Science and Technology for Development

As the year turns, we are a step closer to the 1979 U.N. Conference on Science and Technology for Development. That Conference promises to be more than a general exchange of scientific courtesies. It will be a face-off between advanced and deprived societies, with science and technology as hard currencies in the new diplomacy. This is the outcome of postwar Western achievement in discovery and use of knowledge, and the lessons have not escaped notice.

The issues now being raised go to the rate, the terms, and the scale on which this productive knowledge will be shared by the have-not majority. As it happens, these questions are entangled with troubling dilemmas of our own national economy, our markets, and our institutional structures. Science and technology may be the new high cards in foreign policy, but how they are dealt in that arena cannot be separated from considerations of U.S. economic growth and stability. This double image has to be respected in preparing for the Conference, and it defines implicit constraints on our diplomatic posture.

Stimulation of development through science and technology will not come about through an instant and massive transfusion of Western know-how. It will take time, measured in decades. It follows that any significant U.S. response to the ideas of the "new international economic order," and especially to industrialization demands, will require a strong and lasting U.S. political consensus.

That kind of consensus is unlikely if we cannot count on an expanding U.S. economy with lively growth and innovation. A struggling economy, lagging in productivity, averse to industrial risk investment, shying off from long-term research and development, beaten repeatedly by foreign competitors, and unable to keep its own work force employed, is not likely to sustain the political consensus needed to undertake decades of scientific and technical support for development—especially when the aim of the Group of 77 is to reduce and erase the relative economic differentials between North and South. But the alternative prospect of an expanding economy capable of absorbing the near- and midrange economic and social costs of industrialization assistance would enhance the chances for political consensus and open up the diplomatic options. The work of our beleaguered economic strategists thus assumes an important external dimension.

The benefits of science and technology to developing countries can be substantial, but so can the costs. If the goal is to make a difference, the quality of the difference needs to be considered. Just as Congress had good reasons for providing itself with an Office of Technology Assessment, we should be equally thoughtful of the risks of handing off technology. We can hardly tell the developing countries what is good for them, but we can try to shape priorities to meet basic human needs and to promote industrialization which is not simply imitative but builds on whatever natural advantage is present and awaiting development. Much of the developing world is organized around rural-based societies and village systems, while industrialization has a centralizing drive. Unchecked, it can wreak violent changes on unprepared cultures and value systems with all the familiar downside effects of rampant urban migration, poverty, and political instability. This is the dark side of unthinking modernization, and it is a poor trade-off for present dissatisfaction. If decentralization can be built into industrialization objectives, so much the better.

Although much is said about the limitations of U.S. diplomacy where science and technology are concerned, the preparatory homework in the State Department is very good indeed. Uncertain as may be the outcomes of the 1979 meeting, we are likely to emerge from it with stronger and better foreign policy management.—WILLIAM D. CAREY