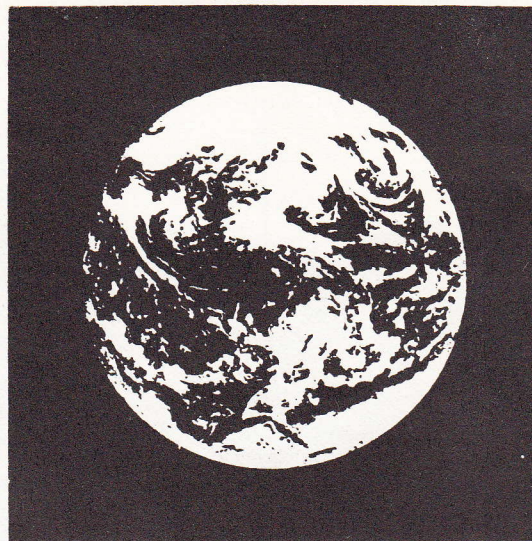


WHAT PRICE THE EARTH?



The meeting of the United Nations Environment Programme (UNEP) in Nairobi Kenya in March 1974 marked the commencement of the real work of halting the rapid deterioration of the global environment. The realisation of massive ecological breakdown led to the Stockholm Conference in June 1972; in December 1972, the United Nations General Assembly created UNEP. The stated purposes of UNEP are threefold: to promote international co-operation on ecological problems of regional and global significance: to direct environment programmes within the United Nations system: and to promote the collation and exchange of information on the ecology of planet earth. UNEP was also directed to review the impact of national and international environment policies on the development priorities of the least developed countries (the poor). The UNEP HQs were established in Nairobi, the first time that a global UN agency has been established in a developing country. Indeed, the dilemma of the UNEP Secretariat in the face of governmental intransigence and the interests of the multinational corporations (half of the world's largest economic units are multinational companies)¹ is symbolised in the lodging of the UNEP offices in President Kenyatta's prestige twenty-six storey Kenyatta Centre. Outside is the contrast of Nairobi's beggars and proletariat (earning \$1.50 a day), and the drought-stricken rural land rolling north to Ethiopia. There is a Firestone tyre plant on the outskirts of Nairobi polluting the water table so that it may become undrinkable in the near future. It is a telling fact that industry had set up its liaison centre with UNEP even before UNEP had transferred itself from Switzerland to Kenya. The industry office represents (amongst others) the International Chamber of Commerce, the International Organisation of Employers, the International Petroleum Industry Environmental Conservation Association, and the Industrial Federations of Brazil, Sweden, Belgium and Germany. UNEP will obviously have no trouble in obtaining industrialists' opinion on how to resolve the ecological binds facing human societies which they have helped to create.

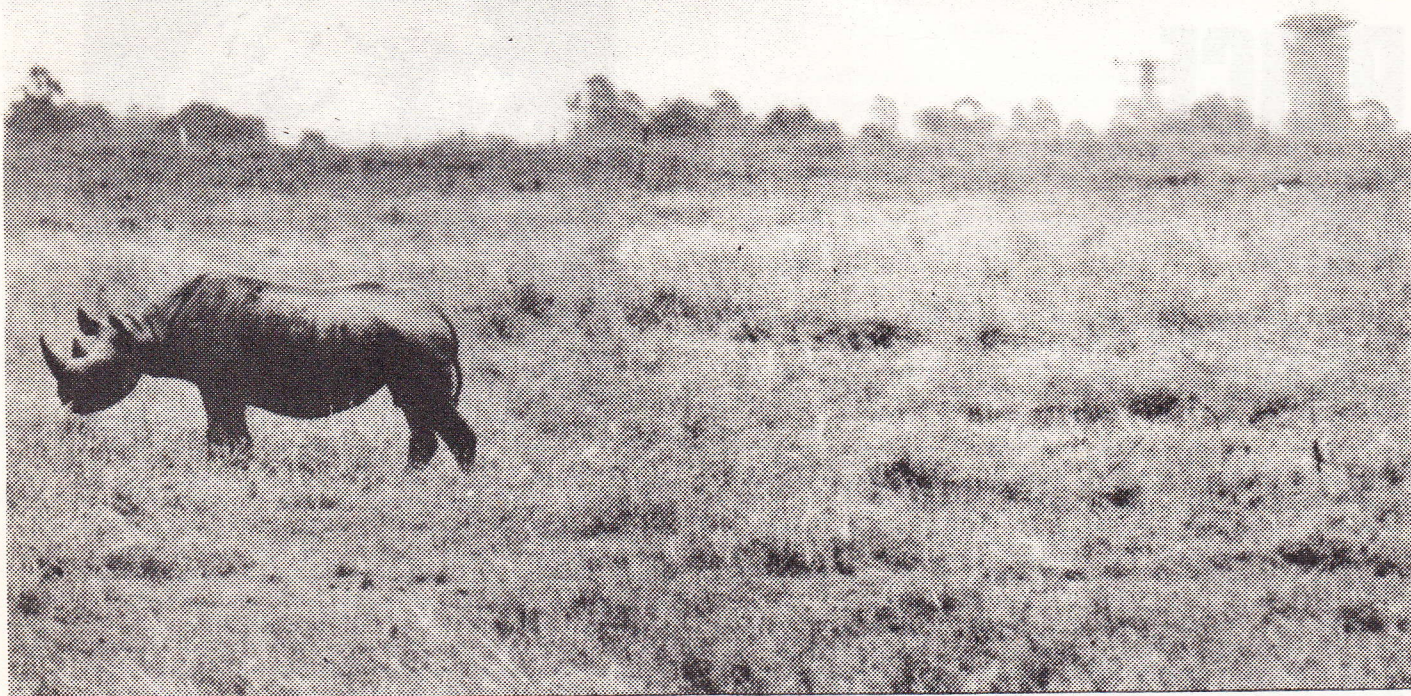
UNEP's sovereign Governing Council of 58 national delegations met to discuss UNEP's work and to establish priorities for the use of the five year \$100 million fund. UNEP has already financed upwards of eighty projects on such areas as marine pollution, human settlements, health criteria, long-term strategy for the drought-affected Sudano-Sahelian region (the Masai tribes driving their cattle into the city in a desperate search for grass could be seen from the top floors of the UNEP offices), development of the global environment monitoring systems, etc. The present extreme drought in Northern Africa is a dramatic example of the type of approach UNEP takes. Over sixty countries have a concern with problems of desertification, and over one-eighth of the world's population live in extremely arid, arid and semi-arid ecosystems threatened by desertification. In the particular case of the Sudano-Sahelian belt bordering the southern Sahara, the desert creep has been induced by fire, over-grazing and excessive forest clearing. The Sudan changes from rainless desert in the north to forest country (70 inches annual rainfall) in the South. Shifting cultivation that allowed for a fallowing of several years within a system

land use in the semi-arid belt (10-20 inches annually) comprises grazing of goat, sheep, cattle and camel, cultivation, charcoal making and cutting for daily domestic use. This ancient shift cultivation cycle has broken under the demands of population growth and technological inputs which have intensified the impact of the same land-use pattern. The steppe-savanna shift characterised by the less efficient regeneration of *Acacia Senegal* and its replacement by vegetation typical of the northern arid belts is part of a large-scale shifting of vegetational belts; desert encroaching on steppe, steppe onto savanna, savanna onto forest.²

UNEP has set up an investigation project to ascertain a long-term strategy for the Sahelian and the Sudano-Sahelian zones. The project (costing \$US40,000) began in October 1973, and will run until August 1974. The objective is to establish strategies for the rehabilitation of these areas (fighting deserts, managing ranches, reafforesting). Other projects include: integrated pest control (with FAO); arid rangelands (with FAO); soil degradation (with FAO); information on the Latin American environment; an Endangered Species Convention (with IUCN); a Symposium on Patterns of Resources Use, Environment and Development Strategies (with UNCTAD); a study of (non-tariff) trade barriers; an Inter-Parliamentary Conference on the control of pollution in the Mediterranean Sea; man's impact on climate (with WHO); preparation for the Human Settlements Conference (Vancouver 1976); etc.

Some hard questions were put to UNEP spokesmen by environmentalists covering the Nairobi Conference. In particular, the responsibility and capacity of UNEP to enter into crucial and controversial fields in the face of opposition to sections of its Governing Council were discussed. The capacity of UNEP to state the ecological and uncomfortable truth in the face of the opposition of the most industrialised countries is already in question. Britain made its point early in Governing Council that it did not see deliberation on energy issues being within the scope of UNEP's discretion or even on the agenda of the Governing Council. The British did not like comment in UNEP's summary of the state of the environment that "It is hard to see how the meagre rations of poor countries can be increased so long as the rich countries treat energy as a free good and a substitute for all other forms of energy . . . In such countries, however, people will soon have to conserve energy . . . Waste will be reduced by disruptive compulsory changes in life-style brought about by shortages, if not by the deliberate strategy of increased efficiency and of more careful distinction between demand and need."

Furthermore, the exercise of UNEP's discretion to act on the proliferation of nuclear bombs and atomic-produced electricity by the military-industrial complex is not going to be acceptable to the superpowers. This is despite the global ecological ramifications of such a buildup. If the total potential energy in nuclear weaponry existing today was released simultaneously, the total amount of energy released would be 8.9 times greater than the solar flux, which is 13×10^{20} kcals/year.³ The role of human societies in manipulating the environment is becoming so



The Kenyatta Centre, Nairobi, Kenya

to the Governing Council that "some energy sources may be simply too dangerous to use . . . A possible outer limit on energy conversion through nuclear fission is imposed by its production of extremely toxic radioisotopes . . . Such substances (as Plutonium 239) require infallible and perpetual isolation from the biosphere, and it is hard to imagine how this can be done . . ." were swiftly rejected by the International Atomic Energy Agency (IAEA) who publicly dissociated themselves from UNEP's warning. Indeed, at Stockholm in 1972, the Director-General of the IAEA sent confidential telegrams to the US and Swedish Governments requesting that UNEP's responsibilities and structures be subordinated "to the responsibilities of existing international organisations".⁴ The IAEA is renowned for working in the interests of the nuclear military-industrial complex in its dual role as the promoter and policeman of nuclear technology.

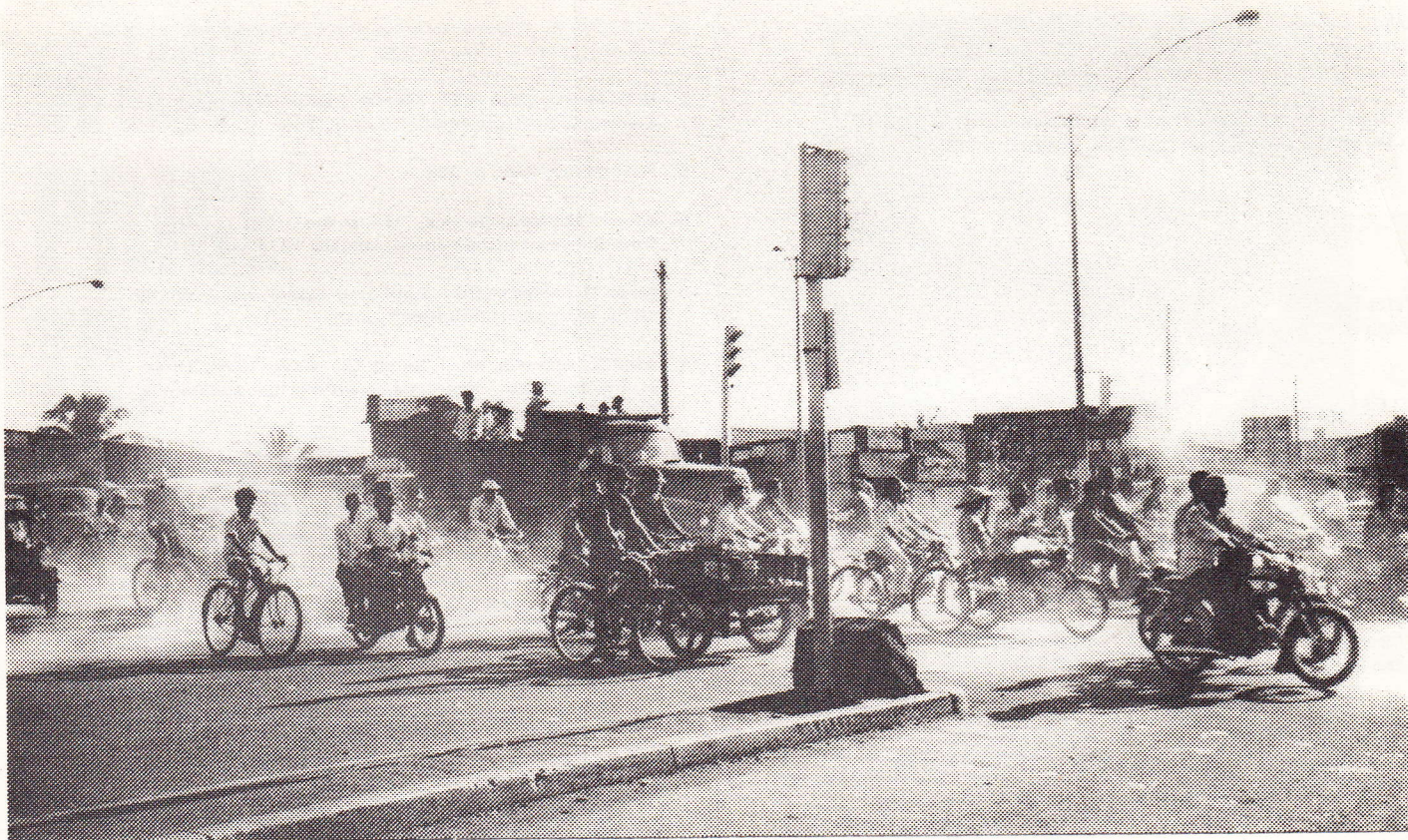
The pattern of energy gluttonism is not amenable to much more analysis; the point now is how the disruption of the global ecology is to be halted, and the contradictions between the interests of the rich in the industrialised countries with the poor are to be resolved. Nevertheless, the desperate development of technological aberrations such as nuclear power to maintain the affluent dominance of a decreasing minority must come under the purview of UNEP. Fossil fuels must not be used for supersonic transport (one Concorde or TU-144 uses enough fuel to support the manufacture of sufficient nitrogen fertiliser to boost food production for 20 million people) and further rampant militarisation so that it can energise high quality development in the poverty-stricken least-developed world.

People are rightfully suspicious of UN Agencies which are filled to the top floor with bureaucratic glue and are open to manipulation or self-seeking. However, UNEP promises to be somewhat more than a self-perpetuating institution: indeed, it must not be allowed to become a typical UN arm, all too often subservient to the wishes and interests of the superpowers. Eventually a global coordination of human societies' economic activities in the biosphere must emerge; meanwhile, UNEP must gather information on the objective nature of the environmental change and degeneration. Seeing the implementation of this knowledge for the increased dignity of man instead of private profit is another matter. As the Chinese del-

protection of technology by a few developed countries" must be opposed, as must the "few industrial countries, particularly the superpowers, who have wilfully discharged large quantities of harmful substances, which not only pollute their own environment but are jeopardising . . . the world as a whole, poisoning the air, polluting the seas, rivers and land and causing heavy economic losses and gravely endangering the health of the people."

It remains for the Australian environment movement to place a high priority on a strong input into UNEP's work. June 6, 1974 was world environment day, and little occurred in Australia to mark this important event. The Minister for the Environment, Dr Cass, admitted just before the elections that two months after the departmental head had returned from representing Australia at UNEP, he had not received a report and could not indicate where UNEP stands on the Government's scale of priorities. The Australian contribution to the UNEP fund in 1973 was only \$US500,000. This is clearly not a sufficient recognition of the importance of UNEP's task in the restoration, preservation and rational use of the resources of the ecosphere. Of course, the same criticism applies to almost all other governments which contribute to the UNEP fund. \$US100 million over five years cannot be said to place a very high value on our global ecology.

The elitist nature of the UNEP operation should also be noted and acted upon. Decisions are made at UNEP reflecting the wishes of governments which affect the future of billions of earth's inhabitants, and the projects are organised by experts. Real change can only come about by the mobilisation of millions of people on the basis of the information that UNEP is producing. Unless the level of participation in UNEP's programmes is raised, they will inevitably be defeated. The UNEP report, the "State of the Environment", already referred to emphasises the need for a massive re-orientation of our international industrial economy; it should be fair warning to both the 'eco-freaks' and to the 'eco-technocrats'. It stresses that major social change is and will be an inevitable result of ecological changes. There are violently totalitarian and anti-ecological solutions (such as nuclear power) being pushed to bridge the transitional gap in achieving an ecologically viable economy. Such solutions will be unacceptable to people caught in the contradictions of the industrial economy as those



Japanese motor cycles choke Saigon

they depend will be unacceptable to the final arbiter, the total ecology. Both solutions will be spurious and irrelevant in the long run: for a society "which chooses high energy consumption restricts political freedom and satisfies production. Beyond a certain threshold, the *per capita* energy consumption of one class imposes exploitative social relations, no matter how much energy the poor consume."⁵

Industrial societies may still be expanding the rate of consumption of gross energy, but a higher and higher percentage is being fed back into the energy seeking process with a consequent decrease in the percentage of net energy gained from this work.⁶ Huntington calculates that presently one short ton (2000 pounds) of uranium ore costs five million kilowatt hours electric to mine, mill and refine to 3% U₂₃₅. The gross energy actually derived per short ton of U₃O₈ (in Light Water Reactors in the United States) is only about four million kwhe.⁷ This means a net loss of electrical energy; it also means a massive misdirection of rich fossil fuels and a consequently enormous opportunity cost. The lesson should be clear for the earth's latest form of dinosaur. As Odum points out, "During times when energy flows have been tapped and there are no new sources, Lotka's principle requires that those systems win that do not attempt fruitless growth but instead use all available energies in long-staying, high diversity, steady state works."⁸

International financial organisations such as the World Bank and the International Monetary Fund are preventing the self-industrialisation of the least developed countries under the guise of environmental protection (the World Bank, famous for its financing of the Saigon regime, is drafting standards "to evaluate the ecological consequences of Bank-financed projects"). Meanwhile, multinational corporations are penetrating the economies of poor countries to locate ecologically disruptive industries there.⁹ It is extremely profitable to export capital and technology to the third world Asian countries in order to take advantage of their natural resources, cheap labour and growing market. For example, millions of Japanese motor-cycles congest the streets of Saigon, killing the trees and making breathing in the city difficult; Ford are investing \$US 1 billion to produce and market an Asian 'Model T' without adequate exhaust emission controls. The Thai Asahi Caustic

Soda Co factory (a subsidiary of the Japanese Asahi Glass Company), 27 kilometres north of Bangkok, has badly polluted the Chao Phraya River with mercury, caustic soda and chlorine.¹⁰ Because of the political instability of countries like Thailand, there is a desperate drive to see investments amortized as quickly as possible, no matter what the ecological consequences. It is considered irrational to equip plants with a high standard of technological control on waste products.¹¹ In South-East Asia there have been at least four off-shore oil-rig blowouts which could have been prevented with proper but expensive precautions.¹² Of course, Australia is subject to similar strategies. As a New South Wales Governmental report concluded, "Apparently the enormous problem of pollution, the lack of land and the high cost of power may mean that Japanese firms will try to establish processing operations in countries like Australia and then export the semi-finished products."¹³

João Velloso, Minister for Planning in Brazil's military government, has said: "Brazil can become the importer of pollution . . . We have a lot left to pollute . . . And if we don't do it, some other country will."¹⁴ That statement highlights the fact that the contradictions between economic development and the environment can only be resolved if people are at the heart of planning. As UNEP states, in contrast to Velloso's mentality, "developing countries will have to make special efforts to find locally appropriate technologies and development paths that are not energy-intensive, as in the long run no other approach can succeed either for them or for anyone else."¹⁵ It has been pointed out that solar technologies, like nuclear power, will not be a major substitute for fossil fuels in industrial economies, for they will not compete without energy subsidies from the fossil fuel economy.¹⁶ Decentralisation must not mean in the Australian case the creation inland of further appendages to the international industrial economy upon which our great cities presently subsist. As Illich puts it, the real option "is that of labor-intensive production with truly post-industrial tools. It is now scarcely heeded. While people have begun to face ecological limits to the amounts of energy its industrial complex can be allowed to transform, they do not think about minimum, feasible power as the critical condition for the social and productive relations which are both

modern and just."¹⁷ The path to which UNEP and Illich refer to will not be easy for those of us who have lost the rural habit and who have become addicted to megalopolis.

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Friends of the Earth

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