the political argument that a certain task has low priority because of 'scientific uncertainty' or 'because scientific evidence is incomplete'?

Seek Thresholds for Action

It is clear that many of the factors underlying climatic change are already known: as an example, the concentration of 'greenhouse' gases has increased to such an extent that some appreciable warming is considered inevitable. Obviously, we don't know all the implications that this will have on future climate patterns, and even less is known about the socio-economic consequences. Does it mean that we should wait until we know more? No! On the contrary, we are facing a threshold for action. Do we know what actions to suggest? Not yet. But we need policy options, based on the results of natural and socio-economic sciences, to suggest to governments. This is where UNEP sees its role—in its interactions with such scientific bodies as SCOPE, and in some instances most immediately of all with SCOPE.

Nor must other subjects be ignored. Where are the 'thresholds for action' for tropical forests, for eroded soils, for biological diversity, for our own exposure to chemicals, and so on? We at UNEP are proud that it was a joint idea of SCOPE and UNEP to carry out in-depth studies of global biogeochemical cycles. It is being done, with some support of UNEP, and we already have much deeper insights into some of the most important mechanisms governing the processes on our planet. But, based on the results of these studies, have

* Based on the Author's statement, made on behalf of the United Nations Environment Programme (UNEP), at the opening session of SCOPE's VIIth Triennial General Assembly, Budapest, Hungary, 6 June 1988—see the Conferences & Meetings section of our Autumn 1988 issue.—Ed.

† See the review by Dr Arthur H. Westing, published in *Environmental Conservation*, Vol. 13, No. 3, pp. 281–2, 1986.—Ed.

we identified and suggested actions, to be taken at the national and international levels, to correct any unfavourable processes? I cannot recall any.

One should not, however, colour everything with only black paint. One of the remarkable successes in international actions based on solid research is the recently-signed protocol which controls consumption of chemicals depleting the ozone shield in the stratosphere. The threshold for action was not missed there, but almost 15 years passed between the time when the problem was identified and the moment when concerted action was agreed upon.

Climatic Change Problems

Let us come back to the problem of climatic change. In comparison with the ozone layer problem, it is much more complex, multidimensional, and much more deeply interwoven with the socio-economic and political aspects of our life. And we know that when socio-economic systems are involved, the solutions to the problems become very difficult—at both the national and international levels. The climatic change problem is addressed now by many institutions in the world, but one cannot wait for better knowledge to be achieved. One has to suggest a few options for action on the international agenda while it is still not too late.

Thus, to get back to my original theme, SCOPE might well consider how to achieve ‘thresholds for action’ in those areas where scientific pressure may be brought to bear for positive results. As UNEP’s Executive Director, Dr Mostafa K. Tolba, said when addressing your preceding General Assembly: ‘SCOPE produces a mass of valuable work, yet a lot of that work is not applied or is used only on a small scale.’

But how can one formulate criteria for establishing ‘thresholds for action’? May I suggest careful examination of two important documents which appeared last year. One was the Report of the World Commission for Environment and Development, entitled ‘*Our Common Future*’*, and the other is ‘*Environmental Perspective to the Year 2000 and Beyond*’, adopted by UNEP. Their joint aim is to enable people everywhere to enjoy the benefits of the world’s natural resources for a sustainable future. Indeed, the main message of both documents is ‘sustainable development now’.

Vital Role of SCOPE

With SCOPE’s intellectual leadership and UNEP’s unique position as a catalysing agent and coordinator of action within the United Nations, we are well placed to stimulate the international community towards taking the right action for environmentally sound and sustainable development.

Yet, I am compelled to repeat: for the international community to take action, it must *not* be permitted to take the easy option and retreat behind the excuse of ‘scientific uncertainty’. SCOPE has an important role to play here. By providing solid scientific evidence and demonstrating that dangerous trends exist, SCOPE can say: ‘we have reached a particular threshold for action’. Whenever the world community realizes that it must make a choice when confronting such a threshold, it will have to reach a decision.

There is a saying that: ‘Justice deferred is justice denied’. This is equally true when we are faced with the potentially catastrophic consequences of deferred decision-making in the field of the environment. We now believe that we stand facing some of those thresholds, and rely on SCOPE for the credible scientific evidence that is needed to spur on the decision-makers to action.

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* See the review by Dr Martin W. Holdgate, published in *Environmental Conservation*, Vol. 14, No. 3, p. 282, 1987.—Ed.