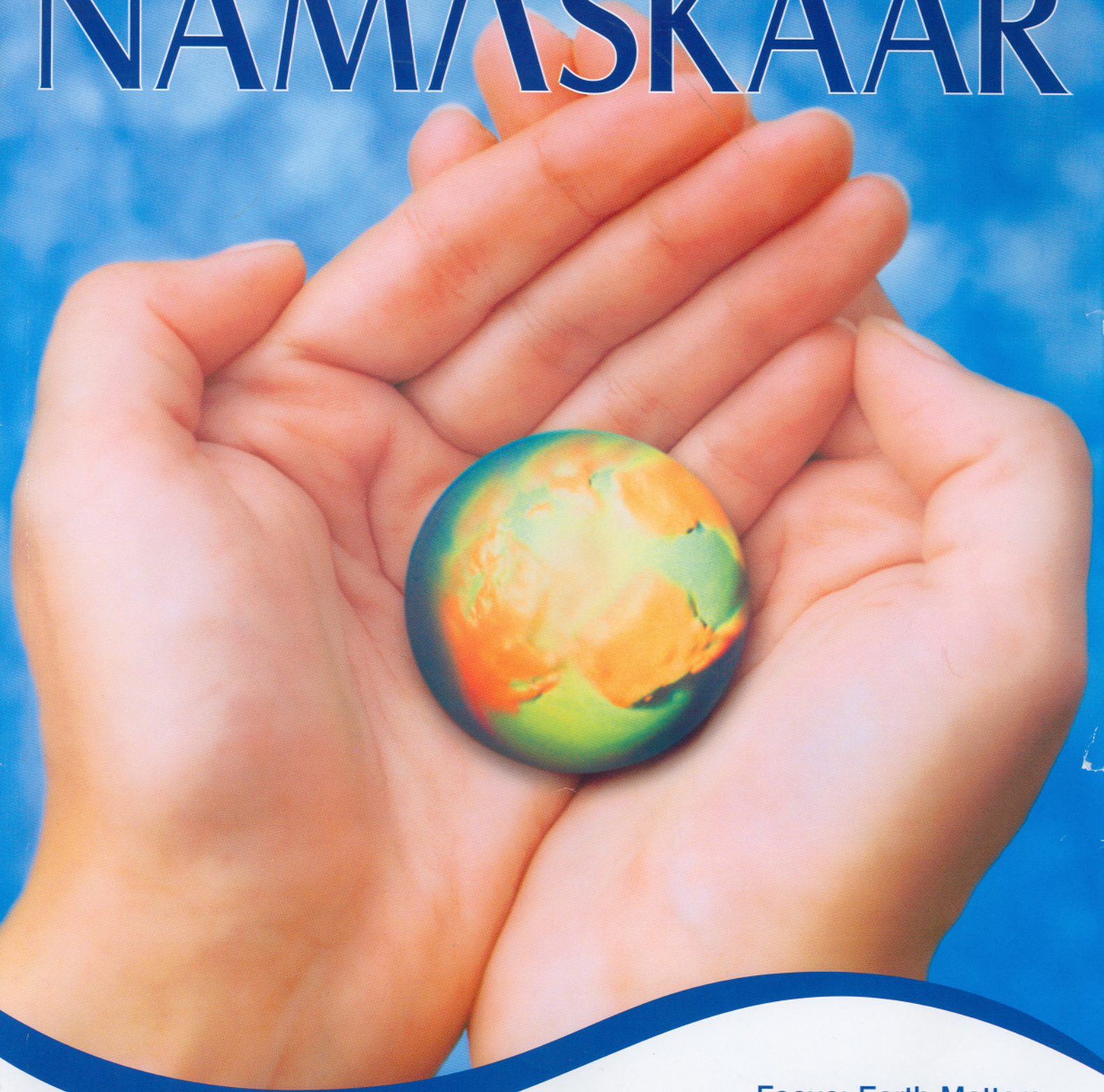


September 2005

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NAMASKAAR



Focus: Earth Matters
Amritsar: Pool Of Nectar
Renoir Sunsets In Aube



THE INFLIGHT MAGAZINE OF AIR INDIA



Klaus Toepfer, Executive Director
United Nations Environment Programme (UNEP)

Take Off Towards Sustainable Development

Klaus Toepfer raises awareness of the importance of protecting the ozone layer

As you read this magazine you are probably cruising at between 8 and 13 kilometers above the earth. About 17 kilometers above you is the stratospheric ozone layer. An invisible but vital sheet of molecules, each made up of three oxygen atoms that protects all life on earth from ultraviolet radiation from the sun. Without the ozone layer, we would not exist. It is our protective shield.

The ozone layer represents the power of nature to protect. It also symbolizes how natural resources can be damaged by human activity. The ozone layer is in danger because of the emission of certain human-made chemicals. Examples include: chlorofluorocarbons (also known as CFCs), which are used in refrigerators and air-conditioning units; halons used in fire extinguishers; carbon tetrachloride, a solvent; and methyl bromide, a pesticide used in agriculture.

Scientists' understanding of how these chemicals cause ozone depletion led UNEP to catalyze global action to protect the ozone layer. The Montreal Protocol, signed in Montreal in 1987, has now been ratified by 189 countries. It has specific time-bound targets for developed and developing countries to phase out the production and consumption of ozone-destroying chemicals.

So far, these international efforts to save the ozone layer have been highly successful. Most CFCs and halons have been phased out in the developed countries, and developing countries are following closely. The Government of India, for example, has a comprehensive national strategy to eliminate these substances and replace them with alternatives. It is helping industry to adopt environmentally friendly technologies and cooperating with its neighbours to combat illegal trade in these chemicals. India is in compliance with the Montreal Protocol and playing its part to protect the ozone layer.

Without the Montreal Protocol, the world would have seen 1.5 million more cases of melanoma skin cancer, 19.1 million more cases of non-melanoma cancer and 130 million

incidents of cataract. Nevertheless, despite these successes, the ozone layer remains fragile and under threat.

Throughout September 2005, Air India passengers will meet Ozzy Ozone, a colourful cartoon character who is helping UNEP's OzonAction Programme* to explain ozone depletion and the simple steps that we can all take to protect ourselves from its effects and contribute to sustainable development.

Sustainable development implies meeting the needs of the present without compromising the ability of future generations to meet their own needs. It means that all aspects of our developmental efforts - economic, environmental and social - must be balanced to secure long-term growth and stability. UNEP is the environmental conscience of the world. We are working with governments, industry, non-governmental organizations and the public to set a flight path towards a sustainable future for all.

UNEP commends Air-India for taking a proactive role in raising awareness of environmental sustainability. The invention of the airplane is one of humanity's most outstanding accomplishments. With ingenuity, commitment and resources, humankind solved a seemingly impossible challenge and broke free of gravity. With the same creative energy, we can overcome the challenges in environmental sustainability.

Helping to protect our ozone layer is a vital step in that direction. Remember, when it comes to protecting our environment - including the ozone layer - every action counts.

UNEP wishes you a pleasant flight and a soft landing! ✈️

• *The United Nations declared 16 September of each year as International Day for the Preservation of the Ozone Layer to remind us all of the ozone layer's importance. Around the world, governments, industry and communities commemorate the date when the Montreal Protocol was signed and promote awareness about ozone protection.*

* *For more information on OzonAction visit <http://www.unep.fr/ozonaction/>*

Saving The Shield



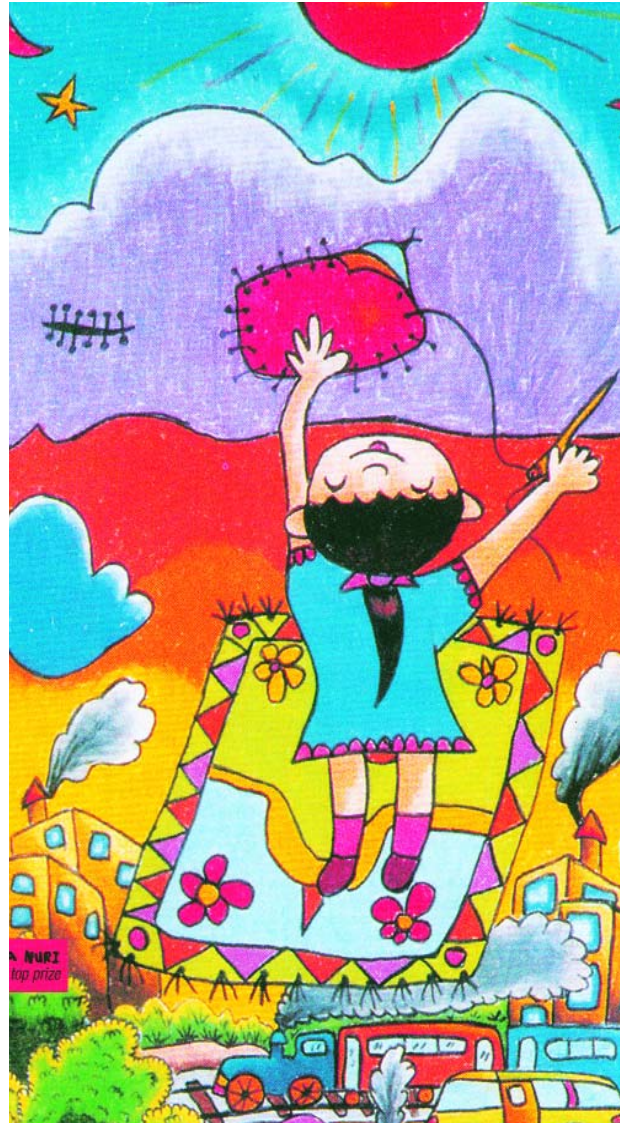
Mario Molina describes the success of the Montreal Protocol in protecting the earth's endangered ozone layer

There has been enormous scientific and technological progress during the past 100 years. The quality of life has improved in many ways - average life expectancy, for example, has more than doubled. On the other hand, it is now clear that the degradation of the environment is an unintended consequence of this progress. People first started altering the surface of this planet thousands of years ago, when they began to establish settled communities and develop an agriculture that required ploughing, irrigation and the clearing of forests. In the past, most environmental problems were local or regional. But, in recent years we have come to recognize that the impact of human activity on the environment has reached global proportions. The problems are now affecting the entire planet because they occur so often and in so many places.

Perhaps the best understood global environmental issue involves chlorofluorocarbons, CFCs, and the ozone layer. CFCs are chemical compounds developed as replacements for toxic refrigerants. Once CFCs are released from the components in the atmosphere, they stroll all the way to the stratosphere where they deplete the ozone layer that protects life on earth from harmful solar ultraviolet radiation. CFCs are released predominantly in the Northern Hemisphere, yet the most striking effects of their release occur over the South Pole - far removed from the source.


The CFC problem is now under control, thanks to the Montreal Protocol on Substances that Deplete the Ozone Layer - an unprecedented international agreement negotiated under the auspices of UNEP. Formulating the Montreal Protocol required the participation of scientists, industry representatives, policy makers and environmentalists: it is a very important precedent demonstrating how all these different sectors of society can work together and can be very productive, functioning collaboratively. The Protocol also established a new way of addressing environmental problems: the original agreement was negotiated on the basis of the ozone depletion theory which predicts that human-made CFCs would deplete the stratospheric ozone layer.

In another important precedent, the Protocol includes procedures for periodic revisions of its terms: as new scientific



By Laila Nuri, aged 8, Indonesia. First prize winner of UNEP Children's Painting Competition on Ozone Layer Protection.

evidence of globally occurring ozone depletion becomes available, the agreement is modified and strengthened. The agreement also attempts to make the phase-outs fair for developing countries: the revised agreement established the Multilateral Fund - provided by developed nations - to help developing countries adopt 'ozone-friendly' technologies.

One of the key steps in any rational approach to addressing global environmental issues is to promote internationalism - a widespread understanding that all our human problems are interconnected. Regional and international cooperation will be essential to the solution of environmental problems, and UNEP has shown us the way to achieve it successfully. 

Mario Molina is a professor of atmospheric chemistry at the University of California and head of the Mario Molina Center for Strategic Studies on Energy and Environment. Professor Molina is a member of the National Academy of Science and the Institute of Medicine in the United States, as well as of the Mexican Academy of Science, the Mexican Academy of Engineering, the Pontifical Academy of Science of the Vatican, and of several other institutions. In 1995, Molina was awarded the most prestigious award of all - the Nobel Prize for Chemistry.



By Maharshi Bhupendra Jesalpura, aged 10 India, Protection of the Ozone Layer. UNEP Children's Painting Competition on Ozone Layer Protection.

before it is discarded. Portable halon fire extinguishers that are no longer needed should be returned to your fire protection authority for recycling. Consider purchasing new fire extinguishers that do not contain halon (e.g. dry powder) as recommended by your fire protection authority.

Be an ozone-friendly office worker

Help your company identify which existing equipment (e.g. water coolers, air conditioners, cleaning solvents, fire extinguishers) and the products it buys (aerosol sprays, foam cushions / mattresses, paper correct fluid) use ozone depleting substances and develop a plan for replacing them with cost-effective alternatives.

Be an ozone-friendly community organizer

Inform your family, neighbour and friends about the need to protect the ozone layer and help them get involved. Work with non-governmental organizations to help start information campaigns and technical assistance projects to phase out ozone depleting substances in your city, town or village.

Be an ozone-friendly teacher

Inform your students about the importance of protecting the environment and in particular the ozone layer. Teach students about the damaging impact of ozone depleting substances on the atmosphere, the health impact and the steps that are being taken internationally and nationally to solve this problem. Encourage your students to spread the message to their families.

Be an ozone-friendly child

Tell your family and friends how important it is to protect the ozone layer. Ask your parents to choose ozone-friendly products.

Be an ozone-friendly citizen

Read and learn more about the effects of ozone depletion on people, animals and the environment, your national strategy and policies to implement the Montreal Protocol and what the phase out of ozone depleting substances means to your country. Get in touch with your country's National Ozone Unit and learn how you can get involved on an individual level.

How You Can Act Ozone-Friendly

Being ozone friendly means taking individual action to reduce and eliminate the impact on the stratospheric ozone layer caused by the products that you buy, the appliances and equipment that your household or business uses, or the manufacturing process used by your company. Products made with, or containing ozone depleting substances (ODS) such as CFCs, HCFCs, halons, methyl chloroform and methyl bromide can contribute to ozone layer depletion. The following list describes some actions individuals can take to help protect the ozone layer.

Be an ozone-friendly consumer

Buy products (aerosol spray cans, refrigerators, fire extinguishers, etc.) that are labeled "ozone friendly" or "CFC free". The product labels should indicate that they do not contain ozone depleting substances such as CFCs or halons. Ask for more information from the seller to ensure that the product is ozone friendly. Tell your neighbour that you are the proud owner of "ozone friendly" products.

Be an ozone-friendly homeowner

Dispose off old refrigerators and appliances responsibly. CFC and HCFC refrigerants should be removed from an appliance



For further information, including the Ozzy Ozone video, visit the following UNEP DTIE OzonAction Programme website: <http://www.unep.fr/ozonaction/> UNEP Division of Technology, Industry and Economics

OzonAction Programme 39-43 quai André Citroën 75739 Paris Cedex 15 France
Tel: (33) 1. 44.37.14.50
Fax: (33) 1. 44.37.14.74
Email: ozonaction@unep.fr

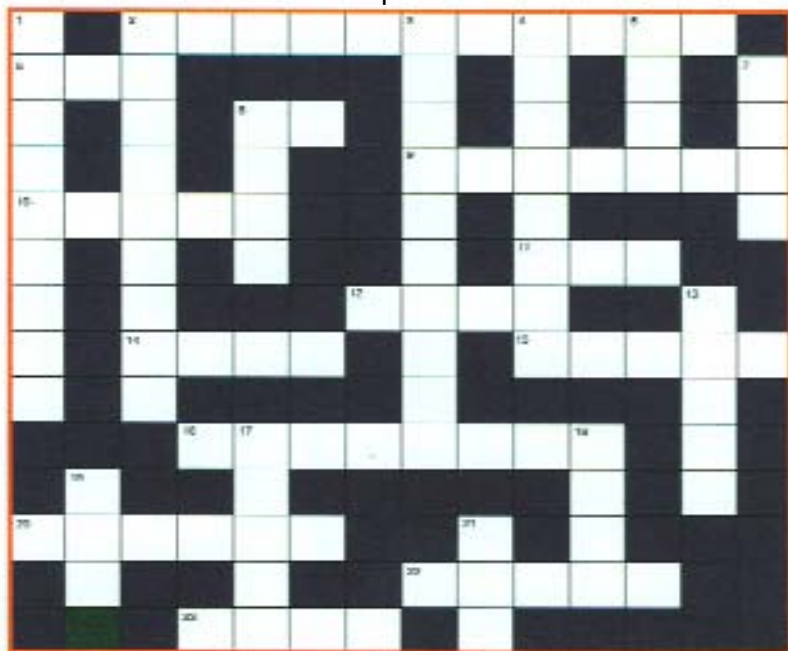


Save our Sky

Take this environment friendly crossword and score brownie points with the earth!

ACROSS:
 2. ENVIRONMENT 6. ALL 8. UV 9. NATURE 10. RAISE
 11. EAT 12. DATA 14. TIME 15. LEARN 16. DESTRUCTS 20. EFFORT 22. OASIS 23. HAN

DOWN:
 1. DAMAGE 3. ELIMINATE 5. OZONE LAYER 7. MOUNTAIN
 9. HOLE 11. HUBB 13. CHORE 17. EARTH 18. SAVE 19. STOP 21. DAY



ACROSS

2. Our surroundings
6. Everyone, collectively
8. Ultra Violet abbreviated
9. Opposite of man-made
10. We need to awareness to achieve the goal of ozone layer protection
11. To nourish oneself
12. Numbers resulting from scientific measurements
14. This cannot be wasted before taking action
15. To acquire knowledge about ozone layer protection
16. Methyl Bromide is one of the chemicals that our ozone layer
20. We need to make the to spread the word on what chemicals do to the earth
22. Aerosol and Halon
23. Opposite of thick

DOWN

1. Damage to the eyes caused by UV light
2. To get rid of ozone depleting substances
3. Its depletion is endangering all life on earth
4. 1987 Protocol for the protection of the ozone layer
5. Close to the deadline
7. Gap in the ozone shield
8. A United Nations body responsible for ozone protection
13. Methyl Bromide is used to control insects that affect our
17. Planet that we live on
18. our sky
19. Chemicals that destroy the ozone layer
21. Opposite of night

In 1987, many countries signed an agreement called the Montreal Protocol to discontinue their use of ozone depleting substances by specific deadlines. So far, over 170 countries have ratified the Montreal Protocol. Some international organizations are helping countries to discontinue using ozone depleting substances.

The UNEP DTIE OzonAction Programme provides information about ozone depleting substances and their replacements to government representatives, industry representatives, and other stakeholders.

This will enable users to make informed decisions when adopting replacements to these environmentally harmful substances.

PERSONAL CHALLENGE

Learn as much as you can about ozone layer protection. Contact the National Ozone Unit in your country to become more involved in ozone protection activities.