## Retrospective environmental impact assessment

Eric Ashby

The Volta River Project. By David Hart. Pp.131. (Edinburgh/Columbia University Press: 1980.) £7.50, \$20.

MEMBER states of the European Community will shortly be asked to adopt a common policy for environmental impact assessment. The individual members already have policies of their own; so the wrangling — and there will be plenty of it — will be about the means for predicting environmental impact rather than whether to do it at all. The ends are clear: to reconcile the inevitable conflict between exploitation of nature for the benefit of Man, and conservation of nature also for the benefit of Man. The wrangling begins when you ask: for whose benefit and at whose cost? And the conflict is confused because we do not know how to predict and we cannot agree about who should participate in assessing predictions.

In Britain the current procedure is to hold ministerial enquiries, commonly under the Town and Country Planning Acts. No one pretends that they are satisfactory (think of the bitterness left after the enquiries at Windscale about fuel reprocessing and at Winchester about the route for a motorway); but even critics of the British procedure prefer it to the bureaucratic hypertrophy of the Environmental Protection Agency in the United States. The trouble is that no one seems to be thinking about the problem in a scholarly way, that is, by examining past experience and trying to draw lessons from it. What we need, before we commit ourselves to European policies for environmental impact assessment, are retrospective studies of technology assessment and environmental impact predictions. Academics have done a little work, notably Roy Gregory in his book The Price of Amenity (Macmillan, 1971), and a team sponsored by the American Academy of Arts and Sciences in their study Boundaries of Analysis (Ballinger, 1976). But much more work needs to be done. That is why this modest study of the Volta River project in Ghana deserves careful reading. We may think we manage environmental affairs better in Westminster than they are managed in Accra, but Ghana has something to teach us, even though it is a cautionary tale.

Among people unfamiliar with West Africa there is still a residual euphoria about the great Volta River project. Isn't it exactly what Third World nations need: to enrich themselves by generating energy, creating industries, raising living standards? The message in David Hart's book is that the Volta River project was not what Ghana needed — at any rate not what the great majority of the people of Ghana needed or ever asked for. It was wished on

Ghana by the West: Britain wanted an assured supply of aluminium from the sterling area; the Kaiser Corporation wanted a large supply of electricity with which to produce cheap aluminium. So under the pure white banner of 'aid' the West descended on Ghana, created a lake which occupies 3.6% of its land-area and dispossessed some 1% of its population. (A rough analogue for England would be to flood the whole of Devonshire and to decant its 460,000 inhabitants into other parts of the country.)

The Volta River project was contemplated as long ago as 1915 by the man who was at that time director of the Gold Coast Geological Survey. The idea was revived about 1948. A special commissioner, Commander Jackson, was appointed in 1953 to report on the whole project and its implications, without prior approval from the legislative assembly in Accra (a sign, as Hart says, "that the real decisions were being made elsewhere"). Even at that stage two influential and distinguished members of the assembly, Danquah and Busia, voiced their doubts. The primary purpose of the Volta River project, they said, was the production of cheap electricity to smelt aluminium; the development of Ghana was only a secondary purpose; the people of Ghana would benefit more from a smaller project to supply electricity to many towns, and to provide irrigation.

And so it has proved to be: aluminium is being smelted, but it has not brought the benefits to Ghana that were promised, and its destiny is in the hands, not of the Ghana government, but of the International Primary Aluminium Institute. As to the benefits to Ghana, Hart's account of the plans which were made to re-settle the 80,000 people occupying 739 villages in the

area to be flooded is a sardonic comment on the incompetence of planners when they have to deal with the human consequences of their decisions. Of course there were plans to compensate the people ejected from their holdings and to give them land elsewhere. In the event the plans were so mismanaged that much of the compensation is not paid, even today, and much of the re-settlement has proved abortive. Polygamous extended families, accustomed to having separate houses, however simple, for their wives and relatives, were given a house suitable only for a nuclear family. In their new locations the pattern of their society, the markets the familiar locations for buying, selling and making social contracts - vanished; even the styles of agriculture and fishing had to be different. From a world of poverty ameliorated by security they were shovelled into a world of poverty exacerbated by stress. There were tensions among the indigenous occupants of the lands where the re-settlements took place. There were scandalous under-valuations of the property some of them had been obliged to abandon. And, on top of all this, there were alarming increases in the incidence of bilharzia, owing to the opportunities for the snail which transmits the disease to breed in the still waters of the lake; Hart publishes a map of the lake showing places where 70-100% of people sampled were infected.

I said that the experience in Ghana may have lessons for Britain; a remark which will provoke the protest: "It couldn't happen here". Not in the same way, it couldn't. But when we plan airports, motorways, power stations, what proportion of cash, thought and effort is put into the second-order effects of the pro-

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iects? And are the decisions as to what is 'good' for the local populace made locally, or in London? (One perceptive comment on the environmental impact assessment made for the Volta project was that it was made by Westerners for Westerners; what was needed was a team of 'barefoot anthropologists' to live among the people affected by the Volta dam, and then to recommend how they should be handled.) If the people who say "it couldn't happen here" will pause a moment, they may recall the preposterous tragedy of taking people out of down-at-heel terrace houses and hoisting them up into high rise flats; or resettling people from the cohesive and compassionate society of a slum into neat, clean, aseptic villas in a suburb.

Upheavals in our traditional ways of life are inevitable; we are in for a lot more of them; people will have to migrate from the closed steelmills of Corby as surely as they

had to migrate from the waters of the Volta River. The British people are flexible and courageous enough to tolerate these upheavals. What they will not - and should not — tolerate is the pained surprise of planners when some of the remedies proposed from Whitehall are rejected. The way to minimize mistakes — they can't be avoided altogether — is to improve the standard of environmental impact assessment; and the way to do that is to study very carefully case-histories of past assessments, to diagnose where they went wrong and what they left out. David Hart's little book, despite its high price, ought to be on the bookshelves of planners; for he does what he sets out to do: he gives a case-study of politics and technology relevant not only to Ghana but to Britain.

Lord Ashby is Chancellor of Queen's University, Belfast, and a Fellow of Clare College, Cambridge.

## **Questions of energy**

Joseph S. Nye

World Energy Issues and Policies. Edited by Robert Mabro. Pp.367. (Oxford University Press: 1980.) £15, \$44.50.

This volume is a collection of papers from the first Oxford Energy Conference, held at St Catherine's College in September 1979, and cosponsored by the Organization of Petroleum Exporting Countries and the Organization of Arab Petroleum Exporting Countries. The Secretaries-General of the two organizations provide two of the 28 papers in the book. Distinguished OPEC contributors also include Kuwait's Minister of Oil and Venezuela's Minister of Energy and Mines. Other essays are contributed by government, industry and academic figures from various oil-consuming and -producing nations. A brief introduction and summary is provided by the editor, Robert Mabro.

As might be expected in a diverse collection of conference papers, there is great uneveness of quality and style. Mabro explains that the essays have "not been heavily edited" in order to avoid lag in publication and to preserve their flavour of authoritative statements. Fair enough, though the disparities on occasion jar somewhat — a brief section, "World Energy Outlook", pairs Wolf Hafele's 23 pages on world regional energy modelling over 50 years with three pages of casual observations by the late C.C. Pocock of Shell Oil.

A more important problem is the gaps in coverage. The resulting tone of the book certainly leans toward the energy establishment. The editor acknowledges some omissions and wishes he had an environmentally orientated paper to balance the

chapter on nuclear energy written by an industry representative. He also regrets the absence of a contribution from a senior official of a major OECD country such as the United States, but explains that official speakers at the seminar were encouraged to speak off the record. A rule that may have been good for the conference, however, is not good for a book. The result is a meagre two chapters, one on the United States by an academic and one on the United Kingdom by a deputy undersecretary of energy, in the section on energy issues and policies of OECD countries. In contrast, there are six papers (including by highly placed OPEC officials) in the section on energy issues and policies of oilexporting countries. Moreover, the paper on United States' policy entitled "A Critical Overview", hardly purports to be a balanced presentation.

Despite the problems of uneveness and gaps, there are several useful papers in the volume, especially in the opening section on energy supply. Particularly interesting is the paired treatment of natural gas by Nordine Ait-Laoussine of Algeria and James Jensen of the United States. On the other hand, one would have thought coal deserved more than five brief pages. There are descriptive discussions of the Soviet Union and China by Michael Kaser and John Foster, and many of the papers by officials are of interest not because of their analytical insights, but because of their author's positions. If treated as a smorgasbord, the book succeeds in one of the editor's purposes in that it does present some interesting conference fare for a wider audience to sample.

Mabro also has an explicit political objective: "to improve the chances of

success of any future formal dialogue which Governments sooner or later will have to initiate". In his summary, Mabro says that "the urgent need for dialogue was almost unanimously recognized", but there was little agreement on modalities or scope of the agenda.

The idea of a dialogue between OPEC and consumers is currently fashionable in the aftermath of the Brandt Commission Report. A consumer-producer dialogue might help nations shift their focus to the potential long-term joint benefits to be gained. Such a dialogue might seek intergovernmental agreements to stabilize the oil market; for example, OPEC and IEA countries might agree on production targets and consumption limits (at first separately, and then in joint bargaining) which would allow for modest real price rises over the next decade. A band of prices might be established for the duration of the agreement. OPEC countries would agree to maintain sufficient spare capacity to increase production if a shortfall of production from any subgroup of producers threatened to push prices outside the band. They would cut production (or agree to permit consumers to increase demand above the agreed limits) if prices threatened to fall through the bottom of the band. Additional inducements might be needed to assure adequate production levels. For example, consumers might offer indexing of assets and assurances of assistance and market access for the new OPEC industries. Special credit or aid provisions might be agreed for oil-importing developing countries; some such countries could be included in bargaining sessions.

But a number of hard questions must be answered. Could the agenda be focused on energy? If other developing countries participate, will the world replay sterile North-South debates, but with much higher stakes than in the United Nations? Can the "Pandora's Box Effect" be controlled if nations start down the path to serious international collective bargaining?

Is a reasonable bargain likely? At modest prices there are divergent interests between those OPEC surplus producers who lean toward conservation and the high-absorbers interested in maximizing revenues. Large price increases (which maximize revenues and allow painless production cutbacks) tend to reconcile that division. Would OPEC countries be able to agree to a bargain that meant higher production and lower prices than the market would otherwise determine?

Does OPEC have sufficient cohesion to make a bargain stick? Thus far, OPEC countries have been unwilling to limit their separate sovereign control over production decisions concerning the resource that is their major source of power. They compete for power within the oil arena and they reserve the right to use oil as a weapon in wider political games. Given the politics of oil, and the domestic instability of many