

## GUEST EDITORIAL

### A Harvest of Dust?

Almost seven years ago, the world's nations agreed to a sweeping Plan of Action to halt the process of destruction which we call desertification. Now, UNEP has just completed a two-years' assessment which reveals that the global threat posed by desertification, far from diminishing, has actually increased in severity. Currently about 35% of the world's land surface is at risk, and the livelihoods of the 850 million people who live in these areas are directly threatened. Nearly three-quarters of the 45 million sq. km which make up the world's drylands, and which include the sub-humid tropics, is already affected—between half and a quarter of them, severely so. That is the measure of the problem facing the world community, which must act speedily if we are to avoid shortages leading to chaos on a scale hitherto unknown.

To some extent the term 'desertification' is misleading; the popular image of sand-dune encroachment is only a minor part of the problem. Sometimes, thousands of kilometres away from the margins of the Sahara, Gobi, Atacama, and the other so-called 'true' deserts, desertification is taking place. The situation has been likened to a skin disease in which existing eruptions worsen and coalesce with new outbreaks of the disease; and as with any disease, treating the symptoms is secondary to tackling the causes.

In the case of desertification, the main cause is not drought, as many still believe (though drought tends to exacerbate the problem) but human overexploitation of lands through over-cultivation, overgrazing, poor irrigation practices, and deforestation. And in turn, the underlying causes of these reside in bad management, rural neglect, and political and economic forces resulting mainly from the world's inequitable financial arrangements and terms of trade. To this extent the developed world, the least victim of desertification, should accept more responsibility than at present and contribute to a shared effort in combating this global menace. The certain knowledge that humans are responsible for most of the problem, gives us hope that desertification can be halted and ultimately made to reverse its trend. For unlike the situation with some environmental problems, we not only know the causes of desertification but also have the solutions, some of which have been applied with success.

#### *New Conclusions*

This message of warning and hope is the one which UNEP will convey to the representatives of probably more than 75 nations who will attend a special two-days' session (on May 17 and 18) of the meeting of our Governing Council in Nairobi this year (16–29 May 1984). The delegates will be presented with the findings of UNEP's assessment of the progress registered so far in applying the Plan of Action to Combat Desertification (PACD) which was agreed to by the 94 nations attending the United Nations Conference of Desertification (UNCOD) in 1977.\* They will also be presented with a set of practical recommendations which, if applied properly, could go a long way towards improving the situation by the year 2000, bearing in mind that the goal set by UNCOD to stop desertification completely by then has been shown to be no longer feasible.

Our conclusion now is that the 1977 Plan of Action nevertheless remains essentially viable. Indeed, given the main finding that the problem has grown in severity, the Plan is to that extent more relevant today than it was in 1977. Meanwhile the Plan of Action and the goals which it set have provided us with a yardstick to judge nations' performance in tackling the problem of desertification. Without the awareness that it stimulated (who, beyond the environmental community, had heard of the term 'desertification' before 1977?) and the—admittedly patchy—national and international action that it inspired, the problem would be a great deal worse than it now is. Thus we can point to the success of the UN's Sudano-Sahelian Office (UNSO) in coordinating action in the Sahel; to governmental, non-governmental, and community-inspired, agro-forestry projects; to the work of country-to-country, international, and UN, aid schemes which are promoting soil conservation; and so on. A radio reporter sent by UNEP to report on the situation in the Indian State of Rajasthan returned with one success story after another.

But anxious as UNEP may be to promote the success—to show that desertification can be defeated—such a tendency is tempered by the facts revealed by our survey. We have found that a total of 3,475,000,000 hectares of the world's range, rain-fed cropland, and irrigated land—an area approximately the size of North and South America combined—is affected by desertification. Currently each year some 21 million hectares are reduced to a state of near- or complete uselessness. Projections to the year 2000 indicate that a loss on this scale will continue if nations fail to step up remedial action to combat this insidious scourge. Surely a 'haemorrhage' of productive land at such a rate must lead to disaster—such as is already occurring in some poorer nations, and will inevitably spread to the industrialized nations. Some of these latter—notably Australia, USA, and USSR—are already experiencing severe desertification problems of their own. If these nations, with all their vast resources and know-how, are in difficulties, how much greater are the problems of their less-fortunate and less-productive co-inhabitants of planet Earth?

The main difference between UNEP's understanding now and seven years ago of the nature of the problem is a more thorough appreciation of the universality of its impacts and causes, which extend well beyond the drylands that are most immediately affected. Desertification results not only in the loss of nations' productive resource-base but also in the loss of valuable genetic resources, increase in atmospheric dust (which could have as yet unknown consequences on the global climate), disruption of natural water-recycling processes, loss of markets, and so on—the list is depressingly long.

Such consequences of environmental despoliation are helping to destabilize nations. Desertification and the other threats to the planet's life-support systems are causing social and political breakdowns which in turn threaten our tenuous global security. In UNEP we believe that a failure to recognize this ultimate, environmentally-induced threat lies at the root of the apparent unwillingness of nations to tackle desertification, and resource-exhaustion in general, on anything like the scale that is needed.

#### *Inadequate Contributions*

We need look no further than the absurdly inadequate level of contributions to the Special Account set up in 1979 to finance the PACD, for an indication of the low priority which nations attach to tackling the problem. By the end of last year it had received less than \$50,000—all from developing countries! The special machinery which the UN General Assembly set up to mobilize funds to tackle desertification, has raised in its six years of existence only \$26 millions—25% of the minimum target figure. These sums should

\* See the accounts of Ralph Townley and Margaret R. Biswas published, respectively, in our Spring and Winter issues of the following year (*Environmental Conservation*, Vol. 5, No. 1, pp. 69–70, and No. 4, pp. 247–62, 1978).—Ed.

be weighed against the \$4.5 thousand millions needed annually over a period of 20 years to stop desertification. If this seems like a large price to pay, it should be viewed alongside the UN's 1980 estimate, which put the annual value of agricultural production from land that is lost through desertification at \$26 thousand millions! And this figure takes no account of what must be the very much higher social and other 'disguised' costs.

From every angle—cost-effectiveness, political and social stability, self-interest, humanitarian concern—the case for a massive mobilization of resources to tackle the global problem of desertification appears overwhelming. UNEP says that this will not come about unless, and until, decision-makers and the general public alike develop a new perception of the nature of the threats. This meeting which UNEP is planning for May should help to stimulate that required new level of awareness. Afterwards, it will need the help of the NGOs, sister UN agencies, and the responsible media, to sustain concern and pressure for action.

#### *Practical Recommendations*

In the light of the experience gained in applying the Plan of Action, we have come up with a set of precise and eminently practical recommendations. Taken together, they call for a more integrated approach to dealing with desertification than has hitherto been attempted. National plans to combat land deterioration should be merged with plans for economic and social development, but at the same time should have a clearly-defined place and clearly-allotted resources. A properly funded and well-placed national machinery to combat desertification at least in each of the countries concerned, would act as a motivator in the overall governmental process, ensuring that all development plans take account of desertification. It would also act as a point of leverage for raising funds from donor nations and multilateral organizations.

Experience over the previous six years has shown that a pre-condition for success in carrying out field projects is local community participation. Our evaluations of such projects show that they are far more effective than large downward-directed projects. The success of NGO-run schemes, which have tended to be small-scale and directed at community problems is, in particular, something which UNEP is keen to see extended.

The 1977 Plan of Action recommended the establishment of a series of transnational projects, but in virtually all cases these failed—owing in part to strained political relationships. Desertification, like most environmental problems, pays no heed to national boundaries, and the need for increased and widened, regional cooperation remains a top priority. UNEP is recommending the setting up of joint ventures along the lines of UNSO for 9 southern African countries, and for other southern Asian and South American countries that are affected by desertification.

#### *Financial Resources Deficient*

Three studies carried out in the period after UNCOD showed that adequate resources do not exist to pay for anti-desertification programmes. UNEP is therefore proposing a series of novel fund-raising schemes, ranging from the establishment of a Trust Fund financed from gold-sales reflow by the IMF, to the establishment of an Independent Financial Corporation to finance interest-free loans. Such measures are vital, as financial returns on investment in schemes to halt desertification are nearly always long-term. These financial arrangements would also guarantee a measure of automaticity and predictability in the flow of funds.

Equally important is the need for a dramatic change in the priorities of bilateral and multilateral development assistance agencies. Far too much technical and financial assistance has gone to show-piece projects and into measures aimed at appeasing the more politically advantaged urban populations. By comparison, rural populations which tend to lack political clout—especially in the more remote semi-arid regions—are all-but ignored. And even when it comes to allotting funds for rural development, agro-forestry and other ecologically sound activities are nearly always at the tail-end of the queue.

It is ironical that many of the urban problems of developing nations have their origins in the countryside. Loss of land productivity has practically forced villagers into the towns, and has also caused food shortages which result in food riots and other forms of unrest. But how often do we see newsmen and other commentators establishing the link with desertification? A prime example is the flooding which has caused so much damage and loss of life in India. That flooding is caused to some extent by siltation, which arises from soil erosion—that itself is a major cause and also a result of desertification.

It is the failure to perceive these often subtle linkages and interconnections that lies at the bottom of the failure to arrest desertification. When the minority in government and among the general public who now perceive these linkages become a majority, one crucial battle in the war against desertification will be won.

#### *Look to the Soil*

We need, as Indian Prime Minister Mrs Indira Gandhi said at the launch of the World Conservation Strategy, to 'put our ear to the ground so that the earth can whisper its secrets to us'. We need also to listen to the inhabitants of the million or so villages of the Third World who are in the front line. These people know the problems and how difficult they are to solve. *Environmental Conservation* having stressed this devastating topic in the past, † we hope they will continue to support our *campaign to combat desertification* with further enlightened papers in the near future.

Meanwhile, UNEP has been involved in the making of a film on the alarming march of deserts in Ethiopia. We recorded a meeting of villagers, all of whom expressed their anger and frustration over their apparently hopeless situation. One peasant farmer remarked that less than ten years earlier his harvest had been good; but in the meantime the topsoil had been eroded away, he said: 'Now all I have is a harvest of dust.' That Ethiopian peasant spoke for hundreds of millions more like him. This time we must listen or pay a terrible price.

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† See, for example, the papers by Hare, Ayyad & Ghabbour, Cloudsley-Thompson, and Hassanyar, published in our Volume 4 (1977), those of Mabbutt and Went & Babu in our Volume 5 (1978), all of which were included in the collected 'Papers on Desertification for the United Nations Environmental Programme', and our particular stressing of the topic in our Autumn issue of 1982 (Vol.9, No. 3).—Ed.