

Africa is made up of a stunning mosaic of forests and woodlands, mountains, deserts, coastal lands and freshwater ecosystems upon which hundreds of millions of people depend. However, environmental change threatens the people and natural resources of this vast continent.

*Africa: Atlas of Our Changing Environment* provides compelling evidence of the extent and severity of such dramatic change over the past 30 years on the region's environment due to both natural processes and human activities. The Atlas is the first major publication to depict environmental change in all of Africa's countries using satellite imagery. By telling a vivid, visual story of the dramatic impacts on the continent's landscapes, the Atlas is a resource for remedial action at local, national, and regional levels.

One of the Atlas's most striking features is its site-specific, side-by-side display of historical and current remote-sensing imagery. "Before and after" satellite images show different kinds of environmental change: forest conversions and the loss or degradation of habitats; urban growth; altered hydrology (dams, shrinking lakes, river diversions, and drained wetlands); degraded coastal areas; mining developments; dryland modification; and the impacts of climate change. While it's generally a challenge to present visually the impacts of climate change and land degradation in Africa due to the often long intervals between cause-and-effect involving these two issues, the Atlas powerfully tells the story of climate change and its impacts through paired satellite images. Vignettes from people's lives provide personal accounts, describing how environmental change has affected them, how they have adapted to it, and also helped to slow further deterioration or restore environmental quality.

The *Africa: Atlas of Our Changing Environment* is an immense resource for all who have an interest in the regional environment. It among others:

- Introduces Africa in the global context, providing a general description of the region's geography, plants and animals, and its people. Highlights transboundary environmental change across national borders and frontiers, highlighting the effects of such change on people and the environment itself. It emphasizes the need for international cooperation to manage shared water bodies, ecosystems, and protected areas; cross-border pollution; and environmental issues related to conflict.
- Spotlights briefly each country in Africa, describing how each is faring in terms of achieving the targets set under Goal 7 of the United Nations' Millennium Development Goals (MDGs): "Ensure Environmental Sustainability". The incorporation of the MDG Goal 7 targets, and observations on the progress African countries have made towards achieving them, is yet another unique feature of this Atlas.

- Summarizes the magnitude of the challenges that Africa faces that will become even more taxing in light of climate change and its potential impacts on Africa and its people.

The Atlas also examines geographic and ecological issues of relevance at the national level. It presents each country's unique features, and highlights some of the major environmental trends and challenges of each. It displays paired satellite images, focusing on specific sites in each African nation where environmental change is visually evident. Each "change pair" of images is accompanied by a short write-up, drawing on scientific literature. The result is a concise, accessible presentation of a case study of environmental change.

It is important to note that different sites highlighted in this Atlas are only a window through which we can understand that environmental change is a widespread phenomenon throughout Africa.

The *Africa: Atlas of Our Changing Environment* brings compelling visual and scientific evidence of environmental change derived from the Earth observation sciences to a broader audience; builds awareness about our rapidly changing environment; and will help us make better decisions together to ensure our mutual future on this ever-more crowded globe—our planet Earth.

It is the work of many partners of UNEP. I would like to express the gratitude of the United Nations to our partners in Africa as well as the United States government whose support through agencies not only made the satellite data and analyses available, but also is committed to building capacity in Africa to strengthen efforts to analyse environmental change and inform effective policy responses.



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