nature

NATURE VOL. 333 2 JUNE 1988

Environment and the public's purses

Japan's environment agency altruistically advocates sacrifice on behalf of the global environment, but should instead be seeking the basis of common self-interest.

SMOKESTACK Japan is an international image, most other people's vision of what is now the richest country in the world. Japan is generally supposed to be a place in which dirty factories compete with people for room in which to site themselves, a vivid demonstration that technology is inimical of quality of life. The reality is, of course, quite different. In less than fifteen years, Japanese cities have been transformed by stringent regulation of air and water quality. The national talent for flower-arranging has been spectacularly transplanted to city sidewalks. The richest country in the world belies the stereotyped image, although in part because so much of it is spanking new.

Yet Japan's environmental agency is now (see page 385) demanding further environmental measures, some of them likely to be beneficial for those on whom the costs will fall, others more altruistically aimed at the general improvement. Even if the agency may carry little influence with the powerful economic ministries in Tokyo, so that many of its proposals will be delayed or overlooked, environmentalists elsewhere have much to learn from the circumstance that this altruism is so closely linked with Japan's comparatively new riches.

The first stark lesson to be drawn is that environmental quality must be purchased, and that a wealthy people can purchase more of it than others. There is nothing novel in that. There is a wealth of experience to show that communities more easily rid themselves of bacterial infection (one of the primitive environmental hazards) as they become more prosperous. The provision of an artificial environment, generally known as a house and widely believed to be a protection against the dangers of the natural environment, is positively correlated with prosperity. And can it be accidental that California, for many decades among the most well-to-do of the United States, has so often been in the van of environmental movements, many of them sensible? Or that the poor countries of the world, both the heavily-industrialized countries of eastern Europe and the agrarian countries of the developing world, so often run into environmental scrapes? That implies that industrial development, the most economical way of generating wealth, is a prerequisite of environmental quality. So why is it that the relationship between industry and environment is so often supposed to be inimical?

Part of the explanation is the general confusion about the notion of environmental quality, which means altogether too many different things. Clean air and clean water are generally understood to be public goods which are ultimately purchased in industrialized countries by consumers, either through taxes or by paying the higher prices for the goods they buy which are required to compensate manufacturers for meeting more stringent standards. There may be arguments about the equitability with which these costs are distributed among people, or about the point at which the balance should be struck between the degree of environmental quality and its cost, but a coherent society can in principle reach rational decisions. In these simple regards, most reasonably prosperous societies are probably at present purchasing what environmental quality they can afford — and hoping to buy more as time goes on.

Several of the items on the Japanese agency's shopping list present different problems because they are international. On the assumption, safe enough, that chlorofluorohydrocarbons are inimical of stratospheric ozone, the most easily identifiable losers from their accumulation are people living at high altitudes and low latitudes, not the Japanese. That is the sense in which it was altruistic of Japan (and other similarly placed governments) to have subscribed to last year's convention on chlorofluorohydrocarbons — they have made a public purchase whose benefits will disproportionately accrue to others. There are many, of course, who say that the Montreal protocol is insufficient — that the public purchase has been too little — but that view overlooks the unavoidable limitations of altruism in the behaviour of governments. It is as valid to regard the Montreal protocol as a resounding triumph of the general interest over conflicting national self-interests — and to look for mechanisms by which the conflicts may be blunted in the future.

The carbon dioxide problem, although its consequences are potentially much more serious than those of diminished stratospheric ozone, may paradoxically be more simply tackled. For the greenhouse effect, if its signal emerges from the climatic noise in the years ahead, should create an identity of interest among very different governments. Poor countries will be particularly fearful of drastic climatic change, especially because predictions are so uncertain. Rich countries (among which only Switzerland is landlocked) would all suffer from the increase of sea level that could follow increased surface temperature over many years. Moreover, the cost of purchasing relief from the greenhouse effect (dispensing with most machines dependent on fossil fuel) would be so great as to require investment over decades. It is not in the circumstances unreasonable to ask that governments should tackle a task of a character they inherently detest — that of answering the hypothetical question "What will we jointly do if...?"

From past and present experience, especially in Japan, a large part of the answer must be "Create more wealth". If, for example, it should be necessary to replace existing electricity generating plants with safely operated nuclear plants, there will be a need of capital investment on a breathtaking scale. But it will also be necessary for governments to be more discriminating than at present about the purchases they make of environmental quality. The present row in Britain about the preservation of the physical appearence of southeast England, a rolling man-made landscape spotted with low-density housing, echoed as it is in many other prosperous communities, could easily turn out to seem a frivolous luxury. Even Japan's environment agency's breast-beating about the logging roads Japan helps to build in Malaysia may seem an irrelevance if that is the cheapest way of helping Malaysia to become more prosperous.

What this implies is that the supposed conflict between economic growth and environmental quality is not merely an illusion but a dangerous trap, into which too many people have repeatedly tumbled. Japan's environment agency, for all its altruism, seems insufficiently aware of the danger — and of the economic foundations of its own environmental achievements in recent years. Would it have more influence with the economic ministries if it learned this lesson? □

© 1988 Nature Publishing Group