



Protecting the Ozone Layer

BY SUELY CARVALHO

With the creation of the Montreal Protocol in 1987, developed and developing countries agreed to phase out the use of ozone-depleting substances. At the United Nations Millennium Summit, UN Secretary-General Kofi Annan emphasized to delegates the basic services that the natural environment affords us, including protection from the sun's ultraviolet rays provided by the ozone layer in the earth's atmosphere. He warned that, in many cases, people are degrading the ability of the environment to provide these life-sustaining services, but went on to praise the Montreal Protocol as "perhaps the most successful environmental agreement to date."

Since the 1970s, scientists began to see evidence that certain man-made chemicals—including those used in common products such as refrigerators, air conditioners, aerosol cans, cushions, packaging materials, insulation and cleaning solvents—were rising into the stratosphere and damaging the earth's natural shield against ultraviolet radiation.

Increased ultraviolet radiation levels lead to higher rates of skin cancer, cataracts and damage to people's immune systems. Even small increases in ultraviolet radiation can diminish the productivity of important food crops and adversely affect levels of plankton in the ocean.

After the adoption of the Montreal Protocol, industrialized countries discontinued the use of the most damaging ozone-depleting substances; developing countries were given more time to phase out their use of these chemicals.

In 1990, the industrialized countries established a Multilateral Fund to help developing countries meet the control measures specified in the Montreal Protocol. The United Nations Development Programme (UNDP) is one of the implementing agencies of the Multilateral Fund, along with the UN Environment

Programme, the UN Industrial Development Organization and the World Bank. UNDP is involved in 1,561 projects worth US\$355 million in 85 countries that will eliminate 44,186 tonnes of ozone-depleting substances.

The Montreal Protocol Unit in UNDP's Bureau for Development Policy provides guidance to developing countries in formulating national programmes for phasing out ozone-depleting chemicals; it also provides financial and technical assistance directly to companies converting their operations to use alternative ozone-friendly substances.

Factory conversions are complex undertakings that require expert analysis to help owners determine what equipment and materials are needed. Even though resources are available through the Multilateral Fund, managers worry that alternatives will be more expensive, or that workers will have difficulty handling new machinery and chemicals.

Over 500 companies in 31 countries—Argentina, Brazil, China, Colombia, Costa Rica, Cuba, Dominican Republic, Egypt, El Salvador, Gambia, Ghana, Guatemala, India, Indonesia, Iran, Jamaica, Malaysia, Mauritius, Mexico, Morocco, Nigeria, Panama, Paraguay, Peru, Philippines, Sri Lanka, Syria, Thailand, Uruguay, Venezuela and Viet Nam—have had their conversion process to ozone friendly technologies completed. Quite a number of smaller manufacturing enterprises with projects under implementation or in the process of formulation will need assistance.

UNDP's Montreal Protocol Unit has developed innovative approaches for assisting small and medium-sized enterprises, including ways of processing procurement orders for different enterprises. Companies that acquire new, ozone-friendly equipment enjoy the advantages

of state-of-the-art technology that allows them to remain competitive, while preserving existing jobs, and creating new economic opportunities.

Although implementation of the Montreal Protocol has been an environmental success story, many challenges still have to be confronted before compliance targets will be fully met. Demands on the Multilateral Fund will continue, and the workload of UNDP and other implementing agencies will likely increase, as the focus will shift to smaller and more labour-intensive projects.

Proactive role in technology development in Brazil

Espumas Oeste, a Brazilian company that manufactures flexible foam car seats and rigid foam coolers, recently adopted a process that uses water rather than ozone-depleting chlorofluorocarbons to produce foam. The conversion project was prepared by UNDP and implemented by the UN Office for Project Services. As part of the project, Espumas Oeste constructed a multi-functional blender to produce its own foam formulations. Here, as in other similar cases, the company involved in the conversion played a proactive role in the development of technology that reduced costs for themselves and others.

Reducing the use of ozone-depleting solvents in China

There are about 2,200 widely dispersed small and medium-sized enterprises in China that use ozone-depleting solvents. Most solvents covered by the Montreal Protocol are used for cleaning printed circuit boards and precision instruments, and degreasing metal products. In March 2000, UNDP worked with Chinese authorities to adopt a multi-year Solvent Sector Phase-Out Plan to develop viable

Brazil: Espumas Oeste constructed a multi-functional blender to produce its own foam formulations.



PHOTOS: MONTREAL PROTOCOL/UNDP

alternatives for cleaning processes where solvents are currently used, and to provide companies with new high-quality low-cost cleaning equipment. Technical assistance activities, training programmes and public awareness campaigns will support the introduction of alternative cleaning processes and ozone-friendly substances.

Ozone-friendly chemicals for foam sector enterprises in India

In 1997, India's Ministry of the Environment and Forests and UNDP developed a project involving eight small and medium-sized enterprises that manufacture rigid polyurethane foam, typically used in thermal insulation for buildings and for products such as jugs, flasks and coolers. UNDP worked with a local supplier who developed a chemical formulation that allowed these companies to use ozone-friendly substitute technologies. Standardization and bulk procurement opportunities, together with the use of local expertise, made the conversion process more economical. The project was successfully completed in 2000, and UNDP went on to develop three more similar projects covering another 70 companies.

Phasing out the use of methyl bromide in Malawi

By 2004, Malawi expects to have eliminated the use of methyl bromide, an ozone-depleting substance used in agriculture for disease and pest control. The project will develop alternatives to its various uses, which range from eliminating microorganisms and nematodes found in soils to exterminating insects and rodents infesting stored commodities and buildings. UNDP, with funds from the Multilateral Fund is providing the technical assistance and monitoring required as to meet the agreed elimination targets. The Montreal Protocol stipulates that virtually all methyl bromide use in developing countries must end by 2015. ■

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UNDP's Montreal Protocol Unit assists companies converting their operations to use alternative ozone-friendly substances.

Maximizing the Potential of the Drylands

Drylands development has been a priority of the UNDP for over 25 years. In 2001, UNDP further strengthened its capacity to support drylands development by establishing the new **Drylands Development Centre** in Nairobi, building on the experience of UNDP's Office to Combat Desertification and Drought. The Centre is now part of UNDP's worldwide network of Sub-Regional Resource Facilities (SURFs). The Centre acts as a global hub of excellence in drylands development, and as a source of policy advice on dryland issues and technical expertise for countries on drylands programme development. It also gives the world a major instrument to implement the UN Convention to Combat Desertification.

The Centre is committed to assisting countries in their fight against poverty in the drylands. Continuing to support the UNDP's mandate "to help provide the world's citizens with the rights, opportunities and tools to live the kind of life they want with a secure and healthy future for themselves and their children," the Centre aims to ensure that the rights of people living in the drylands are equally considered.

Drylands cover more than 40 percent of the Earth's surface and are home to more than two billion people. The Centre estimates that around one billion people live on the natural resources of drylands, many of whom are among the poorest in the world. If drylands are properly managed, they will become areas of productivity providing an excellent way of life for their inhabitants, and ultimately helping them break out of poverty.

There are several success stories proving that sustainable drylands development can be a reality. UNDP Country Offices, governments and the Centre are working together to learn from the work of the last 10 years since Rio, and to bring those lessons to WSSD.

Unlike the common misperception, the drylands are not regions of hopeless poverty needing constant welfare programmes for support. They are areas where people are innovative, and responsive to economic signals and opportunities. The Centre will raise awareness of the potential of people in the drylands. It will communicate this message to policy makers throughout the world.

We need to put drylands policy at the heart of macroeconomic, social and environmental policy. The Centre will share its experiences to elevate knowledge of drylands development, and its contribution to sustainable development and poverty reduction.—
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