

CREATING
A REAL
CHANGE
FOR THE
ENVIRONMENT



Multilateral Fund
for the Implementation of the Montreal Protocol

*“We already have one encouraging **example** showing how **global solutions** can be found. Thanks to the Montreal Protocol on **Substances that Deplete** the Ozone Layer, the risk of harmful radiation appears to be receding – a **clear demonstration** of how global environmental problems can be managed **when all countries** make determined efforts to implement internationally **agreed framework.**”*

KOFI ANNAN

SECRETARY GENERAL OF THE UNITED NATIONS

MARCH 2005

The cover of this publication is taken from a painting by Shanika Harshani Perera (aged 15) from Sri Lanka. The painting was submitted to the International Children's Painting Competition organised by the OzonAction Programme in 1998 as part of UNEP's work programme under the Multilateral Fund and was judged to be the winning entry from Sri Lanka.

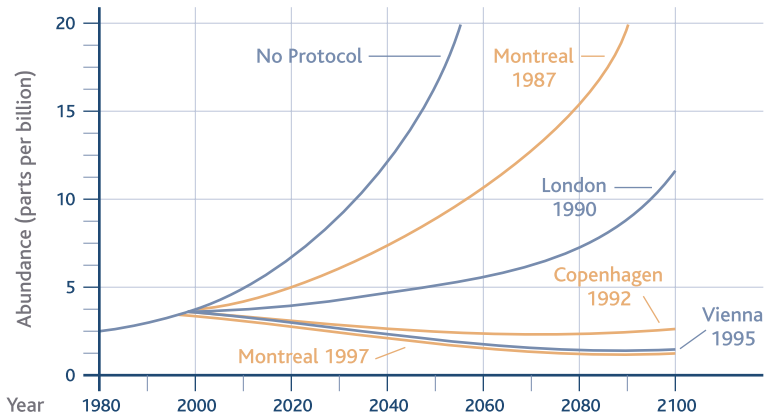


Life on earth is protected by an ozone layer

that filters out the sun's harmful ultraviolet radiation. The thinning of the ozone layer, caused by ozone-depleting substances (ODS), is endangering the environment and human health. In 1985, the global community responded to this threat by adopting an international legal framework for action, the Vienna Convention for the Protection of the Ozone Layer. Two years later, in 1987, the Montreal Protocol on Substances that Deplete the Ozone Layer was adopted. The Montreal Protocol went further than any other global environmental agreement by requiring countries to reduce the level of production and consumption of chemicals that harm the ozone layer according to an agreed schedule.

The consumption and production of ODS were reduced during the late eighties and early nineties by developed countries. It was considered vital to enable developing countries to do the same. However, for many developing countries, protecting the ozone layer was less of a priority than poverty alleviation, increasing food security and providing drinking water. The additional costs associated with converting the emerging industries dependent on ODS to ozone-friendly technologies made them hesitant to sign the Montreal Protocol, particularly when their economic growth was creating a steep increase in the production and consumption of ODS.

LEVELS OF ODS IN THE STRATOSPHERE

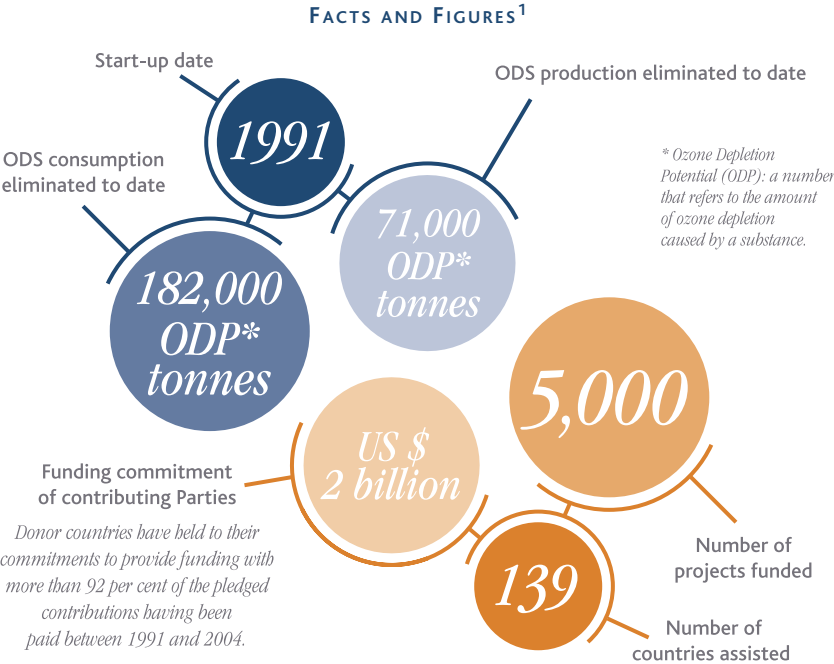


The graph shows predictions of levels of ozone-depleting substances in the stratosphere in the future with and without the Montreal Protocol and its subsequent amendments (London, Copenhagen, Vienna and Montreal).

A major barrier to the accession of developing countries to the Montreal Protocol was removed in 1991 when the Multilateral Fund was set up to assist developing countries to meet Montreal Protocol requirements. The Multilateral Fund has provided finance for various activities including industrial conversion, technical assistance, information dissemination, training and capacity building aimed at phasing out the ODS used in refrigeration, foam blowing, industrial cleaning, fire extinguishing, soil fumigation and cosmetic and pharmaceutical products.

The Multilateral Fund is a financial mechanism, not an implementing body. The separation from implementation responsibilities allows it to have an objective and rigorous project review procedure and an impartial monitoring and evaluation system to identify problems in implementation and to find solutions to them. Financing is based on performance-based funding with independent verification of results, flexibility in the use of funding to promote national ownership, and provision of penalties for non-achievement.

This booklet was prepared on the occasion of the 20th Anniversary of the Vienna Convention for the Protection of the Ozone Layer. It provides an overview of the lessons learned by the Multilateral Fund since 1991, and also presents some of the challenges and opportunities that lie ahead.



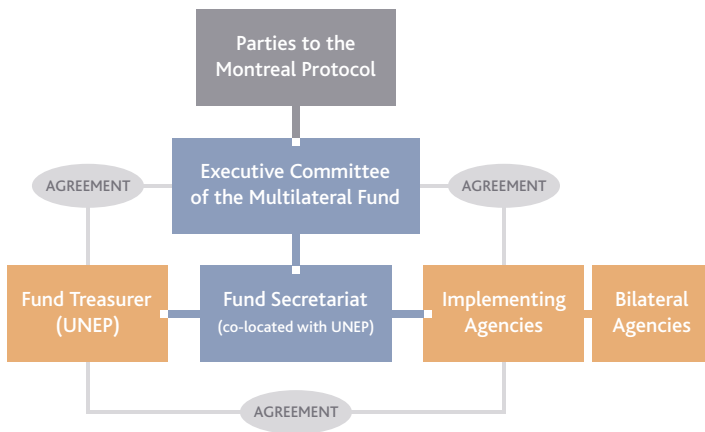
¹ AS OF 31 DECEMBER 2004



Operation of the Multilateral Fund

WHEN THE THE SECRETARIAT OF THE MULTILATERAL FUND WAS ESTABLISHED in Montreal in January 1991, only 21 developing countries had ratified the Montreal Protocol. Yet the first mandatory target that developing countries had to achieve in reducing their production and consumption of ODS was due in 1999, that is in less than 10 years. Unlike several development assistance funding programmes, the Multilateral Fund operates within a specific time frame and with exacting deadlines. Since there was no ready model for the Multilateral Fund to follow in 1991, it was necessary to quickly establish innovative operational processes with effective and efficient disbursement mechanisms that could adapt to an evolving situation.

STRUCTURE OF THE MULTILATERAL FUND



- > The Multilateral Fund (MLF) operates under the authority of the Parties to the Montreal Protocol.
- > An Executive Committee comprising seven developed and seven developing countries oversees MLF operations.
- > In delivering financial and technical assistance, the MLF works together with 'implementing agencies': UNDP, UNEP, UNIDO, the World Bank and a number of bilateral agencies.
- > The Fund Treasurer is responsible for receiving and administering pledged contributions (cash, promissory notes or bilateral assistance), and disbursing funds to the Fund Secretariat and the implementing agencies based on the directive of the Executive Committee.
- > The Fund Secretariat based in Montreal carries out day-to-day operations.

Shared responsibility in governance

Equitable and participatory management

The Multilateral Fund operates under the authority of the Parties to the Montreal Protocol who decide both on its overall policies and, every three years, on the level of replenishment of the Fund. The Multilateral Fund is managed by an Executive Committee which is made up of representatives from seven developed and seven developing countries. Members are selected annually at the Meeting of the Parties to the Montreal Protocol based on equitable geographic representation. Members have equal voting rights but the Executive Committee has never voted; decisions are based on consensus. The Chair and Vice-chair of the Executive Committee alternate annually between the developing and developed countries.

A representative constituency system introduced by the Executive Committee allows each of the 14 members to co-opt additional countries from the same region. This has significantly broadened the participation of stakeholders in the decision-making process, and enhanced their sense of ownership of the process.

The Executive Committee is responsible for developing operational policies and guidelines, drawing up the three-year plan and budget for the Multilateral Fund, approving country programmes and specific projects and overseeing the Multilateral Fund's administration. The Committee primarily discharges its responsibilities at the three meetings it convenes each year.



Emilia Stefanovska (aged 12) MACEDONIA

Liduvina E. Gutierrez Amados (aged 8) MEXICO



Implementation of Multilateral Fund activities

Contract out implementation

It was decided from the very beginning that to prevent duplication of effort and to promote outreach and speed of action, the Multilateral Fund would rely on existing capacity and expertise for the implementation of its activities. The work on the ground in developing countries is carried out by four implementing agencies, which have contractual agreements with the Executive Committee: the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organization (UNIDO) and the World Bank. Taking advantage of the agencies' global network and programme development capabilities, activities under the Multilateral Fund were speedily launched in over a hundred developing countries. Between 1991 and 1995, the Multilateral Fund built up the capacity to deliver a US \$200 million programme annually.

The Parties to the Montreal Protocol also decided that contributing Parties could use up to 20 percent of their annual contribution to carry out activities with developing countries on a bilateral basis. Currently 12 contributing Parties engage in a range of bilateral activities such as training, technical assistance and the introduction of up-to-date ozone-friendly technologies. Their participation diversifies the implementation process and broadens the impact of the Multilateral Fund.


Management of the Multilateral Fund

Separating management from implementation

The Fund Secretariat is co-located with UNEP and assists the Executive Committee in the discharge of its functions. It is not mandated to implement projects and programmes but to ensure that the objectives of the Multilateral Fund are adhered to and to provide liaison between the Executive Committee, governments and implementing agencies.

The separation of the management of the Multilateral Fund from its implementation activities has proven to be effective in maintaining the credibility and independence of the Multilateral Fund by fostering the development of the operational policies needed to achieve cost efficiency in a largely grant-based programme. It has enabled the Fund Secretariat to apply a rigorous project review procedure applicable to all funding requests submitted to the Executive Committee. This is reinforced by an open, transparent and dynamic policy development process undertaken by the Fund Secretariat in cooperation with the implementing agencies. The project review process enables support of all funding requests that meet the Executive Committee's approval criteria but often at a lower level than originally requested, leading to significant savings.

Since the inception of the Multilateral Fund, the Executive Committee has allocated a total of US \$1.97 billion to implement more than 5,000 projects and activities. Total funding of US \$3.21 billion was initially sought for these projects. The savings of US \$1.26 billion represents costs that were found to be outside the Executive Committee's funding guidelines or which did not meet the fundamental Multilateral Fund requirement of being "incremental costs".



An important aspect of the Multilateral Fund is that it covers only the additional costs incurred in converting to ozone-friendly technologies - the so-called 'incremental costs'. An indicative list of the categories of incremental costs is decided by the Meeting of the Parties.



Empowering Governments

National ozone units

Create national advocacy for ozone protection

Implementing the Montreal Protocol is ultimately the responsibility of national governments. Recognizing this, the Multilateral Fund has provided funding to establish national ozone units within the governments of each recipient developing country. The funding is intended to enable the provision of at least one full-time staff member and to cover basic office and communication costs even for the smallest country.

Establishment of national ozone units has helped 139 countries to take ownership of their national ozone protection programme by providing a continuous link to the assistance under the Multilateral Fund, as well as a channel of communication to the agencies implementing Multilateral Fund projects. One of the benefits of the creation of national ozone units has been the steady improvement by developing countries in the mandatory annual reporting of data on national consumption and production of ODS. By 2004, the rate of reporting by recipient developing countries had reached 96 percent.

The ongoing effort to empower national governments has contributed to:

- > enhancement of governments' capacity to manage national programmes to phase out the production and consumption of ODS;
- > provision of a sound basis for compliance with the strict control and reduction schedules of the Montreal Protocol;
- > and the adoption of agreements with the Executive Committee for binding accelerated reduction and phase-out schedules.



Angela Marcela Castillo Gil (aged 14) COLOMBIA

Supporting networks

Maintain and nurture them

Although most national ozone units were up and running by 1994, maintaining a national programme to phase out ODS constantly presents new technical and managerial challenges. The Multilateral Fund supported two initiatives to support the fledgling units as they assumed an increasing level of national responsibility. In 1994, the Government of Sweden initiated and funded a regional network for South-East Asia and the Pacific to enable national ozone officers from that region to meet twice a year, together with representatives from developed countries and implementing agencies, so providing a forum to discuss regional issues, disseminate information on and gather feedback on the policies of the Multilateral Fund. This peer support system proved successful and was quickly adopted by the Multilateral Fund. Today, there are nine regional or sub-regional networks, which form the backbone of a global ozone network, for 139 national ozone units.

As a second initiative, since 2000 the Multilateral Fund has funded UNEP's Compliance Assistance Programme (CAP), which has enabled UNEP to relocate staff to the regions and deliver more timely advice and assistance to both individual countries and the regional networks.

REGIONAL NETWORKS OF OZONE OFFICERS

- Africa – English-speaking
- Africa – French-speaking
- Latin America and Caribbean – South America
- Latin America and Caribbean – Central America
- Latin America and Caribbean – Caribbean
- South Asia
- South East Asia and Pacific*
- West Asia
- Europe / Central Asia

*Funded by the Government of Sweden



Maria Rozica Popescu (aged 13) ROMANIA



Strategy

Stunting the growth of ODS production and consumption

The target prior to 1999

The Montreal Protocol did not require any reductions in the production and consumption of ODS in developing countries until 1999 when the 'compliance' period began with the first mandatory control measure. Projections showed that, if ODS growth remained unchecked, the production and consumption of ODS in the 1990s could potentially offset the reductions already achieved by developed countries. Therefore the primary objective of the Multilateral Fund during that period was to slow down the growth in the consumption and production of ODS in developing countries as effectively as possible. To do this the Multilateral Fund prioritized project funding based on the most cost-effective use of funds per volume to be phased out. It also provided incentives to countries that closed down plants producing ODS and discouraged the establishment or expansion of ODS-using industries.

In 1986, one year prior to the adoption of the Montreal Protocol, the total consumption of the most important ODS, chlorofluorocarbons (CFCs) and halons, in developing countries was about 188,000 ODP tonnes. Using the prevailing average annual ODS growth rate, this consumption would have reached about 570,000 ODP tonnes by 1999. Such growth would have raised the phase-out costs by up to 300 percent and increased substantially the complexity of the overall phase-out task.

The effective intervention of the Multilateral Fund between 1991 and 1999 contributed significantly to containing this growth and as a result in 1999 the total baseline consumption of the two ODS in developing countries was about 212,000 ODP tonnes. In this way consumption of around 358,000 ODP tonnes of the two harmful chemicals was avoided.

Leaving no country behind

The target beyond 1999

July 1999 was an important milestone for developing countries with the entry into force of the first mandatory limit under the Montreal Protocol. By that date each country was required to freeze its consumption and production of CFCs, at levels no higher than the corresponding average levels of production and consumption in the period 1995-1997. Subsequently, intermediate mandatory reduction steps are entering into force until the complete phase-out of the most common ODS is achieved in 2010. A more demanding compliance period began in which the commitment of each developing country is being measured by its achievement of the Montreal Protocol's mandatory limits. Accordingly, the Multilateral Fund has shifted its funding strategy from maximizing the reduction of ODS by industries to providing support at the national level through a compliance-driven approach and performance-based funding.

Compliance-driven approach

In order to ensure that the funding needs of each country are met, the Multilateral Fund instituted a three-year-rolling plan which predicted for each country the amount of ODS to be eliminated annually to meet each Montreal Protocol reduction step. Through regular updating, this mechanism places every country on the funding map of the Multilateral Fund and ensures the availability of funds when they are needed to enable compliance with the requirements of the Montreal Protocol.

Najla Hussein Eid (aged 5) EGYPT





Eros Puentes Rodriguez (aged 11) CUBA

Performance-based funding


From 2000, the Multilateral Fund has put less emphasis on the funding of stand-alone projects to replace technologies using ODS. Instead, it has encouraged the development of national ODS phase-out plans that map out a detailed plan of action to eliminate the entire remaining consumption of the most common ODS in a country. Each plan is governed by an agreement between the Executive Committee and the government concerned which specifies:

- > the annual reduction target to be achieved by the government, at a minimum consistent with the reduction schedule for ODS under the Montreal Protocol;
- > the total funding level from the Multilateral Fund agreed in principle;
- > a schedule for the disbursement of funds;
- > an independent verification of achievement of the annual reduction target, as a condition for fund disbursement;
- > the flexibility to reallocate funds within programmes; and
- > provision for penalties such as a reduction or suspension of grants if the reduction target for ODS is not met.

National ODS phase-out plans integrate into a coherent package including:

- > the enactment and enforcement of government policies on the import and export of ODS, such as the training of customs officers and harmonization of customs codes; and
- > measures such as recovery and recycling of ODS to gradually reduce the need for new ODS in existing refrigeration equipment.

In this way, performance-based funding agreements facilitate compliance by placing national governments in a position to implement their commitments under the Montreal Protocol. National phase-out plans usually result in more rapid reductions in the consumption of ODS than would be required by the Montreal Protocol schedules.



As of June 2005, the Multilateral Fund has concluded 71 agreements with 47 countries. Under these agreements, 295,834 ODP tonnes of ODS would be eliminated.

Zaidee Walker (aged 12) TRINIDAD





Efficient Project Cycle Management

SHORT PROJECT CYCLES WITH MEASURABLE RESULTS

Monitoring and evaluation in the Multilateral Fund

Setting-up a monitoring and evaluation capability

The Multilateral Fund has established its own monitoring system for continuous assessment of the progress of ongoing projects and programmes. All ongoing programmes are assessed annually, enabling the Executive Committee to exercise its oversight responsibility. In addition, a number of independent thematic or sector evaluations are carried out each year. These provide feedback both on the results and impact of completed and ongoing projects, as well as lessons and recommendations for policy development.

Tracking progress

Use of indicators to measure performance

A performance assessment of the implementing agencies is carried out each year, assessing the progress toward the targets set in the annual business plans. Based on the objectives of the Multilateral Fund, a range of indicators has been developed to measure the performance of the implementing agencies. Assessments have been used as a reference for future resource allocation. This has created a healthy and balanced competitive environment and raised the quality of service to recipient developing countries.

Annual business planning provides the implementing agencies with ODS phase-out targets, the cost efficiencies to be reached and the level of funds to be disbursed. Milestones are used to measure the progress of project implementation. When supported by a number of administrative actions, up to and including project cancellation, this ongoing monitoring provides an incentive for the rapid completion of delayed projects.

Using unused funds

Recovery of unused funds

Tight deadlines have been established for the return of unused funds from completed or cancelled projects. Fund returns are continually monitored, to maximise reprogramming for future use.



Future Challenges

CFCs and halons

Remaining consumption and the issue of illegal trade and production

Despite an impressive track record and encouraging indicators, the success of the Multilateral Fund will be measured by the extent of compliance with the Montreal Protocol's targets. The first mandated reduction in consumption and production of two common ODS, CFCs and halons, start in 2005 with a 50 percent cut, followed by an 85 percent cut for CFCs in 2007 and full phase-out for both chemicals in 2010.

The ability to meet these compliance targets now depends on:

- > successful implementation of already approved, multi-year, national and sectoral phase-out plans by individual countries together with their partner bilateral and implementing agencies;
- > approval of final national phase-out plans for countries with low levels of consumption; and
- > rapid project development for the remaining new Parties to the Montreal Protocol.

In each case, project implementation is taking place in rapidly changing circumstances that continue to produce unique challenges and to demand innovative approaches.



Qu Nan (aged 8) CHINA

Lim Yang Yang (aged 11) MALAYSIA



Supply shortages arising from restrictions on imports, imposed by an individual country to assist in reducing its CFC consumption, can create unofficial markets and pressure for illegal production or illegal trade. The Multilateral Fund has responded by assisting countries in a number of ways to exercise tighter control on the trans-border movement of ODS. Funding is provided for the training of customs officers, the harmonization of customs codes, and the provision of equipment to detect ODS. Regional networks facilitate information exchange between the governments of ODS exporting and importing countries.

A heightened awareness of ozone layer protection and the implementation of recovery programmes is leading to an accumulation of used ODS. It is reported, for instance, that 300,000 ODP tonnes of halons are currently held in cylinders in developing countries. Safe storage, reclamation and disposal of such chemicals is a prerequisite for environmental health.

Chemicals that have not yet been fully addressed

Methyl bromide

Methyl bromide is a widely applied pesticide used in agriculture and food production. It became a controlled substance under the Montreal Protocol in 1994. For developing countries, the Parties to the Montreal Protocol agreed control measures to freeze national consumption by 1 January 2002 and introduced a 20 percent reduction in consumption by 1 January 2005. Final phase-out is to be achieved by 2015.

To provide the assistance necessary for developing countries to meet their compliance commitments for methyl bromide, the Multilateral Fund had to respond rapidly and effectively with new and different policy criteria for project development and project funding. Although the Multilateral Fund was hitherto concerned with industrial conversion projects, it was required to obtain and deploy expertise in agriculture and primary industries and to reach out to an entirely different set of stakeholders.

Despite the challenge of dealing with a new sector, the Multilateral Fund was able to provide some assistance by the end of 1994, and by December 1998, 31 countries had been provided with financial assistance in the methyl bromide sector. By September 2005, that number had expanded to 67 countries. When data on methyl bromide were compiled in 2003, it was found that 46 of the 55 countries reporting data had been successful in freezing their national consumption.

Meleko Mokgosi (aged 16) BOTSWANA





Abnaf Rafid Bin Habib (aged 5) BANGLADESH

Although consumption of methyl bromide can continue until 2015, some countries are already advanced in their phase-out efforts. In the countries that have reported use of methyl bromide, total consumption has already been reduced by 25 percent, and Multilateral Fund agreements have been concluded to address another 60 percent of this consumption.

Currently, in 2005, no single cost-effective alternative can replace methyl bromide in all applications. Unlike a one-time factory conversion, the option of methyl bromide use must be confronted with each crop cycle. The adoption of new technologies in the critical agricultural sector involves changes to current practices and attitudes, among multiple stakeholders ranging from risk-averse farmers to governments and suppliers. The risks arising from alternative technologies coupled with the inherent variability of natural systems and processes must be fully assessed and carefully managed if a project is to be successful and sustainable.

Sustaining planned decreases in consumption is presenting challenges for some developing countries and the pace of project development in others is slowing down. Maintaining zero consumption in other developing countries is also emerging as a related issue. The Multilateral Fund is adapting to the change in circumstances and has provided support to assist the sustainability of zero consumption, acknowledging the need for rescheduling of some countries' original methyl bromide phase-out plans, while ensuring that the overall phase-out objectives are not compromised.

Carbon tetrachloride

Carbon tetrachloride, CTC, is a universal solvent and a chemical process agent. The Multilateral Fund has provided assistance to complete the phase-out of CTC consumption as a solvent and, where technologically practicable, as a process agent.

Some significant technological challenges remain to be addressed. A small number of developing countries, which have industrial processes where CTC alternatives cannot be used, must alter their current processes so that CTC emissions are kept at a negligible level. That negligible level still remains to be defined and the task of maintaining emissions permanently below the defined level is formidable.

Production of certain chemicals will continue to result in significant quantities of CTC as a by-product, for example in the production of HCFC-22. In the case that it cannot all be completely used to make other chemicals, the excess quantities will need to be destroyed. Given the usefulness of CTC as a solvent, the challenge of preventing illegal trade will remain.



Laila Nuri (aged 8) INDONESIA

Pongsak Poolchuen (aged 15) THAILAND



Chemicals that have not yet been addressed

The HCFC Challenge

Hydrochlorofluorocarbons (HCFCs) are a group of ozone-depleting chemicals albeit with a potential to damage the ozone layer significantly lower than CFCs. HCFCs were introduced as a transitional substitute for CFCs and were already widely used in various refrigeration applications. There has been a constant growth in the production and consumption of these chemicals in developing countries. Recent projections indicate that demand for HCFCs could exceed 350,000 metric tonnes by 2015.

The Montreal Protocol introduces controls on these chemicals for developing countries with a freeze starting in 2016. It took 10 years, from 1990 to 1999, to prepare the developing countries for the CFC freeze. The Multilateral Fund decided in 2005, 10 years before the first mandatory control on HCFCs, to prepare the groundwork for taking on HCFCs by assisting a number of countries to survey the level and pattern of consumption, the projected growth of HCFCs, the necessary policy framework to manage their elimination, and the technological options available. The future anticipated demand for HCFCs will pose a significant challenge.



Creating a Real Change

The Multilateral Fund continues to be one of the success stories of global environmental protection. However there are still future challenges if the Multilateral Fund is to attain its ultimate goal. While at one level the Multilateral Fund is simply a financial mechanism to transfer funds to developing countries so that they can phase out harmful chemicals, at another level it is a story of international cooperation, speedy action, equity between contributing and recipient countries, the importance of a country-driven approach and the development of an innovative, accountable and transparent financing structure.

By empowering governments and promoting national advocacy for ozone protection in developing countries, the Multilateral Fund has built an environmental capacity in all developing countries eligible for Multilateral Fund assistance. This capacity provides a vehicle for the management of these chemicals within national governments and at a regional level, and provides effective exposure and sustainable implementation of programmes in countries where global environmental challenges are less pressing than poverty and economic development concerns.



Nam Babadur B.K. (aged 15) NEPAL

The images used in this publication were painted by children from developing countries as part of the International Children's Painting Competition organised by the OzonAction Programme in 1998 as part of UNEP's work programme under the Multilateral Fund. These paintings were judged to be the winning entries from their respective national painting competitions, which were organised by National Ozone Units in cooperation with UNEP. The paintings have been exhibited at UNESCO Headquarters in Paris, reproduced in the UNEP booklet "Healing the Ozone Layer with Small Brushes", and used in publications and awareness materials produced by National Ozone Units. Through their talent, ingenuity and imagination, the children who made these paintings show that they are ready to make a real contribution to solving the problem of ozone layer depletion.



Multilateral Fund

for the Implementation of the Montreal Protocol

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