

আন্তর্জাতিক ওজোন দিবস ১৬ সেপ্টেম্বর ২০০২ International Ozone Day 16 September 2002

পরিবেশ অধিদপ্তর
Department of Environment



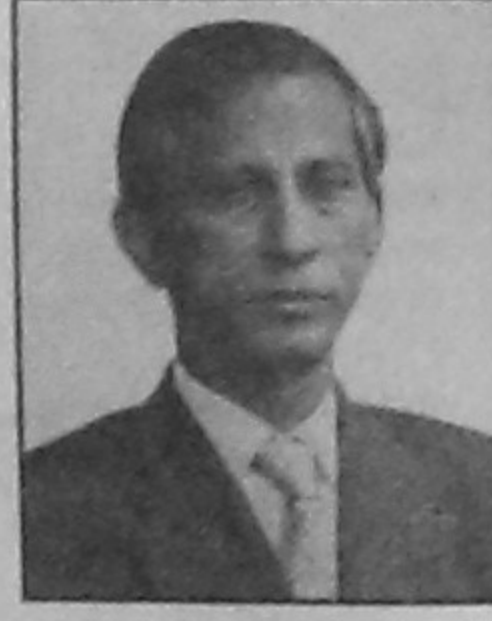
গণপ্রজাতন্ত্রী বাংলাদেশ
বাণী
বিসমিল্লাহির রাহমানির রাহিম

বিশ্বের অন্যান্য দেশের মতো বাংলাদেশে আন্তর্জাতিক ওজোন দিবস পালনের উদ্যোগকে আমি স্বাগত জানাই।
পৃথিবীতে জীবনের অস্তিত্বের জন্য স্ট্র্যাটোস্ফিয়ারে অবস্থিত ওজোনস্তর অত্যন্ত গুরুত্বপূর্ণ। এই স্তর পৃথিবীকে ক্ষতিকর বেগনি-রশ্মি থেকে আড়াল করে রাখে। অবস্থান অনুযায়ী বাংলাদেশসহ বিশ্বের কোন দেশই ওজোনস্তর ক্ষয়-এর ক্ষতিকর প্রভাব থেকে মুক্ত নয়। অন্যান্য দেশের মতো বাংলাদেশে ওজোনস্তর ক্ষয়রোধে 'মাল্টিপল প্রটোকল' স্বাক্ষর করেছে এবং দেশের পরিবেশ সংরক্ষণের লক্ষ্যে কার্যকর ব্যবস্থা গ্রহণসহ এর সফল বাস্তবায়নের জন্য কাজ করে যাচ্ছে।
আমি আন্তর্জাতিক ওজোন দিবসের সাফল্য কামনা করি।
প্রফেসর ডঃ ইয়াজিদুদ্দিন আহমেদ



Minister
Ministry of Environment & Forest
Government of the People's Republic of Bangladesh
Message

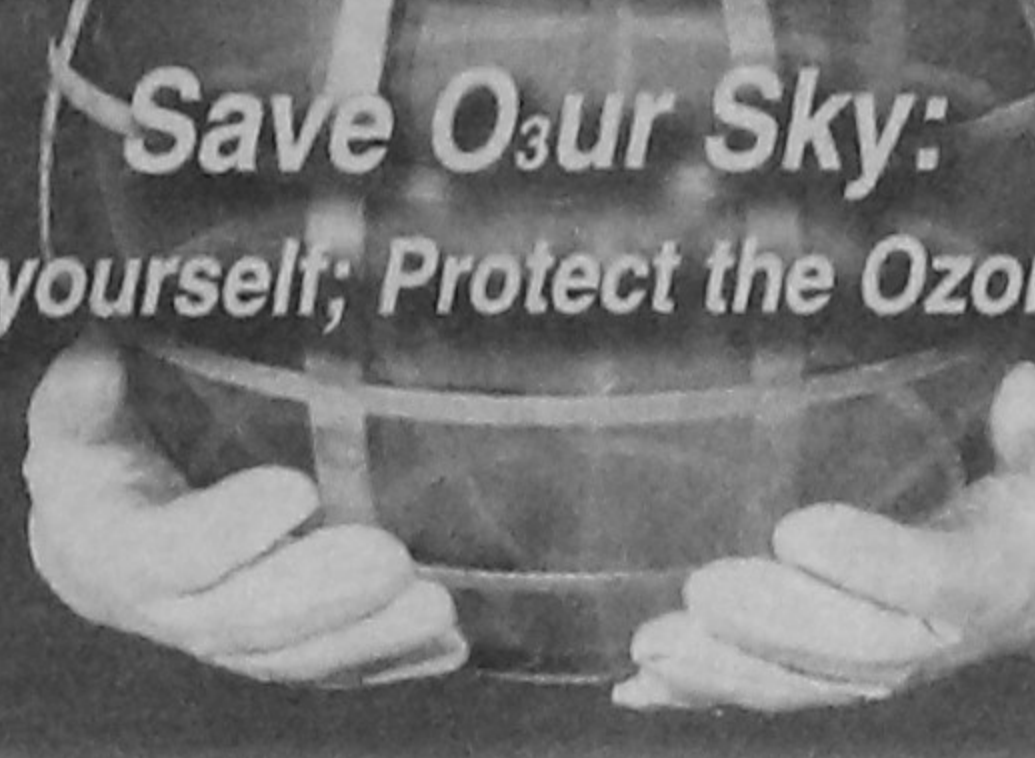
The Montreal Protocol has been a unique and glaring milestone reached through combined endeavor of the countries, governments and peoples throughout the world toward restoring the ozone layer to its original state from the present one of gradual depletion. The treaty has resulted in a considerable decline in the total consumption of chlorofluorocarbons (CFCs). Bangladesh has been among the countries signatory to this Protocol and is committed toward phasing out the use of ozone depleting substances within a stipulated time-frame.
While causing depletion of the ozone layer on one hand, CFCs, as among the greenhouse gases, help enhance the global warming and harmful changes in the climatological conditions, on the other. It causes melting of icecap in the polar region resulting in consequent sea-level rises. If sea-level rises from 10 to 45 cm, 15% of Bangladesh landmass will be inundated by the sea. Moreover, consequent to ozone layer depletion caused by CFCs, higher incidence of harmful ultraviolet radiation has been causing vital threat to the various lifeforms around the world.
International Ozone Day, in this backdrop, assumes considerable significance in creating global awareness on ozone depleting substances. Implementation on a continued basis, at home, of our commitment to the international community has been recognized and acclaimed by all relevant fora. People's participation along with these government endeavors toward saving the ozone layer is, in my opinion, an extremely necessary process. All citizens in their individual capacity may contribute significantly in the protection of the ozone layer by limiting their purchases to CFC-free commodities like refrigerator, aerosol etc., which are available in local markets of Bangladesh. This will substantially help us protect the ozone layer.
Our collective efforts with clear understanding of the importance and significance of the day, I hope, will help reduce global use of such substances, which cause depletion of the ozone layer. Observance of this day would reiterate our success.
I wish all success of the day.
Allah Hafez
Bangladesh Zindabad
Shajahan Siraj



Secretary
Ministry of Environment & Forest
Government of the People's Republic of Bangladesh
Message

16 September is being observed in Bangladesh as the International Ozone Day along with other countries of the world since 1995. The theme of the Day for the current year is "Save Ozone Sky: Protect yourself; Protect the Ozone Layer". This theme highlights the significance of saving the ozone layer from depletion.
The harmful consequences of greenhouse effect on the world environment is being aggravated by the ozone layer depletion. Resultant effect has been gradual imbalance of the environment and the ecosystem. Like all other countries of the world, Bangladesh, too, is being severely affected.
The Government of Bangladesh has signed the Montreal Protocol and has been working toward its fruitful implementation. The Department of Environment has implemented a project with a view to making aerosol sector free of ozone depleting substances (ODS). It is hoped that ODS use in Bangladesh will be reduced by 60% during the current year.
The Department of Environment has also taken up a recovery and recycling project to restrict the use of CFC-12 a major ODS. We are hopeful that the need for import of CFC-12 will soon be reduced. Moreover, requisite legal framework is underway toward ensuring use of non Ozone depleting substances.
Observance of the International Ozone Day will help consolidate and accentuate our efforts toward conserving the Ozone Layer and the overall environment. I wish the day all success.
Sabihuddin Ahmed

আকাশ অক্ষত রাখুন: নিজেকে রক্ষা করুন; রক্ষা করুন ওজোনস্তর



Save O-ur Sky: Protect yourself; Protect the ozone layer

Md.Hedayatul Islam Chowdhury
Director General
Department of Environment

Today, the 16th September, is the International Ozone Day. Since 1995, this day is being observed as declared by United Nations General Assembly. The day is being celebrated all over the world with a view to raising global awareness on ozone layer depletion and its negative impact on the biosphere and also for the control on ODS use. The government and the people of Bangladesh are also observing this significant day in a befitting manner as elsewhere in the world. The theme of the day for this year has been: "Save O-ur Sky; Protect yourself; Protect the ozone layer".
Ozone layer is situated in stratosphere at ten to fifty kilometers above the earth surface. A pungent pale blue poisonous gas called ozone exists in this layer. Ozone is a molecule made up of three oxygen atoms. Though it spreads over quite a large area, the distribution is so thin that if the molecules of ozone were collected together they could have formed a skin around the earth - no thicker than that of an orange.
Importance of the Ozone Layer
The ozone layer protects us from the harmful effects of solar ultraviolet (UV) rays. Higher incidence of UV-B radiation adversely affect the plant and animal life of the earth and quality of air. Depletion of ozone layer is associated with developing of skin cancer, eye damage and suppression of immune system in human body. Crop production and aquatic as well as marine food chain is also affected due to ozone layer depletion. The absorption of UV-B by the ozone layer also creates a source of heat, playing a key role in the temperature regime of the atmosphere.
International Concern for the Protection of Ozone Layer
In 1974, a scientific research pointed out that ozone layer had been in a process of gradual depletion due to the continuous emission of chlorofluorocarbons in the atmosphere. Ozone hole was first detected by British Antarctic Survey Team in 1985. Through the initiative of the United Nations Environment Programme (UNEP), "Vienna Convention for the Protection of Ozone Layer" was adopted in 1985. And the "Montreal Protocol on Substances that Deplete the Ozone Layer" was signed in 1987 for the protection of Ozone layer through control of the use of ozone depleting substances. At the heart of the Montreal Protocol, lies the control measure on the production and consumption of ozone depleting substances e.g., chlorofluorocarbons, halons, carbon tetrachloride, methyl bromide and methyl chloroform within a stipulated timeframe.
Ozone Depleting Substances are largely produced and consumed in developed countries. It has, hence, been agreed that developed nations should be the first to phase-out CFCs, carbon tetrachloride and methyl chloroform by 1st January 1996, halons by 1st January 1994 and hydrochlorofluoro carbons by 1st January 2030. For special needs of countries operating under paragraph 1 of Article 5 (mainly developing countries) with an annual consumption of less than 0.3 kg per capita, Montreal Protocol allows them a ten-year grace period for total phase-out. The Protocol has been amended in London in 1990, Copenhagen in 1992, Vienna in 1995, Montreal in 1997 and Beijing in 1999. Bangladesh is among the 179 Parties to the Protocol.
Promotion of Ozone Layer Protection in Bangladesh
Bangladesh accessed to the Montreal Protocol on 2nd August 1990 and ratified its London, Copenhagen and Montreal Amendments in March 1994, November 2000 and July 2001 respectively. Bangladesh is operating under Paragraph 1 of Article 5 of the Montreal Protocol. According to the Protocol, control measures have to be imposed on the import and consumption of CFCs from 1 July 1999. From that time consumption of CFCs should not exceed the average consumption of CFCs in 1995, 1996 and 1997.
In order to implement the Montreal Protocol and consequent commitment to phase-out the use of ODSs, the Government of Bangladesh undertook a reconnaissance study on import and consumption of ODSs in 1993 and, based on the study, a detailed Country Programme was drawn in 1994. Country Programmes were approved along with two projects. These are: 'Institutional Strengthening for the Phase-out of Ozone Depleting Substances' and 'Conversion to the CFC-free technology for the production of aerosol products at ACI Ltd'.
In pursuance of commitment to phase-out ODSs within the stipulated period, Ozone Cell was constituted within the Department of Environment in 1995 and National Technical Committee on ODS (NTCODS) headed by Secretary, Ministry of Environment and Forest.
The project 'Institutional Strengthening for the Phase-out of Ozone Depleting Substances' became operational on 1 March 1996 and was successfully completed on 28 February 1999. Phase-II of the Project became operational in March 1999 and successfully completed in March 2002.
The following activities were undertaken under 'Institutional Strengthening for the Phase-out of ODS' project from March 1996 till date:
- Data Update Survey on Import and Consumption of ODS for the year 1994, 1995, 1996, 1998, 1999 and 2000.
- Reporting of Data on ODS import and uses to the Montreal Protocol Secretariat.
- Publication of information brochures, both in Bangla and in English.
- Organization of Seminar in 1996, 1997, 2000 and 2001 on the eve of observance of International Ozone Day.
- Considering economic implications of ODS phase-out in Bangladesh with a view to evolving a policy and institutional framework for implementation and monitoring of the Country Programme.
- Formulation of a draft 'ODS Rules' in accordance with the powers conferred by the Environment Conservation Act 1995 to control ODS import and phase-out of its uses.
- Two consultative workshops organized. These workshops were widely participated by relevant policy and decision levels of the Government, the judiciary, members of the legal professions, NGOs, mass-media, various professional bodies related to academic pursuits in the field of ozone depletion and trade associations. The reports have been under active consideration of the government.
- Co-ordination was accomplished with ACI Ltd. for phase-out of ODS in Aerosol sector. A project entitled 'Conversion to the CFC-free Technology at ACI Ltd.' to this end was implemented in 2002 under public-private partnership arrangement.
- Awareness campaign were launched among the importers and users of ODSs about the negative impacts of ozone layer depletion throughout the country.
- Bring out special supplements in various national dailies in both Bangla and in English created awareness among the importers and users of ODSs about the negative impacts of ozone layer depletion throughout the country.
- Awareness campaign were launched, on World Environment Day 1996, 1997, 1998, 1999, 2000, 2001 and 2002 about the importance of ozone layer conservation. Brochures and Posters distributed in the Environmental Fair organized by DOE on these occasions.
- Organization of essay and painting competition on the Eve of International Ozone Day every year.
- Publication and distribution of posters and stickers for mass awareness about the importance of ozone layer.
- Broadcasting of special programme in Bangladesh Betar and Bangladesh Television on the eve of International Ozone Day.
- Two Training workshops were organized on 'Promotion of Ozone Layer Protection in Bangladesh' and 'Implementation of Montreal Protocol in Bangladesh' for motivating various tiers of policy and decision makers and on 'Good Practices in Refrigeration and Air-conditioning Servicing Sectors' and 'Good Service Practices in Refrigeration and Air-conditioning' for technicians and personnel engaged in servicing of various ODS-based equipment.
ODS Consumption during 1995-2000
Surveys were conducted on the ODS consumption patterns in Bangladesh corresponding to the years 1995, 1996, 1997, 1998, 1999 and 2000. The following table represents the findings of the above surveys.

Table - 1: Total consumption of ODSs during 1995, 1996, 1997, 1998, 1999 and 2000

ODS	Consumption in MT (metric tons)					
	1995	1996	1997	1998	1999	2000
CFC-11	82.51	264.16	285.62	298.59	308.15	309.22
CFC-12	178.83	359.24	543.89	483.31	505.44	522.61
HCFC-22	35.17	56.86	70.75	56.39	55.50	46.45
Methyl chloroform	2.14	-	6.50	10.00	10.00	4.55
CCL4	7.15	1.83	2.0	5.00	5.50	4.00
Freons	-	5.07	5.06	-	-	-
CFC-115	-	0.57	0.54	0.50	0.17	0.92
Total	305.8	687.73	914.36	853.79	884.76	887.76
Population (Min.)	119.7	120.7	125.0	126.9	128.8	130.00
Per capita ODS consumption (gms.)	2.55	5.7	7.3	6.7	6.9	6.8

The largest ODS consuming sector in Bangladesh had been the aerosol sector. As per 2000 survey, ACI Ltd., consumed about 60% of total ODS used in the country. For phase out of this important sector, a project entitled 'Conversion to CFC-free Technology in the Manufacture of Aerosol Products' was implemented by the Department of Environment. About 60% of ODS uses is expected to be reduced.
As per survey report of 2000, it is observed that about 2.8 million commercial and domestic refrigerators containing CFCs are in use throughout the country. A developing country like Bangladesh can hardly afford to discard such a large number of refrigerators. To prevent leakage of CFCs to the atmosphere, a project on Recovery and Recycling of Refrigerant undertaken by the Government under MLF assistance. Recycling will reduce demand for new production/import and meet the domestic need. Activity of the project will be started from the current financial year. For the control of unwanted emission of ODS in the refrigeration servicing sector, a project under MLF assistance is now under process of implementation.
Concerned Ministries are in process of approving an 'ODS Rules' in accordance with the powers conferred by the Environment Conservation Act 1995. Environment Conservation Act 1995 are being used to prohibit any new industry from being set up using ODS as raw materials. The Government also considers introducing licensing system on ODS import. Thus, Bangladesh is expected to remain in full compliance of the Montreal Protocol.
The 'Country Programme for Phasing-out of ODS in Bangladesh' was prepared in 1994. Since then significant changes have taken place in the global framework regulating ODS use as well as in the national scenario in Bangladesh. Executive Committee of MLF approved a project in this regard. Government is examining to enact an ODS-rules to control the uses of ODS containing equipment.
Monitoring System on import needs to be strengthened to control ODS import. To combat illegal trade, necessary training will be provided to the customs personnel. Equipment for identifying ODS will also be supplied for the customs department.
ODS Use and Green House Effect
The CFCs, among major ozone depleting substances, are greenhouse gases (GHG). Bangladesh will be the worst sufferer due to climate change and sea level rise caused by these gases. According to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC-2001) about 15 percent of Bangladesh landmass will be inundated due to sea level rise by 10 to 45 cm. In addition to the inundation of coastal areas of Bangladesh, sea-level rise will most likely inundate wetlands and lowlands, accelerate coastal erosion, increase the risk of flood disasters, create drainage and irrigation problems, and increase salt water intrusion into ground water, rivers, agriculture forest lands. This may even damage sea or river port facilities, coastal and river embankments, disrupt mangrove habitat, fisheries etc. All these activities may put pressure on the fragile socio-economic condition of the country.
Conclusion
People's participation along with these Government endeavors toward saving the ozone layer is, in any opinion, an extremely necessary process. All citizens in their individual capacity may contribute significantly in the protection of the ozone layer by limiting their purchases to CFC-free fridge and aerosols, which are available in local markets of Bangladesh. This will substantially help in protecting the ozone layer.



সিএফসিমুক্ত এরোসল ও রেফ্রিজারেটর ব্যবহার কর Use CFC-free Aerosols and Refrigerators

পরিবেশ ও বন মন্ত্রণালয়
Ministry of Environment and Forest
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
Government of the People's Republic of Bangladesh



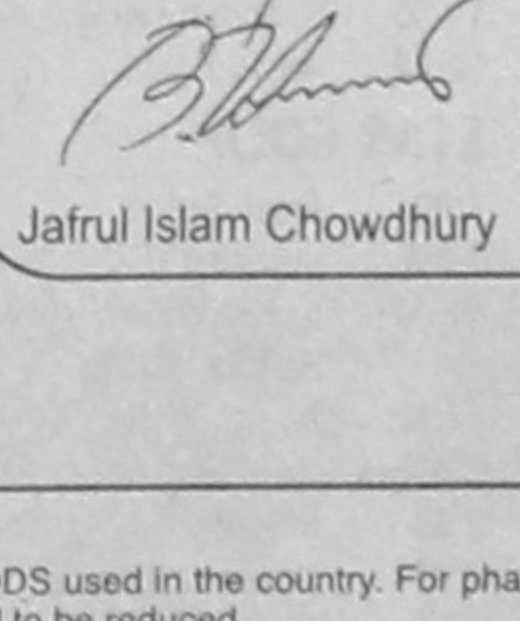
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
বাণী

বিশ্বের অন্যান্য দেশের মত বাংলাদেশেও আন্তর্জাতিক ওজোন দিবস পালিত হচ্ছে যেনে আমি আনন্দিত। দিবসটির এ বছরের প্রতিপাদ্য "আকাশ অক্ষত রাখুন; নিজেকে রক্ষা করুন; রক্ষা করুন ওজোনস্তর" দিবসের অত্যন্ত সমরোপযোগী হয়েছে। বিশ্বব্যাপী এই অস্তিত্ব শ্রোণান পরিবেশ সংরক্ষণ ও দূষণ মুক্ত পৃথিবী গড়তে সহায়ক হবে বলে আমি মনে করি।
আমরা পরিবেশ দূষণ সম্পর্কে অত্যন্ত সচেতন। পরিবেশ সংরক্ষণ ও দূষণ নিয়ন্ত্রণের মাধ্যমে পরিবেশবান্ধব টেকসই উন্নয়নে ইতিমধ্যে পলিথিন ব্যবহার নিষিদ্ধ এবং বায়ু দূষণকারী গাড়ী বন্ধসহ বিভিন্ন যুগান্তকারী পদক্ষেপ আমরা গ্রহণ করেছি। ওজোনস্তর সংরক্ষণের উদ্দেশ্যে মাল্টিপল প্রটোকলসহ পরিবেশ সংরক্ষণ আঞ্চলিক ও আন্তর্জাতিক পর্যায়ে সম্পাদিত চুক্তিসমূহের বাস্তবায়নে আমরা কাজ করছি। আমি ওজোনস্তর রক্ষায় বিশ্বসম্প্রদায়ের প্রচেষ্টার সাথে বাংলাদেশের সংহতি ও একাত্মতা আবারো ঘোষণা করছি।
আমি আন্তর্জাতিক ওজোন দিবসের সকল কর্মসূচির সাফল্য কামনা করি।
আত্মাহ হাফেজ, বাংলাদেশ জিন্দাবাদ
বাংলাদেশ জিয়া



State Minister
Ministry of Environment & Forest
Government of the People's Republic of Bangladesh
Message

The International Ozone Day is being observed throughout the world on 16 September every year since 1995 after the Montreal Protocol was signed in Canada in 1987. In solidarity with the World Community, Bangladesh, too, has been observing the day in a befitting manner.
The United Nations Environment Programme has selected "Save Ozone Sky: Protect yourself; Protect the Ozone Layer" as the theme of the International Ozone Day to be observed this year. Such a theme, in my opinion, bears considerable significance in raising people's awareness toward protecting the ozone layer in the present-day context.
The present Government has been undertaking various steps toward environment-friendly sustainable development through conservation of the environment and pollution control. The Government has entered into agreements, both at regional and international levels, for realization of the above objective. The Montreal Protocol on Substances that Deplete the Ozone Layer has been among such agreements.
The Ministry of Environment and Forest through the Department of Environment has been working toward implementation of the Montreal Protocol in Bangladesh. Banning the import of equipment containing ozone depleting substances and imposition of a licensing system toward control of import of ozone depleting substances have been under active consideration of the government. The Government has also been considering formulating legislative measures toward phasing out the use of such substances in Bangladesh. Under the provisions of the existing Environment Conservation Act, 1995, no new industry utilizing ozone depleting substances as raw materials is allowed to be established. In this way, Bangladesh continues to ensure full implementation of the Montreal Protocol.
I wish the International Ozone Day all success.
Jarul Islam Chowdhury



Secretary
Ministry of Environment & Forest
Government of the People's Republic of Bangladesh
Message

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