

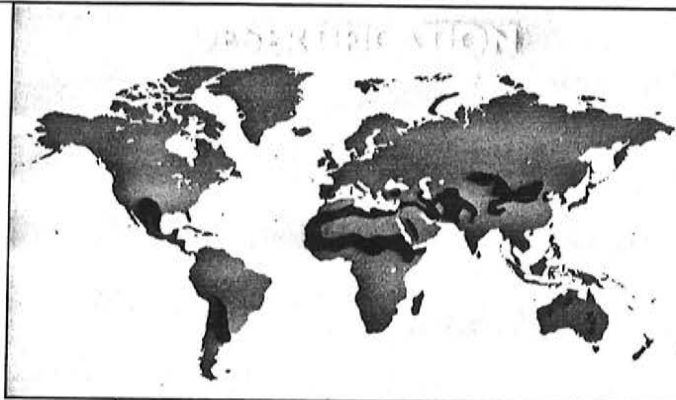
**D**esertification can be defined as the creation of desert-like conditions where none had existed in the recent past. Although the concept has become most closely associated with arid areas along desert fringes, it is now applied to high rainfall areas like the Amazon rainforest. Desertification is a mega-concept. It encompasses many processes such as wind and water erosion, soil salinization, overgrazing, water-logging and deforestation. It also has competing definitions, of which there are more than a hundred. This perspective sees desertification as a process of change, rather than just the end result of that change.

Desertification has a natural as well as a human component. In the ancient past its occurrence was dependent on land-climate interactions. In the past several thousand years the equation has been expanded to include humans. Today, desertification is dependent on land-climate-human interactions. Desertification in specific regions is occurring over decades and years instead of centuries and millennia. The difference is the human factor. We have not learned to live in harmony with our natural environment.

Many Americans believe desertification is a third world problem and not one we need be concerned about in North America. Yet aspects of desertification are under way in our country: degraded rangelands, major dust storms, decreasing soil fertility. Do we have a federal office of desertification control? No. Do we have a Bureau that deals with soil erosion? Yes. With grazing practices? Yes. While it appears that we are not doing much in North America to combat desertification (the mega-concept), we are quite active in combating those land-use problems that degrade our soil's productivity.

In North America desertification is an economic problem. It is a different situation, however, in the third world where the inability to cope with aspects of desertification that encroach on agricultural fields, rangelands and on human settlements can mean the difference between life and death. Many people in sub-Saharan Africa live from one season to the next. They are on their own when it comes to survival, as their governments are either unwilling or unable to assist them. When the fertility of their soils declines, bringing down food production with it, they become malnourished, finding it even more difficult to work their fields. Ultimately they must abandon their land in search of land not yet degraded by human activities.

Decades ago when population densities were lower, farmers could migrate to new



It is far cheaper to train people to avert desertification than to reclaim land that has already been desertified.

Desertification is a long-term, low-grade, but cumulative environmental problem that, like air pollution, acid rain and global warming, keeps getting put on the back burner while governments address seemingly more pressing issues. Solutions, however, are often known but not applied for lack of appropriate

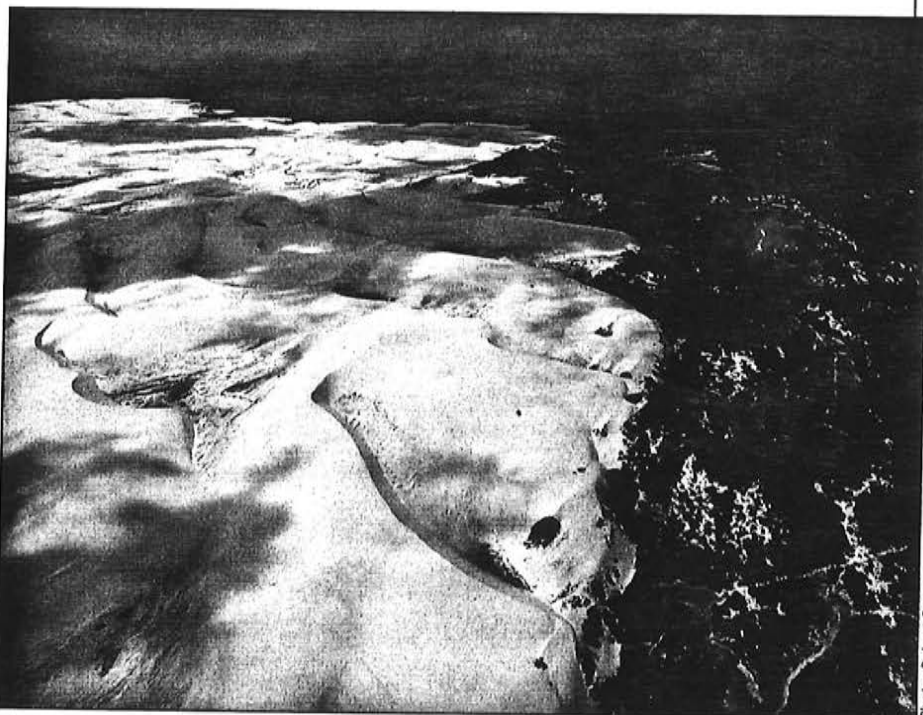
funding. It will take lots of money to combat it. But those funds will have to be used more wisely in the future than they have been in the past. Education and training at the local level should be the highest priorities for agencies seeking to bring an end to desertification in those countries whose inhabitants are most threatened by the process.

Desertification deserves at least equal attention as other environmental changes that threaten "our plundered planet." Only time will tell if humans are smart enough to give it that attention.

Poor countries do not have the funds to combat desertification. Industrialized countries apparently do not have the desire to address the sources of desertification in the third world in a major way. Lip service to combating desertification will not do the job. Training programs and technique transfer (as opposed to technology transfer) are necessary aspects of arresting desertification processes.

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Dune migration in the state of Maranhao, Brazil.

Photo: Robert Perron