


**PROGRAMME
DEVELOPMENT**

Chapter 6



REVIEW AND FORMULATION OF REGULATIONS



The Department of Environment continued to give emphasis to the development of legislations in order to reflect the Government's policies and to provide the framework of administrative mandates and management for pollution control and environmental protection. Although most of the resources in this area were directed towards the drafting and preparation of a Bill to amend the Environmental Quality Act, 1974 (EQA), the Department managed to examine and strengthened legislative requirements pertaining to specific environmental issues such as inland water pollution resulting from the use of detergents, marine water pollution due to indiscriminate disposal of tanker sludges and air pollution contributed by both the petrol and diesel-powered automotive sources. This was done through consultations with the relevant industrial groups and research institutes, and finally with the Environmental Quality Council. The following documents were subsequently forwarded to the Attorney-General's Chambers for vetting:

- (i) Environmental Quality (Control of Emission from Diesel Engine) Regulations;
- (ii) Environmental Quality (Prohibition on the Use of Controlled Substances in Soap, Synthetic Detergent and Other Cleaning Agents) Order; and
- (iii) Environmental Quality (Scheduled Waste) (Tanker Desludging) Regulations.

In relation to inland water pollution due to the use of branched alkyl benzene sulphonates (BAS) in soaps and detergents, the Department consulted all the relevant industrial groups early in the year on their use of raw materials, the availability of appropriate technology and its capability to use other alternatives. The Environmental Quality (Prohibition on the Use of Controlled Substances in Soap, Synthetic Detergent and Other Cleaning Agents) Order was brought into force on April 15, 1995. The prohibition of branched alkyl benzene sulphonates (BAS) was based on the following factors:

- (i) it is non-biodegradable and is proven to cause pollution in rivers and waterways and

a threat to aquatic life;

- (ii) the soap and detergent industry has the capability and technology to switch to BAS substitutes; and
- (iii) the availability of oleochemicals in Malaysia as a substitute for BAS.

On EQA amendments, consultations with other concerned Ministries and State Governments were held before the draft was sent to the Attorney-General's Chambers. The draft Bill was finalised in December. The proposed Bill included provisions to control emerging environmental issues such as transboundary movement of hazardous wastes; environmental management tools; environmental auditing; environmental labelling; compulsory recycling; deposit and rebate scheme; compensation for pollution violation; and on strengthening enforcement and stiffer penalties.

ENVIRONMENTAL GUIDELINES

Environmental guidelines are developed to enhance and to support the implementation of the EQA, 1974 and its regulations and also to facilitate industries, developers and planners to incorporate the environmental dimension into their projects.

As of December 1995, DOE has developed, reviewed and updated 42 sets of environmental guidelines to facilitate compliance with statutory environmental control. These guidelines have taken into account views of various agencies, the private sector and the general public in order to ensure its applicability.

In 1995, the following guidelines were revised and published:

- (a) EIA Specific Guidelines on groundwater and surface water supply, power generation and transmission lines, drainage and irrigation, fishing harbour and land-based aquaculture, dam and reservoir, mines and quarries, hill station resorts, tourist facilities in national parks, tourist facilities on island in surrounding waters gazetted as marine parks, industries, municipal waste treatment and disposal, and toxic and hazardous waste treatment and disposal.
- (b) Guidelines on the Disposal of Asbestos Wastes; and



Participants at the 2nd Meeting of the Malaysia-Denmark-Sweden Initiatives on Environmentally Sound Management of Toxic Chemicals, on January 19-20, 1995 in Kuala Lumpur

(c) Guidelines for the Prevention and Control of Soil Erosion and Siltation.

The review of the 1978 Guidelines for the Prevention and Control of Soil Erosion and Siltation was initiated in November 1995 and is expected to be completed by mid-1996, taking into consideration the state-of-the-art practices for this purpose.

Guidelines on the Management and Disposal of Wastes in Upstream Petroleum Industries and Guidelines for the Management and Disposal of Wastes in Downstream Petroleum Industries, were also printed for sale to the public.

To complement the revised Siting and Zoning of Industries Guidelines (1994), a cadastral-based database map for the Klang Valley was developed using the ARC/INFO GIS computer software.

MANAGEMENT OF CHEMICALS

The Chemical Unit of the Department of Environment (DOE) is responsible for matters pertaining to the environmentally sound

management of toxic and hazardous chemicals such as the London Guidelines for the Exchange of Information on Chemicals in International Trade, Prior Informed Consent (PIC), International Register of Potentially Toxic Chemicals (IRPTC) and International Programme on Chemical Safety (IPCS). To complement the IRPTC database, the Department has also procured a comprehensive chemical software database on CD-ROM.

In line with the national stand strongly advocated at the Rio Summit on the need to promote the sound management of chemicals in international trade, the Department has actively played a key role in continuing its effort towards it. It was also one of the prime movers in promoting international agreement to restrict the export of domestically banned or severely restricted chemicals to other developing countries.

In the international arena, the DOE also contributed significant input for various meetings and played a prominent role in the Malaysia-Denmark-Sweden Initiatives on Environmentally Sound Management of Toxic Chemicals. The Department organised the Second Meeting of the Malaysia-Denmark-Sweden Initiatives on Environmentally Sound Management of Hazardous Chemicals on



January 19-20, 1995 in Kuala Lumpur.

These efforts culminated in UNEP Governing Council's agreement in May 1995 to give the mandate to the Executive Director of UNEP to convene an Intergovernmental Negotiating Committee to develop an international legally binding instrument for the application of the Prior Informed Consent (PIC) procedure for certain hazardous chemicals in international trade. The Executive Director was also invited to convene a Government-designated group of experts to consider what further measures were needed to reduce the risk from a number of hazardous chemicals.

IMPLEMENTATION OF THE MONTREAL PROTOCOL

The Montreal Protocol Unit at the Department of Environment (DOE) was established with financial assistance from the Multilateral Fund of the Montreal Protocol. It serves as the national focal point for co-ordinating, monitoring, implementing and as a one-stop agency for all Montreal Protocol activities pertaining to ozone depleting substances (ODS) phase-out investment projects. This Unit is also entrusted to promote awareness among industries on ODS's adverse effects and to encourage actions to reducing ODS consumption in the country.

In 1995, the following public awareness activities, publications on phase-out projects and proposed control measures on ODS were carried out to facilitate the implementation of the ODS Master Action Plan formulated in the National Country Programme:

Publications and Awareness Activities

- i) Hands-on Training of Mobile Air Conditioning (MAC) Recycling Workshop: 285 MAC competent technicians from selected workshops,

Government training centres and car air-conditioner manufacturers were trained to handle the MAC recycling machines in 4 training sessions on May 12, June 27, July 24 and August 29, 1995.

- ii) National Aerosol Seminar and Safety Audit (Phase 1), May 25, 1995, jointly organised with UNDP. The seminar was attended by 30 small and medium aerosol industries.
- iii) National ODS Seminar, May 29, 1995, jointly organised with FMM. The seminar was attended by 70 participants and the topics discussed were role of Government, current development on ODS phase-out, alternative technology and retrofitting technology.
- iv) Talk on Hydrocarbon Technology, June 26, 1995. A talk on Greenfreeze Technology by a representative of Greenpeace was organised by DOE and attended by 15 key industries from the refrigerant sector.
- v) International Ozone Day Celebration, September 11-16, 1995. Activities include the distribution of ODS publications, pamphlets and posters to the public, schools, industries and universities. A one-week quiz on Ozone was jointly organised by Radio 1 (RTM) and Matsushita Electric Co. (M) Bhd (MELCOM).



Hands-on Training of Mobile Air Conditioning (MAC) CFC Recycling Machines on May 12, 1995, Kuala Lumpur

vi) Talk on Methyl Bromide Technology, October 13, 1995. A talk on methyl bromide alternative technology by two experts from UNEP's Methyl Bromide Options Committee at the DOE was attended by 15 key users of methyl bromide.

vii) National Aerosol Workshop (Phase II), November 7, 1995, jointly organised with UNDP and was attended by 35 aerosol industries and government agencies.

viii) Malaysia Ozone Layer Protection Award, December 19, 1995. Jointly organised with DuPont Far East Inc (M). This second award was sponsored by DuPont and were given to selected organisations, industries and individuals in recognition of their efforts to protect the ozone layer. Thirteen recipients received a commemorative plaque from the Honourable Minister of Science, Technology and the Environment.

ix) Seminar on Refrigeration and Air Conditioning, December 19, 1995. The seminar was attended by 85 participants to discuss the recent development of the accelerated phase-out programme, the role of Government and industries and technology options.

The following ODS publications were produced in 1995:

- Protect the Ozone Layer - an awareness campaign carried out jointly with Autochem
- Malaysia Country Programme Update 1995
- Project Management Office for the Montreal Protocol (Montreal Protocol Unit)
- ODS Directory
- Brochure on MAC vs. Ozone Layer
- Montreal Protocol Multilateral Fund Project: Scheme to Reduce the Use of CFC from MAC in Vehicle
- Guidelines for Prequalifying and Selection Criteria for Acceptable Alternative of ODS in Malaysia
- Poster to commemorate the International Ozone Day
- *Pengurusan Penggunaan dan Perolehan Kembali Bahan CFC Dalam Penyaman Udara Kenderaan : Buku Panduan Mekanik* (in three languages)
- Poster on "Penipisan Ozon" (Ozone Depletion) (joint campaign with WWF)

- Malaysia Ozone Layer Protection Awards, 1995
- ODS Calendar 1996

International Meetings

Malaysian officials were invited to various meetings, workshops and conferences to share its success and experience with other developing countries and to provide technical advice and support:

- 4th Advisory Meeting of UNEP 1995 Work Programme, January 19-20, 1995, Paris



Second Malaysia Ozone Layer Protection Award (MOLPA) Ceremony on December 19, 1995



- Preparatory Meeting of ODS Network in SEAP, January 30-31, 1995, Bangkok
- Asian Regional Workshop on ODS Management in SMIs, February 7-10, 1995, New Delhi
- ASEAN Workshop on Methyl Chloroform Management, May 22-24, 1995, Singapore
- UNEP Advisory Experts Meeting, April 4-5, 1995, Cairne
- 11th Meeting of the OEWG to the Montreal Protocol, May 8-12, 1995, Nairobi
- Regional Workshop on Aerosol Conversion, May 30 - June 3, 1995, Jakarta
- Meeting on CFC Regulations, June 20-22, 1995, Melbourne
- 1995 Meeting on ODS / NETWORK SEAP Officers, August 14-19, 1995, Manila
- Bureau Meeting to the Montreal Protocol, August 25, 1995, Geneva
- 12th Meeting of the OEWG to the Montreal Protocol, August 26 - September 3, 1995, Geneva
- International CFC and Halon Conference, October 23-24, 1995, Washington
- Regional Workshop on Methyl Bromide, October 31 - November 2, 1995, Bangkok

Table 6.1 Malaysia: Projects and Activities Approved under the Multilateral Fund, 1995

Sector	No. of Projects	Cost (USD)
Refrigeration Air Conditioning (MAC/Commercial/Refrigerator)	12	11,326,725
Solvent	10	2,196,133
Foam	31	7,947,170
Aerosol	6	1,134,554
Halon	2	922,932
Several Activities	17	1,329,728
Agriculture (Methyl Bromide)	1	5,000
TOTAL	79	24,862,242
Year	Expected No. of Activities/Projects to be Completed	Expected ODS to be Phased Out (MT)
1993	5	150
1994	8	100
1995	21	1,448
1996	25	1,714.9
1997	16	1,093.4
1998	5	121.4
TOTAL	80	4,627.7
	No. of Activities/Projects Completed	ODS Phased Out (MT)
TOTAL	12 + (18) = 30	1,583
Amount Disbursed = USD 6.3 Million		

- Preparatory and 7th Meeting of the Parties to the Montreal Protocol, November 27 - December 7, 1995, Vienna
- Regional Training Workshop on CFC 113 and Methyl Chloroform Substitutes and Alternative Cleaning Technology, December 13-15, 1995, Singapore



Seventh Meeting of the Parties to the Montreal Protocol on December 5-7, 1995, Vienna

Global ODS Phase-out Projects

Out of 60 countries which received assistance from the Multilateral Fund (MF), Malaysia is leading the list in terms of number of projects completed and phase-out of ODS. According to a report by UNDP, Malaysia ranks highest in CFC project completion score, and its once CFC-dependent industries are thriving on new technologies and their competitive edge.

Till December 31, 1995, 79 projects and activities amounting to US\$24.8 million were approved by the MF for Malaysia (see Table 6.1). Out of these 63 phase-out projects, 46 projects were implemented by UNDP, 16 by the World Bank, 2 bilateral projects with USEPA and one bilateral project with the Government of France. Eighteen projects were completed to phase out more than 1,500 metric tonnes of CFCs.

Malaysia also successfully completed the MAC recycling project of which 200 units of recycling machines were distributed to selected workshops, car air-conditioner manufacturers and government training centres. About 285 competent technicians were trained and would be used as core trainers in future training programmes. Through the implementation of this project, it is expected that 350 metric tonnes of CFC 12 will be recovered yearly from MAC.

Under the national aerosol seminars which were organised in 1995, two packages of ODS phase-out projects from 30 SMIs would be submitted for Multilateral Fund support.

Malaysia also signed the Grant Umbrella Agreement on ODS phase-out projects with the World Bank in October 1995. The project would be carried over till 1999 with a US\$20 million allocation from the MF.

Control Measures

The following control measures were drafted for consideration of the Environmental Quality Council in 1996 :

- Environmental Quality (Refrigerant Management) Order
- Environmental Quality (Halon Management) Order

Parties Meeting

Malaysia led by the Honourable Minister of Science, Technology and the Environment participated at the Seventh Meeting of the Parties to the Montreal Protocol in Vienna on December 5-7, 1995. The major areas covered by the Meeting were:

- Adjustment and Amendment of HCFCs and Methyl Bromide Basic Domestic Needs
- Report on the Financial Mechanism
- Review under paragraph 8 Article 5
- Financial report and budget
- The new phase-out schedule of the Montreal Protocol is as shown in Table 6.2.

United Nations Environment Ozone Award

On the occasion of the Tenth Anniversary of the Vienna Convention for the Protection of the





Global Ozone Award bestowed on Ir. Tan Meng Leng, Director General of Environment on December 4, 1995

Ozone Layer on December 4, 1995, UNEP bestowed the Global Ozone Award to Ir. Tan Meng Leng, the Director General of Environment in recognition of his outstanding

contribution towards the success of the ozone layer protection. He is the sole Asian recipient from among the 16 scientists, technologists and policy makers honoured globally.

Table 6.2 New Schedule to Phase Out ODS

Control Substances	Developed Countries	Developing Countries
Annex A		
CFC	1996	2010
Halon	1994	2010
Annex B		
MTC (III TCA)	1996	2010
CTC	1996	2010
Annex C		
HCFCs # Cap	Reduced 3.1% to 2.8%	-
# Freeze	1996	2016 (2015 as baseline)
# Phase-out	2020 (allowed to produce 0.5% for servicing up to year 2030)	2040
# (Review)	-	2000
Annex E		
MB # Freeze (Soil Fumigation only)	25% (2001) 50% (2005)	2002 (1995 - 1998 average baseline)
# Phase-out	2010	-
# (Review)	-	1997

ENVIRONMENTAL DEVELOPMENT PROGRAMMES AND STUDIES

Environmental Studies

In 1995, the Department continued to support several study oriented projects. A total of 5 projects were implemented of which 3 were carried over from 1994.

Development of Groundwater Quality Monitoring Network

The draft final report was finalised. Regional and local monitoring network was adopted to enable the monitoring programme be

conducted systematically. The regional monitoring network covering the whole of Peninsular Malaysia identified a total of 115 monitoring sites. The distribution of the monitoring sites identified are as tabulated in Table 6.3. Due to the importance of groundwater in Kota Bharu, a total of 40 sites and 84 monitoring wells were recommended.

Socio-Economic Study of Coastal Areas Threatened by Oil Spills

The draft final report was finalised. An inventory of the coastal resources at risk is now available to assist authorities in the planning of oil spill emergency response plan to safeguard the physico-cultural and economic interests of the coastal areas.

The study would also give guidance to



Table 6.3 Regional Monitoring Network for Peninsular Malaysia : Distribution of Proposed Groundwater Well Sites

State	Agriculture	Urban/Suburban	Industry	Landfill		Village	Golf Course	Saltwater Intrusion	Others ^b	Total
				SW	T/R					
Kelantan	7	8	1	2	-	8	-	-	-	26
Terengganu	7	6	2	1	-	3	-	-	-	19
Pahang	5	7	-	1	-	4	-	3	-	20
Perak	7	1	1 ^a	3	2	-	-	-	-	14
Selangor/Federal Territory of Kuala Lumpur	3	-	2	4	-	-	3	-	3	15
Negri Sembilan	2	-	1	1	1	-	-	-	-	5
Johor	-	2	1	2	-	-	-	-	-	5
Perlis	3	2	-	-	-	-	1	-	-	6
Melaka	1	-	1	-	-	-	-	-	-	2
Kedah	2	-	-	-	-	-	-	-	1	3
Total	37	26	9	14	3	15	4	3	4	115

^a Fuel Storage Tank Area
SW-Solid Waste; T - Toxic; R - Radioactive

estimate and assess damages and compensation claimable during an oil spill incidence.

Scheme on the Assessment and Registration of Chemicals

A database of existing chemicals imported, manufactured and used in the country, A Malaysian National Inventory of Chemicals was established under the study. At the end of the study, 3,100 chemicals were recorded. The study also reviewed the various chemical assessment schemes implemented by different agencies. It recommended that in general the assessment should be made based on the risk of chemicals according to the following categories:

- Fire and Explosion Hazard
- Reaction Chemical Hazard
- Toxic Hazards
- General Environment

The assessment of the risk involved would be done based on the specific information supplied by the relevant parties.

Review of Air Emission Standards

This study was initiated in early 1995 but could only commence in November 1995 after approval was obtained from the Treasury on the appointment of consultants and the finalisation of the scope and cost for consultancy services. It was scheduled to be completed in October 1996. The purpose of the study was to review the emission standards stipulated under the Environmental Quality (Clean Air) Regulations, 1978.

Study on Regulations for Noise Pollution Control

The study addressed the current lack of well-defined environmental noise and vibration emission limits, as well as noise and vibration assessment and measurement procedures. It included a pilot project for the implementation of the noise contour concept for noise zone planning and abatement at a selected town council. The study commenced in late 1995 and the Institute of Noise and Vibration of Universiti Teknologi Malaysia (UTM) was appointed to implement the study.

Follow-up Actions

As a follow-up to previous studies, the Department disseminated the findings and recommendations to the relevant agencies to be used as a guide, for implementation or for adoption. Follow-up meetings were also conducted to discuss the findings of the studies to identify options for implementation by other government agencies or to be taken up by the private sector. One such example was the problem of treatment and disposal of hazardous photographic wastes, which did not receive a forthcoming response from the photographic and related chemical industries.

INVENTORY OF POLLUTION SOURCES

The collection and gathering of information on the sources of pollution is a continuing exercise to update the database for air and water pollution sources. Detailed source investigations were carried out through questionnaires sent out to the industries and various related agencies.

Air Pollution Sources

As in the previous years, air pollution emission sources were divided into three major categories namely, stationary, mobile and solid waste disposal sources, as summarised in Figures 6.1 to 6.3, the latter indicating load distribution. Motor vehicles which constituted the mobile sources of air pollution were the most significant in number totalling 7,368,329, an increase of 17 per cent compared to the previous year. The highest distribution of significant mobile sources was in the Federal Territory of Kuala Lumpur, followed by Selangor and Johor, and the lowest in Perlis as shown in Figure 6.1. The distribution of significant stationary air pollution sources is shown in Figure 6.2 where Selangor was found to have the highest number of sources followed by Sarawak and Johor. Perlis again registered the lowest number of sources. The number of open burning practices at solid waste disposal sites has increased from 16 in 1994 to 20 in 1995, with most cases taking place in Selangor. This shows that the highest air pollution concentration loads were in the Klang Valley area.



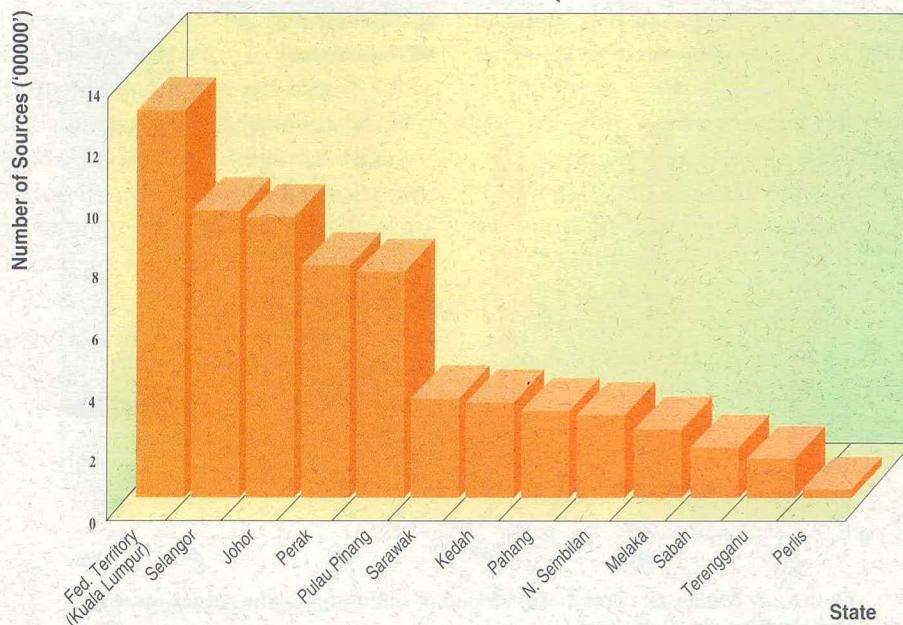


Figure 6.1 Malaysia: Number of Significant Mobile Sources by State, 1995

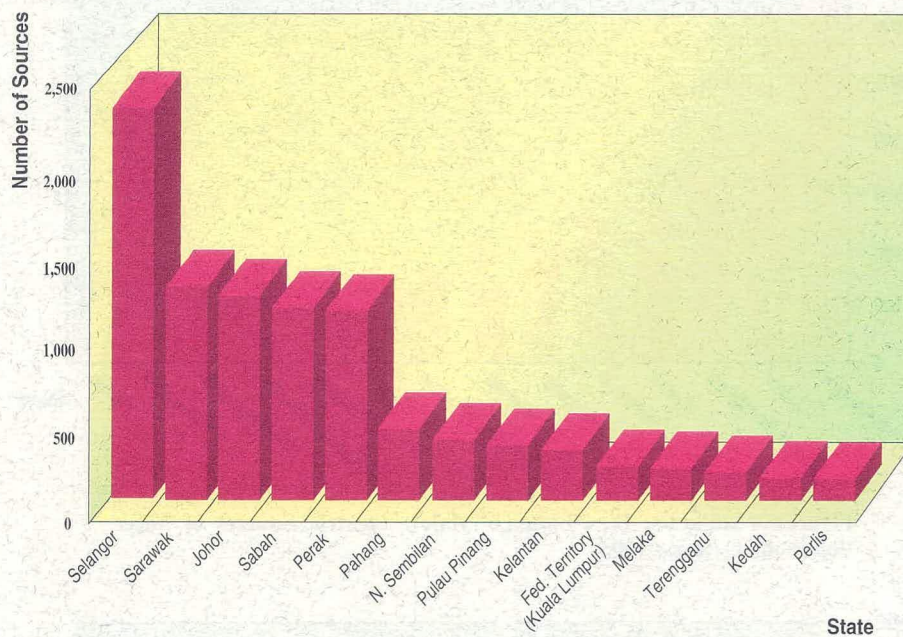


Figure 6.2 Malaysia: Number of Significant Stationary Air Pollution Sources by State, 1995

Air Pollution Load

Estimates on pollution load from fuel combustion which were generated by various industrial activities and mobile sources in 1995 are shown in Figure 6.3. In terms of distribution, 84.3 per cent of emission were from mobile sources, 5.1 per cent from power stations, 4.2 per cent from industrial fuel, 3.8 per cent from open burning practices at disposal

sites, 2.3 per cent from industrial production processes and the lowest at 0.3 per cent from domestic fuel.

Water Pollution Sources

A total of 3,141 industries were identified as significant water pollution sources in Malaysia in 1995. Of this total number of sources, the



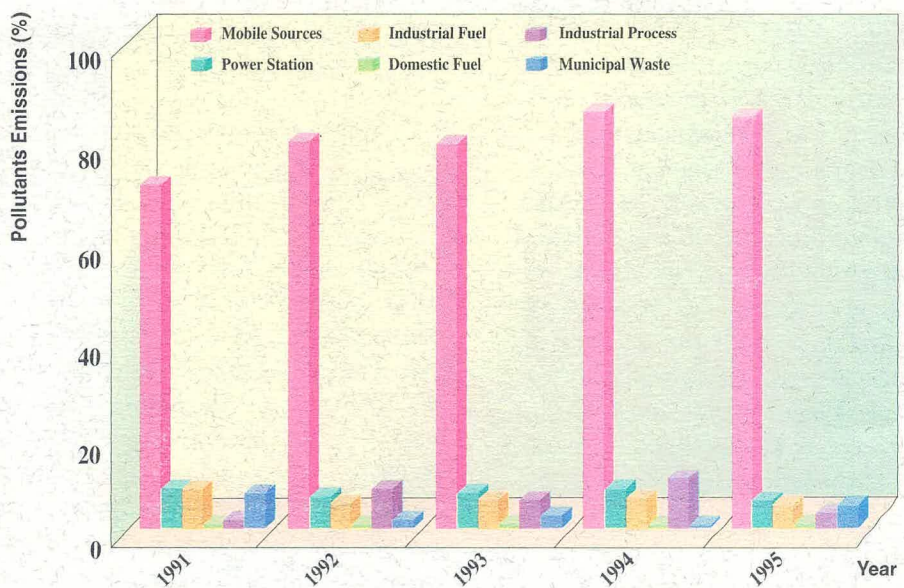


Figure 6.3 Malaysia: Trend of Emission of Pollutants to the Atmosphere by Various Sources, 1991-1995

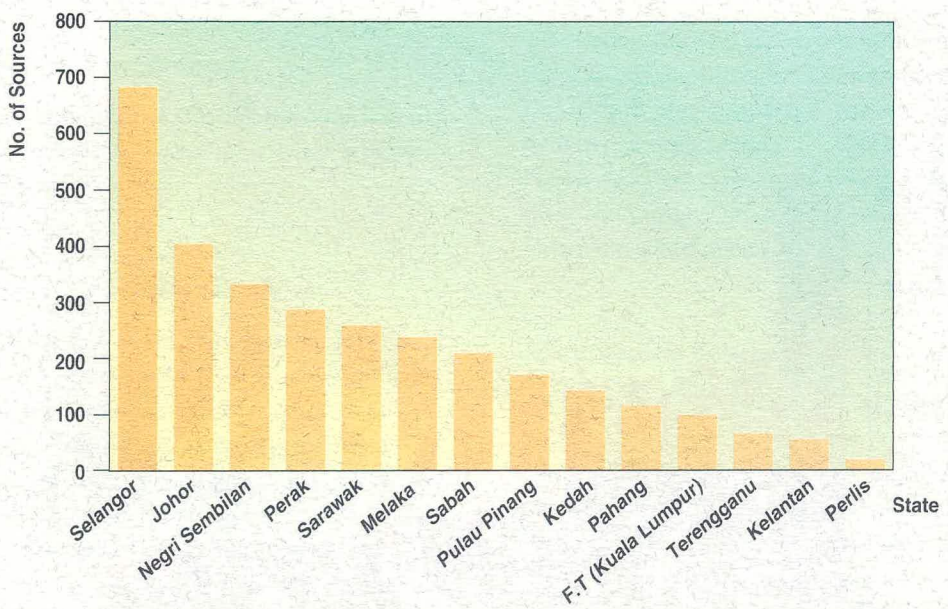


Figure 6.4 Malaysia: Distribution of Major Industrial Sources of Water Pollution, by State, 1995

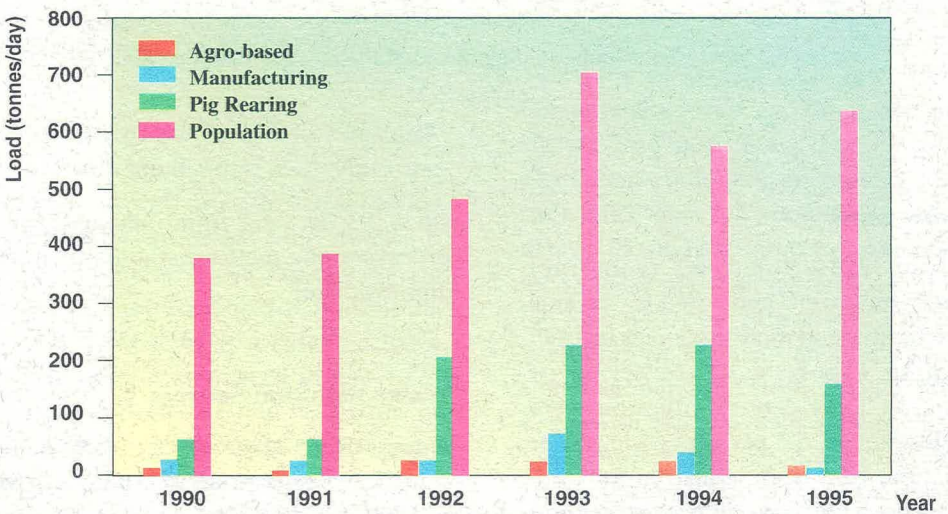


Figure 6.5 Malaysia: Organic Load Discharged according to Sector, 1990-1995

food and beverage industries led with 971 sources or 30.9% contribution followed by the chemical industries with 424 sources (13.5% contribution) and the textile industries with 327 sources (10.4% contribution). Figure 6.4 shows the distribution of significant water pollution sources by state. Selangor had the highest

number of industrial sources at 681, followed by Johor with 405, Negri Sembilan with 335 and Perak with 293.

Figure 6.5 reinforces the findings of the Department's monitoring which had pinpointed sewage and animal wastes as the largest contributors of organic pollution load.



**ENVIRONMENTAL
EDUCATION AND
INFORMATION**

Chapter **7**



PUBLIC AWARENESS PROGRAMMES AND ACTIVITIES

Public Education and Participation

1995 could be considered as the most interesting and eventful year for public awareness and environmental education.

The year kicked off successfully with the launching of ASEAN Environment Year (AEY) 1995 by the Honourable Datuk Law Hieng Ding, Minister of Science, Technology and the Environment. AEY '95 was adopted by ASEAN Ministers during the 6th ASEAN Ministerial Meeting on the Environment (AMME) in April 1994 in Bandar Sri Begawan, Brunei Darussalam. The theme "Green and Clean" was chosen to reflect the true spirit of ASEAN and its commitment in the protection of the environment in the region. This was also in line with the AEY objectives, namely:

- (a) to highlight ASEAN environmental issues and co-operative programmes in order to stimulate awareness on these

- (b) to broaden the participatory process in the area of the environment in ASEAN
- (c) to stimulate regional activities in the environment area

As an active member of ASEAN, Malaysia initiated a number of programmes to fulfill the above mentioned objectives. A total of 101 activities were organised which included amongst others, exhibitions (8), environmental campaigns (22), seminars/ workshops/ lectures (33), environmentally themed competitions (12), radio programmes (2), environmental awareness camps (11), award presentations (5), *gotong royong* (3) and environmental dialogues (2). An aerogramme to commemorate AEY was specially designed for distribution at all post office outlets.

One of the major achievements in organising the celebration was the tremendous contribution and support by the private sector and corporate bodies. Their interest and willingness to come forward was an indication that the private sector recognised their social obligations in line with the Malaysia Incorporated concept.



Launching of Malaysia Environment Week by the Right Honourable Chief Minister of Sabah on October 21, 1995, Kota Kinabalu, Sabah

Malaysia Environment Week (MEW)

The national level MEW was launched in Kota Kinabalu, Sabah by the Chief Minister of Sabah, the Right Honourable Datuk Mohd. Salleh Tun Mohd Said Keruak on October 21, 1995. "Our Environment, A Heritage, Together We Conserve" was chosen as the theme which was in line with the theme for the 1995 World Environment Day, i.e. "We the Peoples, United for the Global Environment". Representatives of diplomatic missions of Commonwealth and ASEAN countries such as Brunei Darussalam, South Africa, Nigeria and the Republic of Philippines attended the launching ceremony.

The MEW was also celebrated at the state level. The DOE State Offices conducted various activities and programmes with the assistance and support of the State Government and other agencies. Table 7.1 summarises the list of events organised at the State levels.

Table 7.1 Malaysia: Activities Organised in Conjunction with MEW '95 at State Level

Date	Venue	Activities
KEDAH		
Sept. 11, 1995	MADA Hall, Alor Setar	Seminar on Science, Technology and Environment
Sept. 17, 1995	Gunung Jerai	Clean-up the World Campaign
Sept. 18-23, 1995	Universiti Utara Malaysia, Sintok	Inter-Varsity Debate
Oct. 5, 1995	Baling Secondary School Hall, Baling	Science, Technology and Environment Quiz
Oct. 6, 1995	Universiti Utara Malaysia, Sintok	Seminar on Environmental Management
Oct. 7-8, 1995	Alor Setar	Launching of Science, Technology and the Environment Exhibition
PULAU PINANG		
Sept. 17, 1995	Batu Maung Beach Stretch	Clean-up the World Campaign
Sept. 18, 1995	Beaches along Rasa Sayang Hotel, Palm Beach Resort, Golden Sands Hotel, Long Pine Hotel, Merit Rasa Sayang, Reef Apartment and Feringgi Beach Resort	Beach Clean-up Programme
Sept. 23, 1995	Chin Farm	Clean-up of Chin Farm
PERAK		
May 16, 1995	Ipoh	"Works Clean Environment" Campaign by Associated Pan Malaysia Cement Sdn. Bhd. - Kanthan Works (including Clean-up & Lectures by DOE Perak)
KELANTAN		
Sept. 14-15, 1995	Gunung Stong	Clean-up the World Campaign
Sept. 28, 1995	Kota Bharu	Cleanliness and Beautification Programme of Cahaya Bulan Beach
Oct. 19, 1995	Pengkalan Chepa	Visit to Rohm Wako Factory (Kelantan) Sdn. Bhd. by students
Oct. 21-27, 1995	Kota Bharu	Radio Programme on "Department of Environment and You" with the co-operation of RTM
TERENGGANU		
April 8, 1995 (Apr. - Oct. 1995)	Hotel Primula, Kuala Terengganu	Launching of Environmental Awareness Project (PRIAS)
PAHANG		
Sept. 17, 1995	Sungai Pandan Waterfall	Clean-up the World Campaign
SELANGOR		
Sept. 1, 1995 & Dec. 1, 1995	Petaling Jaya	Cleanliness Campaign by Matsushita Factory
Sept. 17, 1995	Klang Gates Dam Recreation Area, Taman Melawati	Launching of "Clean-up the World Campaign"





Date	Venue	Activities
Sept. 17, 1995 Sept. 19-20, 1995 Sept. 19-20, 1995	Sg. Penchala, Petaling Jaya Petaling Jaya SIRIM, Shah Alam	Clean-up the World Campaign ISO 14000 Seminar Seminar: Understanding Environmental Management System under ISO 14000
Sept. 1995	Henkel Oleochemicals	Re-formation of Waste Management Group
Sept. - Oct., 1995	Henkel Oleochemicals	Environmental Awareness Enhancement Competition
Sept. - Oct., 1995	Henkel Oleochemicals	Highlights of Environmental Issues in In-house Bulletin
Sept. - Oct., 1995	Henkel Oleochemicals	Implementation of 3 Rs (Reduce, Reuse and Recycle)
Oct. 9-13, 1995	Hyatt Regency Saujana, Subang	International Conference on Wetlands & Development
Oct. 28, 1995	Kancil Forest Recreational Park, Rawang	Clean-up of Kancil Forest Recreational Park
Nov. 1995 Nov. 1995	Carey Island, Klang Kg. Paya Jaras	Enviro-Camp - Plantation Ecosystem Enviro-Camp - Organic Farming Ecosystem
Nov. 1995	Universiti of Malaya Field Study Centre, Ulu Gombak	Enviro-Camp - River Ecosystem
KUALA LUMPUR		
Mar. 14, 1995 (Mar. - Dec., 1995) June 1-4, 1995	Kuala Lumpur Sg. Wang Plaza	Launching of Environmental Quiz 1st Malaysia Annual Ecology Tourism Exhibition '95
June 4, 1995 Aug. 23, 1995	Istana Hotel Head Office of CTOC, Wisma Inai	Green Campaign Launching of Carigali-Triton Operating Company Sdn. Bhd. (CTOC) Accident Reporting Procedure
Aug. 23, 1995 (Aug-Nov., 1995) Aug. 23-26, 1995	Forest Research Institute of Malaysia (FRIM), Kepong Forest Research Institute of Malaysia (FRIM), Kepong	Launching of Enviro-Camp Enviro-Camp-Forest Ecosystem
Aug.-Dec., 1995 Sept. 9, 1995	Kuala Lumpur Kuala Lumpur	Marine Conservation Programme Recycling of Aluminium Cans (Can-Na-Thon Programme) by Stamford College
Sept. 17, 1995	National Zoo	Presentation of Sponsorship for the upkeep of two Sumatran Tigers by Maybank and six Fish Owls by Mayban Finance Bhd to the National Zoo
Sept. 19, 1995 Sept. 21, 1995	MICCI Conference Room, Wisma Damansara Kuala Lumpur	Briefing on Environmental Management Seminar: Update on Environmental Quality Act, 1974 (by Federation of Malaysian Manufacturers)
Oct. 10-12, 1995	Pan Pacific Hotel, Kuala Lumpur	National Review of Environmental Quality Management in Malaysia: Towards the Next Two Decades



Date	Venue	Activities
Oct. 17-20, 1995	Hilton Hotel, Kuala Lumpur	International Conference: Towards Corporate Environmental Excellence -Challenges & Opportunities in Asia-Pacific
Oct. 17-20, 1995	Hilton Hotel, Kuala Lumpur	1st Global 500 Forum International Conference Exhibition
Oct. 18-19, 1995	The Bankers Club, Amoda Penthouse	Public Course on Environmental Monitoring
Oct. 25-27, 1995	APDC Building	Seminar on "Media and the Environment: Effective Waste Management through Reduction, Recycling and Re-use"
Oct. 27-28, 1995	Kuala Lumpur	Workshop on Wastewater Microbiology
Oct. 1995	Kuala Lumpur	Briefing on ISO 14000 to MICCI member companies
Oct. 1995	Kuala Lumpur	Launching of Consumers Club Monthly Action Plan
Oct. 1995	Kuala Lumpur	Factory visit to Genting Sanyen Paper Recycling Factory
Oct. 1995	Kuala Lumpur	Environmental Audit of Bukit Raja Plant (by Unilever)
Nov. 7-21, 1995	Balai Seni Maybank	Art Exhibition entitled "Wings in Flight '95"
Nov. 1995	Kuala Lumpur	Green Consumerism
Dec. 21, 1995	Grand Continental Hotel, Kuala Lumpur	Second Malaysia Ozone Layer Protection Award and National ODS Seminar
Dec. 21, 1995	Grand Continental Hotel, Kuala Lumpur	Refrigerant Air Conditioning (RAC) and Retrofitting Seminar
Dec. 1995	Kuala Lumpur	Enviro-Camp - Urban Ecosystem
Dec. 1995	Kuala Lumpur	Seminar: Environment and the Rural Women
MELAKA		
Aug.-Sept., 1995	Melaka	Environmental Safety & Health Award
Oct. 21, 1995	Melaka	Launching of Environment Week, Melaka State Level
Oct. 28-30,1995	Melaka	Enviro-Camp
NEGRI SEMBILAN		
Sept. 23, 1995	9th Mile, Jalan Teluk Kemang	ESSO Beach Clean-up Day
Sept. 1995	Port Dickson	ESSO-UPM Enviro-Camp
Nov. 10-12, 1995	Port Dickson	Enviro-Camp - Marine Ecosystem



Date	Venue	Activities
JOHOR		
Oct. - Nov., 1995	Johor Bahru	Beautiful and Clean Landscape Competition
Nov. 1995	Johor Bahru	Essay Writing and Art Competition on Environment by school children
Nov. 1995	Johor Bahru	Lecture Competition on Environment by school children
Dec. 1995	Johor Bahru	Environment Week Celebration 1995, Johor State Level
SARAWAK		
Sept. 16, 1995	Peyatim House, Petra Jaya, Kuching	Trees and shrubs planting
Sept. 17, 1995	Kg. Sikog, Kuching	Clean-up Campaign by Kuching Rural District Council
Oct. 15, 1995	Matang Jaya, Kuching	Clean-up Campaign by Kuching Rural District Council
Oct. 23, 1995	Lutong	Exhibition on Health, Safety and Environment
Nov. 19, 1995	3rd Mile, Bazaar	Clean-up Campaign by Kuching Rural District Council
SABAH		
Sept. 17, 1995	Tanjung Aru	Clean-up the World Campaign
Sept. 17, 1995	Prince Philip Park	Clean-up the World Campaign
Oct. 14, 1995	Bahang National Secondary School, Penampang	Launching of Tree Planting Project
Oct. 14, 1995	Kadazan-Dusun Cultural Association (KDCA) Building	Tree Planting Project
Oct. 14, 1995	Bahang National Primary School, Penampang	Tree Planting Project
Oct. 16, 1995	Tanjung Aru, Kota Kinabalu	Clean-up Programme
Oct. 18, 1995	Nasional College, Kota Kinabalu	Tree Planting Project
Oct. 20, 1995	Inanam National Secondary School, Inanam	Tree Planting Project
Oct. 20, 1995	Shangri-La Hotel, Tanjung Aru	Workshop on Environment
Oct. 22, 1995	Gaya College, Kota Kinabalu	Tree Planting Project
Oct. 23, 1995	Wisma Merdeka, Kota Kinabalu	Exhibition on Environmental Conservation
Oct. 23, 1995	Wisma Merdeka, Kota Kinabalu	Computerized Quiz
Oct. 23, 1995	Labuan Supply Base	Launching of SHELL Malaysia Health, Safety and Environment Week
Oct. 23-26, 1995	Poring Hot Spring, Ranau	Enviro-Camp - Hill Ecosystem
Oct. 26, 1995	Labuan Supply Base	(i) Briefing on Environment: Waste Segregation at Labuan Supply Base
Oct. 27, 1995	Labuan Supply Base	(ii) Distribution of Leaflets
Oct. 29, 1995	Papan Island, Labuan	Office Cleanliness Campaign "Gotong Royong" cum Beach Clean-up
Oct. 1995	Kota Kinabalu	Best Palm Oil Mill Award in Sabah
Nov. 1995	Kota Kinabalu	Environmental Journalism Award

OTHER PUBLIC AWARENESS AND EDUCATIONAL ACTIVITIES

Environmental Themed Novel Writing Competition

The phrase "A pen is stronger than a sword" spurred the Department to organise an Environmental Themed Novel Writing Competition with the aim to encourage and enhance the role of "green writers" in assisting the government to promote environmental awareness amongst the public through their creative writing skills. The Department received an overwhelming response with more than 100 entries. However, only 62 qualified for final judgement by a panel of experts in creative writing. The novels would be available to the public when published in 1996.

Video Production

A video production which is also available on CD ROM entitled "Environmental Requirements in Malaysia" was produced by the Department. This serves as a guide for potential investors to adhere to all necessary environmental and legal requirements when setting up industries in Malaysia. The video is available for loan at all DOE State Offices and from the Department's Representative in MIDA. It was also distributed to all Malaysian embassies.

Environmental Lectures and Exhibitions

Environmental lectures and exhibitions were conducted to enhance public understanding of the environment. These programmes enabled the public to gain access to correct information on the environment. Figure 7.1 provides an indication of the numbers and subject matters of lectures given in 1995.

Environmental exhibitions were also conducted throughout the year. Besides conducting exhibitions, the Department also distributed posters as well as loaned slides and photographs to interested individuals and agencies. Figures 7.2 and

7.3 respectively, show the number of exhibitions held by the Department, and the total number of posters, slides and photographs borrowed by interested individuals and organisations.

Educational Programme via the Mass Media

An Environmental Awareness Quiz was organised through *Minda Pelajar*, one of the major weekly newspapers for secondary school students. The Quiz, which was targeted at secondary school students succeeded in attracting more than 50,000 entries from students all over Malaysia since its launch in March 1995. The Quiz, a joint effort between DOE, Hongkong Bank (M) Bhd. and *Minda Pelajar* will continue throughout the year until March 1996.

The Department also continued to contribute articles monthly in *PELANCAR*, a magazine published by *ANGKASA*.

Presentation of Langkawi Award

The Langkawi Award which was introduced in 1991, is a recognition by the Government of



Winners of the Environmental Themed Novel Writing Competition



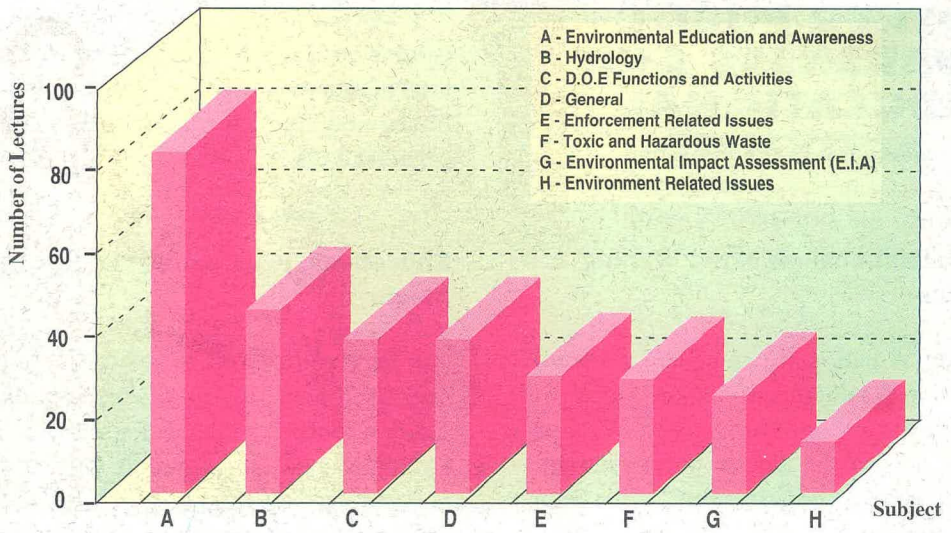


Figure 7.1 Department of Environment: Lectures Conducted by Head Office and State Offices according to Subject, 1995

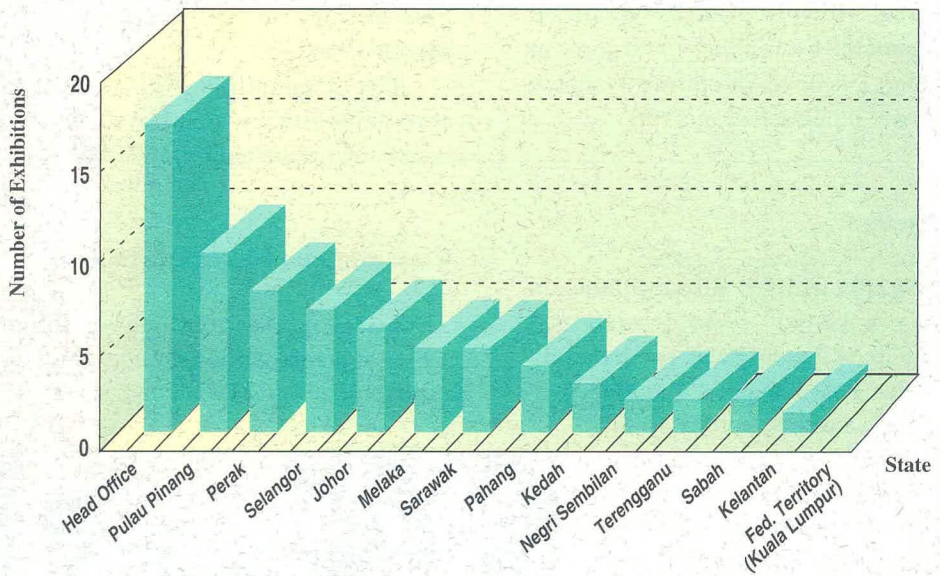


Figure 7.2 Department of Environment: Exhibitions Organised by Head Office and State Offices, 1995

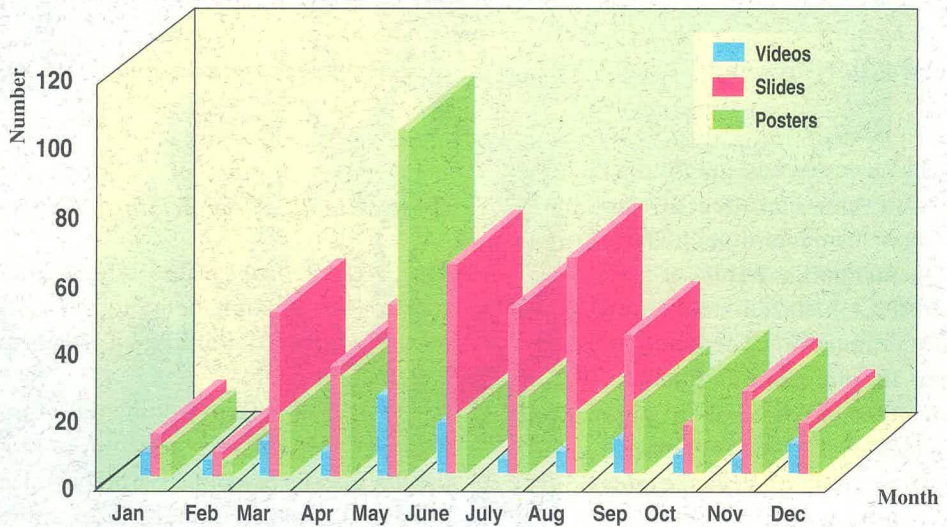


Figure 7.3 Department of Environment: Audio-visual Aids Borrowed from the Environmental Education Unit, 1995

Malaysia to any Malaysian individual who has contributed significantly towards the betterment of the environment. Tan Sri Khir Johari, a veteran in many areas, including the environment was selected as the recipient for the 1995 Langkawi Award. His most outstanding contribution was his years of leadership in conservation work locally and internationally through the World Wide Fund for Nature Malaysia (WWF).



The Honourable Minister of Science, Technology and the Environment presenting the 1995 Langkawi Award to Tan Sri Khir Johari

ENVIRONMENTAL EDUCATION

Environmental Awareness Camps (Enviro Camps)

Enviro camps were organised to instil environmental awareness and to create interest in the protection of the environment among secondary school students. Since its official launch in 1994, the Department had developed seven modules and organised 14 camps pertaining to Highland Ecosystem, Forest Ecosystem, River Ecosystem, Marine Ecosystem, Plantation Ecosystem, Urbanisation and Organic Farming Ecosystem. The camps were conducted with the assistance of non-governmental organisations (NGOs) and higher institutions of learning namely, World Wide Fund for Nature Malaysia (WWF), Malaysian Nature Society (MNS), Centre for Environment, Technology & Development Malaysia (CETDEM), Federation of Malaysian Consumers Association (FOMCA), Universiti Pertanian Malaysia (UPM), Universiti Malaya (UM) and Golden Hope Plantation (M) Bhd.

In 1995, a total of 219 students from all over Malaysia, including Sabah and Sarawak participated in the camps. The Highland Ecosystem Camp held in Sabah in conjunction with MEW 1995 and AEY 1995 was attended by three students from Thailand accompanied by their teachers.

The feedback provided by the students



Students participating at the Enviro Camp (Marine Ecosystem) in Port Dickson

indicated that the camps were found to have heightened the students' understanding of the environment and urged the Department to organise more camps to enable more students to participate.

Projek Riadah Alam Sekitar (PRIAS '95)

The PRIAS programme which entered its fourth year of implementation, was extended to the States of Pahang, Terengganu and Kelantan in 1995.

PRIAS is an environmental competition whereby participating students are required to prepare a scrap book of environmental activities and environmental materials, and will be judged by a panel of judges from DOE,



Table 7.2 Peninsular Malaysia: Participation in PRIAS, 1992-1995

Year	State	No. of Schools	Estimated No. of Participants	Winners
1992	Federal Territory of Kuala Lumpur	41	6,400	1st prize : La Salle Secondary School, Klang, Selangor
	Selangor	58	8,600	2nd prize : Kajang Convent Secondary School, Selangor
	Total	99	15,000	3rd prize : Sri Aman (Girls) Secondary School, Petaling Jaya, Selangor
1993	Johor	85	10,000	1st prize : Durian Daun Secondary School, Melaka
	Melaka	38	3,800	2nd prize : Perumahan Damai Secondary School, Johor Bahru, Johor
	Negri Sembilan	41	4,200	3rd prize : Sultanah Engku Tun Aminah Secondary School, Johor Bahru, Johor
	Total	164	18,000	
1994	Perak	93	9,400	1st Prize : Jalan Damai Secondary School, Bukit Mertajam, Pulau Pinang
	Kedah	60	6,100	2nd Prize : Hua Lian National Secondary School, Taiping, Perak
	Pulau Pinang	35	3,600	
	Perlis	10	900	3rd Prize : Tun Syed Sheh Shahabudin School, Bukit Mertajam, Pulau Pinang
	Total	198	20,000	
1995	Pahang	53	6,000	1st Prize : Dato' Ahmad Maher Secondary School, Kota Bharu, Kelantan
	Terengganu	31	3,600	2nd Prize : Chung Hua National Secondary School, Kota Bharu, Kelantan
	Kelantan	74	8,000	
	Total	158	17,600	3rd Prize : Durian Guling Religious National Secondary School, Marang, Terengganu

Ministry of Education, Malaysian Scientific Association and Tetra Pak (M) Sdn. Bhd.

Table 7.2 shows the active participation of the schools and the winners of PRIAS 1992-1995.

Inter Varsity Environmental Debate

For the 1995 Inter Varsity Environment Debate, a new format was introduced to improve the quality of the debate itself as well as to further improve the ability of the speakers in open spontaneous debate. The debate was divided into two sessions namely, the 'open session' and the "normal session". The open session was similar to "*berbalas pantun*" format where the debaters have to respond immediately to the points raised.

This new format was well accepted by the debaters, and would be adopted for future debates. Universiti Sains Malaysia (USM) was the 1995 winner of a trophy and a cash prize of RM 3,000.00. The International Islamic University (UIA) was placed second with a cash prize of RM 2,000.00. The topic for the

Final Debate was "Environmental Awareness Among the Public is Just a Trend". The winners received their prizes from the Honourable Deputy Minister of Science, Technology and the Environment, Dato' Abu Bakar Daud at Universiti Utara Malaysia (UUM), in Sintok, Kedah in conjunction with a Debate Carnival, from September 18-23, 1995.

ENVIRONMENTAL INFORMATION DISSEMINATION AND SERVICES

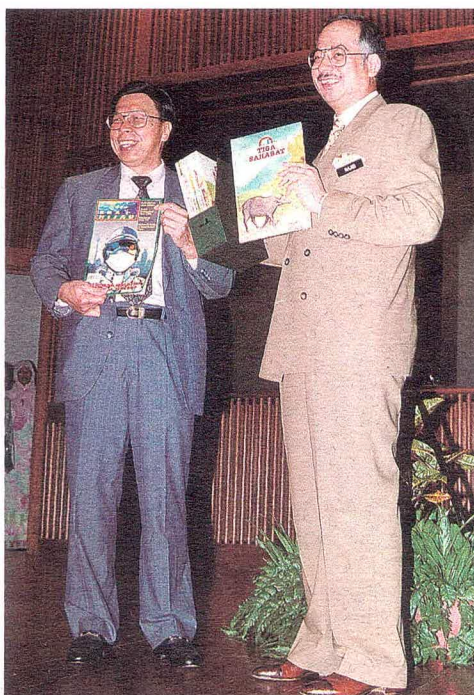
Publications

A total of 32,013 DOE environmental publications were distributed locally as well as overseas. These included the 1994 Environmental Quality Report, the *ERA HIJAU* Magazine, INFOTERRA pamphlets, environmental guidelines, A Guide to Investors,

the *IMPAK* newsletter, environmental information booklets, and posters. The mailing list included libraries, individuals, government agencies embassies, universities and institutions of higher learning, schools, non-governmental organisations (NGOs) as well as the media.

Distribution of DOE environmental publications increased significantly by 140 per cent compared to 1994. This was mainly due to the dissemination of the *ERA HIJAU* magazine which was officially launched by the Honourable Minister of Science, Technology and the Environment, Datuk Law Hieng Ding on August 22, 1995. The publication of *ERA HIJAU* was another effort by DOE to increase environmental awareness among lower secondary school students. Printing and layout were undertaken by Berita Publishing Sdn. Bhd. Three issues of *ERA HIJAU* were published and distributed. The first issue focussed on air pollution, the second on water pollution while the third issue focussed on management of solid wastes. Six copies of each issue were distributed gratis to all lower secondary schools (total 1,432) throughout Malaysia through the Ministry of Education with the objective of promoting environmental awareness among the younger generation.

Simultaneously with the launch of the *ERA HIJAU*, the *Kenali Alam Sekitar* (Know Your Environment) series was also launched by the Honourable Minister of Education, Dato' Seri Mohd Najib Tun Razak. The topics covered were Water, Air, Habitat, Food, Plants, Rivers, Industry, Town, Transportation and Wastes which were targeted for the Primary 1,2, and 3 pupils in Malaysian schools. At the inaugural launch, the corporate bodies came forward to generously purchase 421 sets of the *Kenali Alam Sekitar* books to be distributed to primary schools. These corporate bodies were: Hongkong Bank Malaysia Berhad, Tioxide (M) Sdn. Bhd., ESSO Production Malaysia Inc., Commerce Asset Holding, Dow Chemical Pacific Limited, PDL Industries (Asia) Sdn. Bhd., Nestle (M) Bhd., Golden Hope Plantation (M) Bhd., Business Council for Sustainable Development Malaysia and Berita Publishing Sdn. Bhd. Under the Agreement with the Writers Academy, 10 per cent of the proceeds of the sales was to be credited into the Environmental Education and Awareness Trust Fund.



Launching of 'Era Hijau' by the Hon. Minister of Science, Technology and the Environment and the 'Kenali Alam Sekitar' series by the Hon. Minister of Education on August 22, 1995

In addition, the Department also published a book entitled "*Koleksi Cerita-Cerita Pendek Bertemakan Alam Sekitar*" (A Compilation of Short Stories based on Environmental Themes) which was a compilation of the winning entries of a short story writing competition organised by the Department with the collaboration of Utusan Malaysia.

Figure 7.4 gives an indication of the distribution and readership of environmental publications produced by DOE. The production of these publications was fully funded by the Government of Malaysia under the Sixth Malaysia Plan Development Budget 1995 and the Operating Budget.

Query-Response Services

A total of 3,130 queries for environmental information were received in 1995, an increase of 7 per cent over 1994. Queries from the Department's library users were still the highest, followed by requests through letters and via the INFOTERRA network as shown in Figure 7.5.

Requests for information were received from various target groups. Enquiries via letters were mainly received from students and



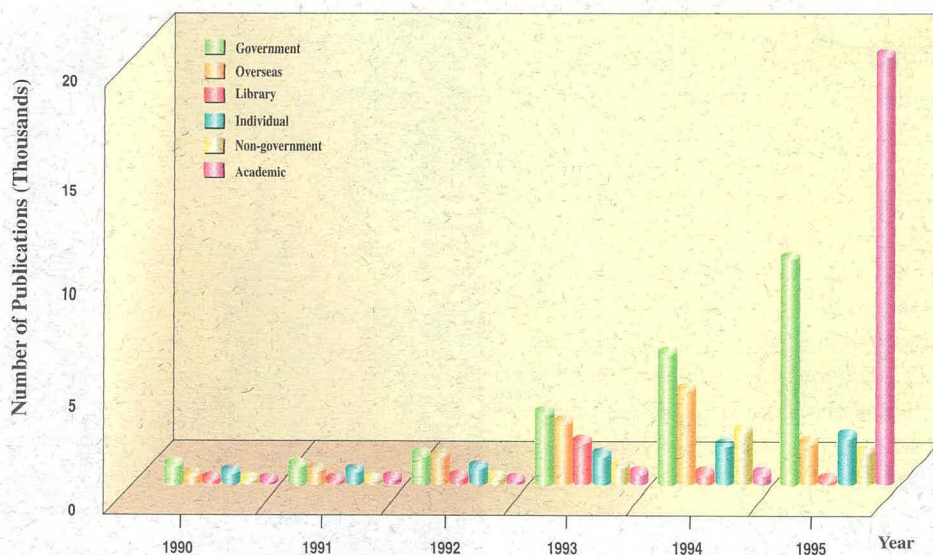


Figure 7.4 Department of Environment: Dissemination of Environmental Publications, 1990-1995

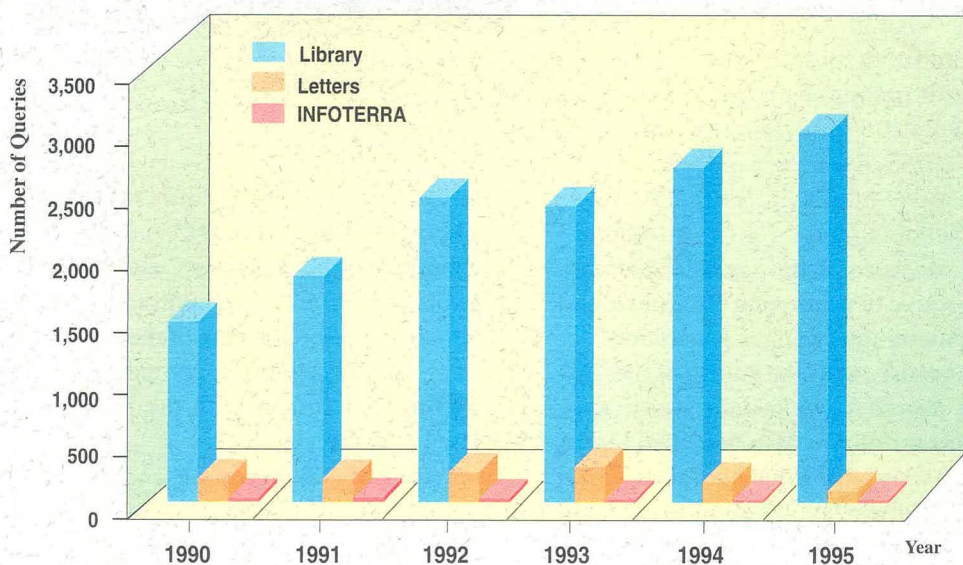


Figure 7.5 Department of Environment: Channels of Query Responses, 1990-1995

individuals abroad, followed by those staying outside the Klang Valley area. Figure 7.6 provides an indication of categories of application for information whereby students were found to be the major users of the Department's library.

International Referral System for Sources of Environmental Information (INFOTERRA)

As the National Focal Point (NFP) for Malaysia, the DOE received and processed a total of 139 queries, of which 21 came via the INFOTERRA network. Out of these, 59 enquiries were from Australia, Bangladesh, Belize, Canada, China, India, Indonesia, Japan, Kenya, Mongolia, Morocco, Republic of

Cambodia, Republic of Maldives, Singapore, Sri Lanka, Thailand, the Philippines, United Kingdom and United States of America.

The main subjects covered were: freshwater resources, environment and development (resource management), human settlements, atmosphere (air pollution), industry, energy, environmental law and institutions, environmental awareness as well as pollution and wastes. A total of 24 enquiries were referred to other agencies while the other 115 were attended to directly by the NFP.

As an effort to promote INFOTERRA, the Malaysia NFP published for the first time, a coloured pamphlet in English and Bahasa Malaysia, which were distributed locally, as well as to all INFOTERRA NFPs throughout the world and to UNEP offices.

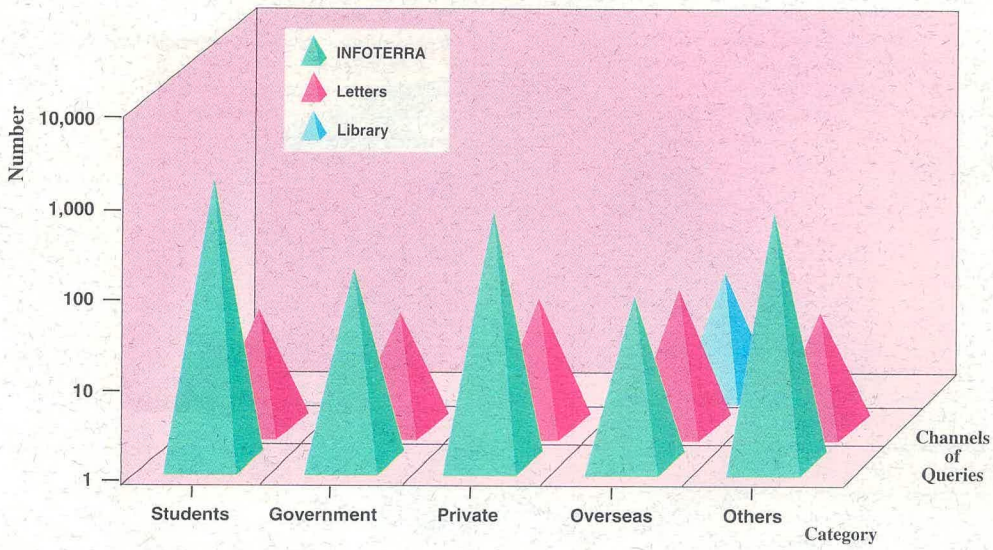


Figure 7.6 Department of Environment: Category of Applicants for Information, 1995

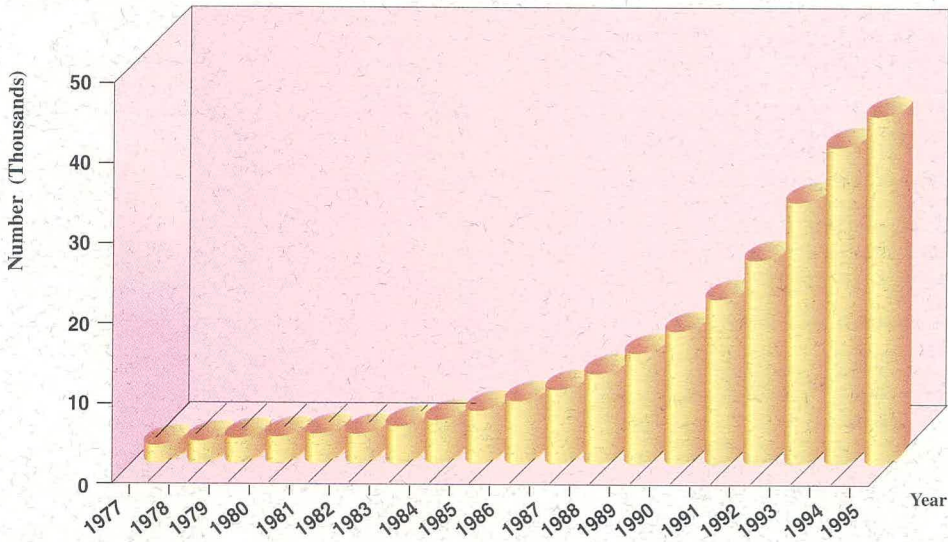


Figure 7.7 Department of Environment: Number of Newspaper Cuttings Compiled, 1977-1995

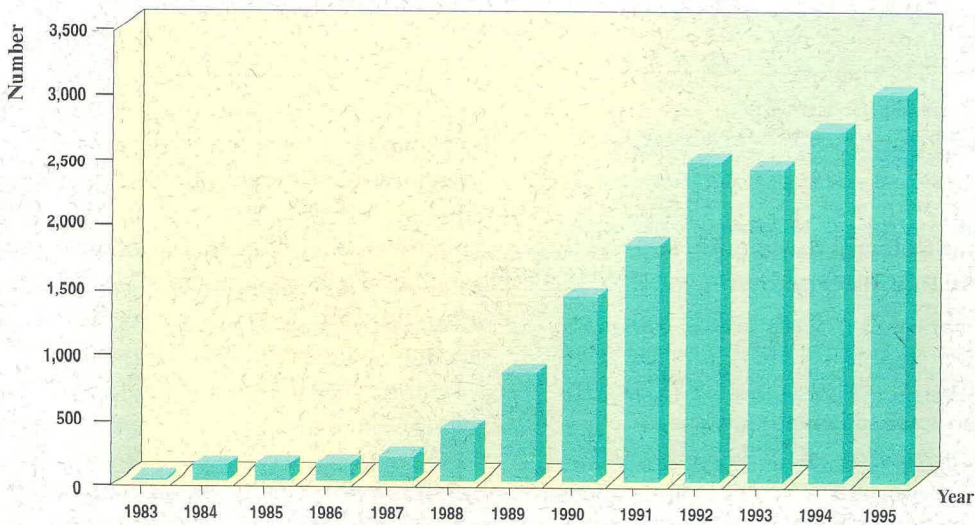


Figure 7.8 Department of Environment: Number of Library Users, 1983-1995



Table 7.3 Department of Environment: Major Publications Available, 1995

Free Distribution	For Sale
<ul style="list-style-type: none"> ● Environmental Requirements: A Guide to Investors ● Environmental Impact Assessment (EIA): Procedure and Requirements in Malaysia ● Penilaian Kesan Kepada Alam Sekeliling (EIA): Prosedur dan Keperluan Di Malaysia (Malay Language) ● Kuala Lumpur Declaration on Environment and Development ● Rio Declaration on Environment and Development ● The Langkawi Declaration on the Environment ● The Kuala Lumpur Accord on Environment and Development ● International Register of Potentially Toxic Chemicals (IRPTC) ● Ringkasan Strategi Rancangan Perlindungan Lapisan Ozon, 1990-2000 (Malay Language) ● Strategi Rancangan Perlindungan Lapisan Ozon (Malay Language) ● The Montreal Protocol and ODS Alternatives Developments ● Perkembangan Terkini Protokol Montreal (Malay Language) ● Laporan Kajian Ulangkaji Undang-Undang Alam Sekitar (Malay Language) ● Guidelines for the Export of Scheduled Wastes ● Guidelines for Storage of Scheduled Wastes ● Guidelines for the Import of Scheduled Wastes ● Code of Practice Manual for Service Stations ● Kod Amalan bagi Stesen-Stesen Servis (Malay Language) ● Garispanduan Bagi Penstoran Buangan Terjadual (Malay Language) ● Garispanduan Prosedur Mengeksport Buangan Terjadual (Malay Language) ● Garispanduan Bagi Mengimport Buangan Terjadual (Malay Language) ● Acid Rain ● Sources of Ground Water Pollution ● ODS Solvents ● Guidelines on Control Measures for the Montreal Protocol on Substances that Deplete the Ozone Layer ● Significant New Alternatives List (SNAL) ● Non-ODS Investments Project for Funding from Multilateral Fund (MLF) on the Implementation of the Montreal Protocol ● Malaysia Country Programme to Reduce and Eliminate the Consumption and Emissions of Ozone Depleting Substances ● Malaysian Strategy for Ozone Layer Protection. ● The Sooner the Better for Protection of the Ozone Layer ● IMPAK (National EIA Newsletter) ● ERA HIJAU (quarterly magazine for schools) (Malay Language) ● Monograf Forum Etika dan Alam Sekitar (Malay Language) ● Guidelines for Project Preparation under the Multilateral Fund ● Fifth Meeting of the Parties to the Montreal Protocol ● Protect the Ozone Layer Save the Earth ● Skim Pengurusan dan Pengurangan CFC 12 pada Sektor Pendingin Kenderaan (MAC) (Malay Language) ● Keprihatinan Menangani Protokol Montreal 1985- 1994 (Malay Language) ● Notification & Control Procedure Adopted by Malaysia and Singapore for Movement of Wastes Between the Two Countries 1995 ● Project Management Office for the Montreal Protocol (Montreal Protocol Unit) ● Malaysia Country Programme Update to Phase Out Ozone Depleting Substances under the Montreal Protocol ● Sejarah Penubuhan Jabatan Alam Sekitar (1975-1995) (Malay Language) ● Guidelines on the Disposal of Asbestos Wastes 	<ul style="list-style-type: none"> ● Environmental Quality Report ● Handbook of Environmental Impact Assessment Guidelines ● Environmental Impact Assessment Guidelines for Coastal Resort Development Projects ● Environmental Impact Assessment Guidelines for Industrial Estate Development ● Environmental Impact Assessment Guidelines for Petrochemical Industries ● Garispanduan Penilaian Kesan Kepada Alam Sekitar bagi Pembangunan Padang Golf (Malay Language) ● Buku Panduan Kawasan Sensitif Alam Sekitar Malaysia (Malay language) ● Guidelines for the Management and Disposal of Wastes in Downstream Petroleum Industries ● Guidelines on the Management and Disposal of Wastes in Upstream Petroleum Industries ● Environmental Impact Assessment Guidelines for Thermal Power Generation and/or Transmission Projects ● Environmental Impact Assessment Guidelines for Fishing Harbours and/or Land-based Aquaculture Projects ● Environmental Impact Assessment Guidelines for Dams and/or Reservoir Projects ● Environmental Impact Assessment Guidelines for Groundwater and/or Surface Water Supply Projects ● Environmental Impact Assessment Guidelines for Drainage and/or Irrigation Projects ● Environmental Impact Assessment Guidelines for Mines and Quarries



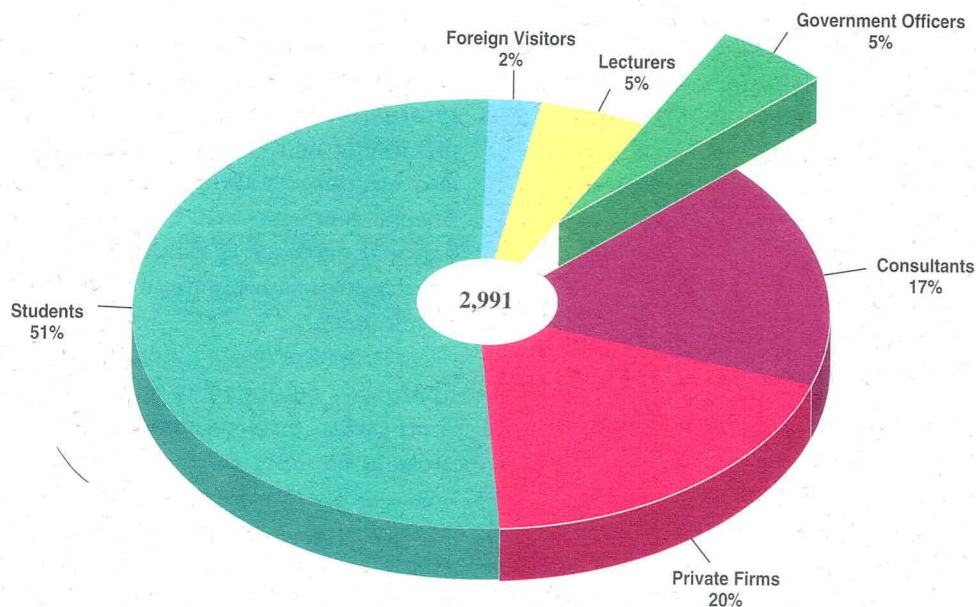


Figure 7.9 Department of Environment: Library Users, 1995

Enviro-Library Services

The number of reference materials in the DOE enviro-library continued to increase over the years. Till the end of 1995, a total of 14,404 reference materials were catalogued and 14,204 records were computerised, an increase of about 6 per cent compared to the previous year. Materials that were catalogued included books, reports, seminar papers as well as working papers prepared by DOE officers. A listing of all major publications available in DOE is as shown in Table 7.3. Regrettably, DOE for the third year running has not received any allocation for acquisition of books and magazines.

Environmental news in the mass media continued to increase in 1995. This is clearly shown from the increase in the number of newspaper reports relating to this subject matter throughout the year. Figure 7.7 shows the number of newspaper cuttings compiled since 1977. Library users can now retrieve these cuttings through the DOKUMAS computerisation system which is available in the library.

Since the library was opened in 1983, the number of library users continued to increase as shown in Figure 7.8. A total of 2,991 outside users were recorded in 1995 in which the majority were students. Figure 7.9 shows the category of library users in terms of percentage.

Environmental Briefings

Environmental briefing is one effective


approach to disseminate environmental information. Throughout 1995, 26 briefings pertaining to the Department's strategies, programmes and activities as well as other environment-related matters were given to the Department's local and foreign visitors comprising university students, officers of the Royal Malaysian Navy, the private sector executives, INTAN International Course participants, as well as foreign visitors from India, Japan, Brunei Darussalam, Hong Kong, China, Sri Lanka, Thailand, Vietnam, Switzerland, Indonesia, Australia, and the Republic of Germany (a full list is as shown in Table 8.2 of the next chapter).

CONTRIBUTION OF ENVIRONMENTAL ORGANISATIONS AND THE PRIVATE SECTOR

Non-Governmental Organisations (NGOs)

A number of NGOs contributed significant expertise and resources for activities conducted by DOE such as the Environmental Awareness Camps, enviro debates, publication of environmental information, and other educational campaigns. Other than the Zoology Department of Universiti Malaya and the Biology Department of Universiti Pertanian Malaysia, the World Wide Fund for Nature





Malaysia (WWF), Malaysian Nature Society (MNS), Centre for Environment, Technology and Development, Malaysia (CETDEM) and Federation of Malaysian Consumers Association (FOMCA) also supported the Department in conducting Environmental Awareness Camps.

Private Sector

The private sector also contributed significantly to assist the government in promoting environmental awareness among the public. With their continuing support, the Department was able to undertake a number of activities such as those organised for the ASEAN Environment Year 1995.

In this regard, DOE would like to acknowledge the valuable contributions from various corporate bodies such as Golden Hope Plantation (M) Bhd., ESSO Malaysia Berhad, Hongkong Bank Malaysia Berhad, Tetra Pak (M) Sdn. Bhd., Utusan Publications, ICI and CCM.

FORTHCOMING PLAN

Chapter 36a of Agenda 21 clearly stated the need to increase people's sensitivity to, and involvement in, finding solutions for environment and development problems. Environmental education can provide the environmental and ethical awareness, values and attitudes, skills and behaviour needed for sustainable development.

Chapter 40b of Agenda 21 also emphasized the need to strengthen existing national and international mechanisms of information processing and exchange to ensure effective and equitable availability of information. Special emphasis will be given on building national capacity to enhance environmental information management for sustainable development.

The nation needs a flexible and adaptable approach, equipped to meet the growing increase in environmental awareness and attitude changes during the transition to a sustainable, developed nation status. In this regard, the Department together with the Economic Planning Unit had initiated a survey on the level of environmental awareness among the general public. These findings would serve to guide future strategies for environmental education and in the promotion of public awareness at all levels. The Department has drafted a National Action Plan for the Promotion of Environmental Awareness to further strengthen the enhancement of environmental awareness programmes in line with Agenda 21.

New programmes and approaches will be introduced in the future to encourage all sectors of society to participate actively in the protection of the environment. This will include programmes with the media, entertainment and advertising industries as well as existing local networking with NGOs and other related agencies. Expansion of public environmental information services will also raise the awareness of all groups, particularly the private sector and decision makers.



**ENVIRONMENTAL
AFFAIRS**

Chapter 8



NATIONAL CO-OPERATION

Federal-State Relations

The 11th Meeting between Ministers and State Executive Councillors (Exco) Responsible for Environmental Matters (MEXCOE) was held on October 20, 1995 in Kota Kinabalu, Sabah in conjunction with Malaysia Environment Week 1995. This was the first meeting for all State Exco members and Ministers in charge of environmental matters after the General Election on April 25, 1995.

The meeting emphasized on a systematic environmental management approach at the federal and state levels, and recognized that to achieve this, co-operation from all State Governments, particularly the local authorities was necessary, especially to overcome problems like open burning, illegal dumping of scheduled wastes and oil spills in coastal waters.

The 11th MEXCOE Meeting also agreed for the following to be implemented at the State level:

- An Oil Spill Clean-up Committee be established at all State levels
- The State Government to establish a fund for beach clean-up as a result of oil pollution by unknown sources
- The Coastal Resource Management Plan established under the ASEAN/United States Coastal Resource Management Project (USCRMP) and co-ordinated by the Ministry of Science, Technology and the Environment, be distributed for adoption and use by all States

The Johor State Government has agreed to use this plan as a formal document and guide in matters relating to:

- coastal reclamation
- development of coastal swamp forest
- other development activities in coastal areas

The Meeting also took note of the Federal Government's efforts in amending the Environmental Quality Act, 1974 to add three new activities in the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 by including development activities in sensitive areas as prescribed activities.



11th MEXCOE Meeting on October 20, 1995 in Kota Kinabalu, Sabah

In the meantime, State Governments were urged to impose on project proponents or developers, the requirement of an environmental impact assessment (EIA) study and the EIA report be submitted to the DOE, as an administrative procedure, for any development activities proposed at sensitive areas, namely:

- development on hill slopes
- golf courses
- development on ex-mining land.

Malaysia Incorporated

In line with the Malaysia Incorporated concept, several dialogue sessions were initiated in 1995 by the Department, to further strengthen the existing co-operation and understanding between the Government and Non-Governmental Organisations (NGOs), Business and Industrial Associations. It also served as a forum for exchange of information and experience on environmental issues.

A total of 9 dialogues were held as shown in Table 8.1. Two separate dialogues were held between the Honourable Minister of Science, Technology and the Environment and the representatives from NGOs, and with representatives of industrial sector. Operational issues were dealt with at the official level, while those relating to policy matters were referred to the Honourable Minister. This approach was found to be efficient and effective. The participants were urged by the Honourable Minister to be more constructive and to give

Table 8.1 Department of Environment: List of Dialogues Held, 1995

Date	Dialogue and Main Issues
June 13, 1995	With Malaysian Motor Vehicle Assemblers Association (MMVAA) and the Motorcycle & Scooter Assemblers & Distributors (MASAAM) on emission standards
June 23, 1995	With Federation of the Rubber Trade Associations of Malaysia (FRTAM) on siting constraints and licensing requirements
July 4, 1995	The Honourable Minister of Science, Technology and the Environment with non-governmental organisations (NGOs) on natural resources depletion, enforcement, manpower and environmental management issues
July 11, 1995	With Chemical Industries Council of Malaysia (CICM) on waste management (privatization and disposal fees proposed by Kualiti Alam Sdn. Bhd.)
July 11, 1995 metal	With Malaysian Iron and Steel Industry Federation (MISIF) on utilization of slag and scrap metal
July 21, 1995	With Palm Oil Manufacturers Association (POMA) on land application and fees
August 8, 1995	With FMM Concrete Products Industry Group on waste water and waste management
September 15, 1995	With Federation of Malaysia Manufacturers (FMM), Malaysian Furniture Industries Council (MFIC) and Malaysian Pulp & Paper Manufacturers Association on scheduled waste management, waste disposal and compliance status
October 26, 1995	The Honourable Minister of Science, Technology and the Environment with Industrial Associations on incentives and scheduled wastes disposal fees



their co-operation to the Government especially in environmental education and awareness activities held from time to time.

The Malaysia Incorporated concept was taken one step further when for the first time, the Department organised a 2-weeks attachment training programme from December 5-16, 1995 for senior executives of the private sector. Five executives, two from Nestle (M) Bhd., and one each from Pollution Engineering Sdn. Bhd., Kuala Lumpur Glass Manufacturers Co. Sdn. Bhd. and Tan Chong Rubber Gloves Sdn. Bhd. took part and were also given hands-on training with the monitoring equipment used by DOE.

The participants benefitted from this programme though it was felt that the 2-weeks duration could be shortened. DOE officials, reciprocally, were also attached to the private sector for the same duration of time. This programme would be expected to expand in the coming year.

BILATERAL CO-OPERATION AND ASSISTANCE

Malaysia - Brunei Darussalam

Malaysia and Brunei Darussalam signed an MOU on Standard Operating Procedures for

Joint Oil Spill Combat in the South China Sea including Brunei Bay for Malaysia and Brunei Darussalam on November 7, 1995 in Kuala Lumpur, Malaysia. The signing of the MOU marked the starting point of regional co-operation in oil spill combat for the benefit of the two countries.

On June 30, 1995, three senior officials from the Prime Minister's Department of Brunei Darussalam held a fruitful discussion with senior officials from DOE regarding DOE Clients' Charter which was formulated based on major activities and output of the Department.

Malaysia-Germany

The existing bilateral co-operation on environment between Malaysia and the Federal Republic of Germany was further strengthened when Her Excellency the Federal Minister for the Environment, Nature Conservation and Nuclear Safety visited the Ministry of Science, Technology and the Environment, and an MOU on Co-operation in Environmental Affairs was signed between Malaysia and Germany on November 18, 1995 in Kuala Lumpur, Malaysia. The areas of co-operation under the MOU are:

- Pollution problems of mutual concern, their identification and assessment of relevant



Senior officials from BAPEDAL, Indonesia and DOE during a Visit to a Palm Oil Mill in Johor on September 21, 1995 under the attachment programme

control technologies, in particular, water quality management, air pollution, solid waste management and resource recovery, as well as marine pollution

- Environmental management and environmental impact assessment
- Environmental monitoring methods and surveillance including the use of environmental information system
- Increasing energy efficiency and use of renewable resources
- Exchange of views on global topics of mutual interest as follow-up to the United Nations Conference on Environment and Development, especially in areas covered by international conventions and protocols.

Malaysia - Vietnam

During the year 1995, three official visits by Vietnamese delegations were hosted by the DOE. The delegations consisted of senior government officials from various agencies and

parliamentarians who were briefed on the functions and activities of the Department.

Malaysia-Kingdom of Cambodia

Eight senior officials from the Kingdom of Cambodia were attached to the Department of Environment under the Malaysia Technical Co-operation Programme co-ordinated by the Economic Planning Unit, Prime Minister's Department. The attachment programme was for a period between December 4 to

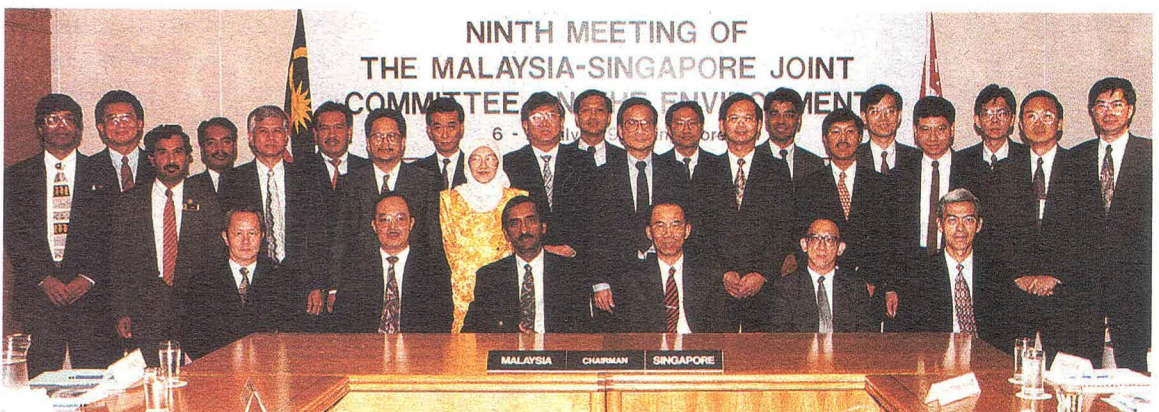
16, 1995 and Kuala Lumpur, Penang, Selangor and Melaka were visited.

Malaysia- Indonesia

Seven senior officials from the Central and Regional Environmental Impact Management Agency (BAPEDAL), Indonesia were on an Internship Programme with DOE for a period of 3 weeks from September 11-30, 1995. The objective of the program was to study and gain experience regarding environmental management in Malaysia. They were also taken for site visits to several development projects such as the hydroelectric power plant and petrochemical industry in Terengganu, as well as palm oil mills and other industries in the State of Johor.

Malaysia - Singapore

The Malaysia-Singapore Joint Committee on the Environment (MSJCE) held its Ninth Meeting in Singapore on July 6-7, 1995. The



Ninth Meeting of the Malaysia- Singapore Joint Committee on the Environment (MSJCE) on July 6-7, 1995, Singapore

Annual Meeting between the Minister of Science, Technology and the Environment, Malaysia and Minister of Environment, Singapore was held on December 2, 1995 in Singapore. The Ministers discussed environmental matters of mutual concern and also reviewed the progress of work carried out by the Malaysia-Singapore Joint Committee on the Environment and adopted the Eighth Report. The Ninth Meeting of MSJCE discussed matters relating to the control of vehicular emission, water quality in the Straits of Johor, the control of tanker cleaning activities, transboundary haze pollution and the management of hazardous chemicals and toxic wastes. The Ministers also agreed that the Straits of Malacca Council should be urged to extend the coverage of the Revolving Fund to include spills arising from carriage of hazardous chemicals.

Prior to the Ninth Meeting of MSJCE, a special Working Group was formed on February 17, 1995 to study ways to deal with incidents involving tankers committing marine pollution offences. The Special Working Group (SWG) met twice during the year, on March 23-24, 1995 in Kuala Lumpur, and on May 4-5, 1995 in Singapore. Following these SWG Meetings, the two countries reached a consensus and formalised procedures to help each country to better handle future incidents.

Malaysia-Canada

Visit Canada Programme '95

Ten DOE officers participated under the Visit Canada Programme to visit Government agencies, research institutions, universities and industries in Canada. This programme was funded by the Government of Canada, the main objective being to establish and further strengthen institutional linkages between Canada and Malaysia in the field of environment. Intensive programmes of visits, exchanges of information and sharing of experiences took place between July to November 1995.

OTHER BILATERAL CO-OPERATION

DOE also received official delegations from various countries such as Australia, Japan,

South Africa, American Samoa, Hongkong, Switzerland, Bangladesh, Taiwan, Fiji and Austria to exchange knowledge and experience on environmental management. The subject matters that were often discussed were environmental impact assessment (EIA), management of toxic waste, monitoring of air and water quality, Environmental Quality Act and guidelines, as well as the functions and activities of the DOE. A list of the foreign visitors and subjects discussed is as shown in Table 8.2.

REGIONAL CO-OPERATION

ASEAN Senior Officials on the Environment (ASOEN)

The Sixth Meeting of ASOEN was held in Bali, Indonesia on October 20-22, 1995. Vietnam participated in the ASOEN Meeting for the first time. It was noted that ASEAN co-operation on environment had developed satisfactorily over the last few years. The ASEAN Strategic Plan on the Environment, adopted by the 6th ASEAN Ministerial Meeting on the Environment held in April 1994 in Bandar Seri Begawan, Brunei Darussalam provided a clearer set of objectives and strategies which highlights ASEAN commitment to implement post-UNCED issues relevant to the region. Reports of the six Working Groups as well as the status of co-operative environmental programmes with the dialogue partners were reviewed and future activities were discussed and adopted.

Brunei-Indonesia-Malaysia-Philippines on Environmental Protection Management (BIMP-EPM)

The four countries in the East ASEAN Growth Area namely, Brunei, Indonesia, Malaysia and the Philippines identified the following sectors for co-operation:

- Agriculture, forestry and fisheries
- Human resource development
- Industrial development
- Power and energy
- Tourism
- Trade and investment
- Transport and communication



Table 8.2 Department of Environment: List of Foreign Visitors and Subjects Discussed, 1995

Date	No. of Delegates/Rank	Organisation/Country	Subjects Discussed
Jan.12	ZZ 3 delegates/Director and Senior Officials	National Institute of Science, Technology and Development Studies (NISTADS), INDIA	Technology Assessment and Geographic Information System
Feb.22	3 Officers	NEC Corporation, JAPAN	Current Environmental Issues, Environment Legislation and Guidelines
March 13-22	6 delegates/Chairman, Director, Deputy Director, and Senior Officials	National Research Programme on Environment, VIETNAM	Environmental Management and EIA
March 28	20 delegates/Directors and Managers	Danish Energy and Environment Trade Delegation; Danish Environmental Protection Agency, DENMARK	DOE's Functions and Activities; Clean Technology; Energy; and Environmental Technology
May 3-6	1 WHO Fellow	WHO, AMERICAN SAMOA	Water Quality Management
June 14	13 Participants of Hong Kong Senior Staff Course No.24	Senior Staff Course Centre, HONG KONG	Air Quality Management and Management of Dangerous Goods
June 26	3 delegates/Course Leader, Manager and Training Co-ordinator	Kitakyushu International Techno-Co-operative Association (KITA) & JICA, JAPAN	Waste Management Practices
June 30	3 Senior Govt. Officials	Prime Minister's Department, BRUNEI DARUSSALAM	Clients' Charter
July 18	12 Government Officials	Administration Centre of China Agenda 21, PEOPLE'S REPUBLIC OF CHINA	Sustainable Development, Environmental Legislation and Enforcement
July 25	1 ADB Expert	Asian Development Bank (ADB), PHILIPPINES	Environmental Issues and Natural Resource Management
August 4	1 UNIDO Country Director for Malaysia	UNIDO	Role of UNIDO to Support Malaysia's Industrial Development
August 10-11	3 Experts	Directorate for Standards and Quality, VIETNAM	Emission from Motor Vehicles
August 14	17 MBA Students	Norwegian School of Management, NORWAY	Policies, Environmental Requirements and Technology, Illegal Dumping, Sustainable Development (Islamic Approach and NGO Involvement)
August 17	1 Chief Municipal Engineer	Dehiwala-Mt. Lavina Municipal Council, SRI LANKA	Solid Waste and Wastewater
August 17	30 Senior Officials	Office of Environmental Policy and Planning, THAILAND	Environmental Management
August 24	85 delegates/Directors, Managers, Engineers, Economists and Officers	Government Departments, VIETNAM	Organisational Structure, Functions & Activities of DOE, Environmental Legislation & Management
Sept. 11-30	7 Senior Officials	Central and Regional Environmental Impact Management Agency (BAPEDAL), INDONESIA	Internship Programme on Environment
Oct. 4	27 Senior Officials	MTCP International Course Participants from Thailand, Cambodia, Fiji, Nigeria, Venezuela, Iran, Dominica, Bangladesh, Albania, Oman, Philippines, Morocco	Institutional Set-up, Legislations/Standards, Environmental Planning, Control and Monitoring
Oct.5-7	1 WHO Fellow	WHO, FIJI	Water and Air Quality Monitoring
Oct. 11	10 Senior Civil Servants	Public Service Commission, AUSTRALIA	DOE Organisational Structure, EIA, Toxic and Hazardous Waste Management
Oct.16	1 Environmental Officer	Dept. of Environmental Affairs, SOUTH AFRICA	Environmental Education
Oct. 30	12 delegates from Industrial Sectors	Swiss-South East Chamber of Commerce, SWITZERLAND	Environmental Management in Malaysia
Nov.9	2 delegates/Heads of Petrochemical Industry Units	UNIDO, AUSTRIA	UNIDO Co-operation
Nov. 13	1 Research Fellow	Chung-Hua Institution for Economic Research, TAIWAN	Environmental Management, Control and Legislation
Nov.14	2 delegates/Director and Senior Official	Posford Duvivier, Port Consultants and Project Managers, UNITED KINGDOM	Environmental Issues





Nov. 16	2 delegates/Executive Engineer and Socio Economist	Tangail Infrastructure Development Project (TIDP), BANGLADESH	Environmental Control and Protection
Nov. 22-29	1 WHO Fellow/Senior Health Inspector	Health Department, WESTERN SAMOA	Environmental Sanitation
Nov. 29	1 UNIDO Country Director for Malaysia	UNIDO	UNIDO Co-operation with DOE
Dec. 4-16	8 delegates/Deputy Director General, Directors and Senior Officials	Ministry of Science, Technology and Environment, CAMBODIA	Environmental Management
Dec.6	9 Members of Parliament	Committee of Science, Technology and Environment, Parliament of SOCIALIST REPUBLIC OF VIETNAM	Environmental Policy

The first meeting of BIMP-EAGA Environmental Protection Management (EPM) Working Group was held on April 26-27, 1995 in Brunei Darussalam, followed by the Third Meeting of BIMP-EAGA Senior Officials (SOM) and Ministers on June 15-17, 1995 in Kuching, Sarawak. The Meeting agreed that projects under the environment sector should cover issues of transboundary pollution and regional pollution at specific sites in BIMP-EAGA.

The involvement of the private sector in projects on management of wastes and environmental services were also considered.

The BIMP-EAGA Working Group- EPM held its Second Meeting on September 18-19, 1995 in Brunei Darussalam. The priority projects listed and agreed upon were as follows:

- (a) Manual on environmental requirements in BIMP-EAGA : A Guide for Investors;
- (b) Formulation of environmental guidelines for development activities in BIMP-EAGA ; and
- (c) Waste Management in BIMP-EAGA.

It was also recognised that the private sector has an important role to play in the success of the implementation of projects identified by the Working Group.

The Fourth Meeting of BIMP-EAGA SOM was held on October 29-31, 1995 in Bandar Sri Begawan, Brunei Darussalam followed by the Ministerial Meeting of BIMP-EAGA on November 1, 1995. Several MOUs were signed between the private sector of the 4 countries to undertake projects formulated under the BIMP-EAGA.

INTERNATIONAL CO-OPERATION

DOE actively participated in various international activities under UNEP, Montreal Protocol, Basel Convention, COBSEA and INFOTERRA. Between January- December 1995, DOE had participated in 80 meetings and conferences, 29 workshops and seminars and 37 training courses as indicated in Figures 8.1 and 8.2. These activities were beneficial by way of enhancing the knowledge of the officers and increased their confidence to actively participate in the international arena.

United Nations Environment Programme (UNEP)

Malaysia remained a key player in environmental activities organised under the UNEP umbrella throughout 1995 and also



Malaysian Delegates at the 18th Consultative Meeting of Contracting Parties to the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter on December 4-8, 1995, London

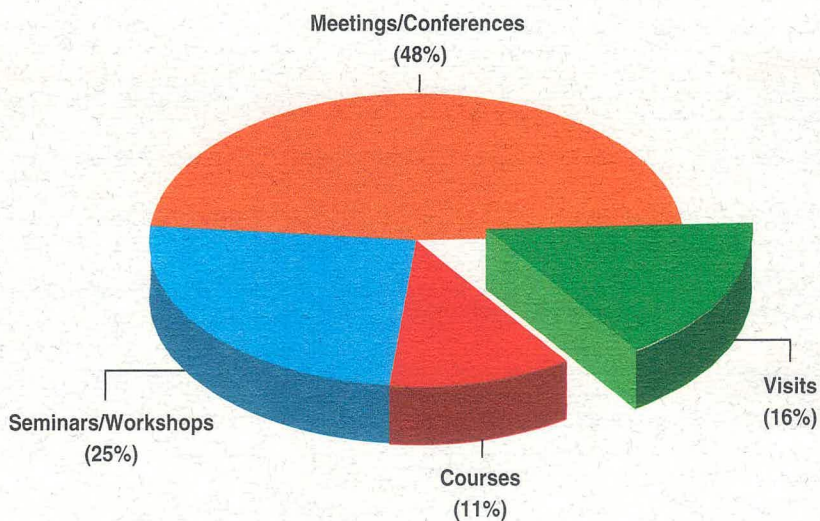


Figure 8.1 Department of Environment : Participation in Environmental Assignments Outside Malaysia, 1995

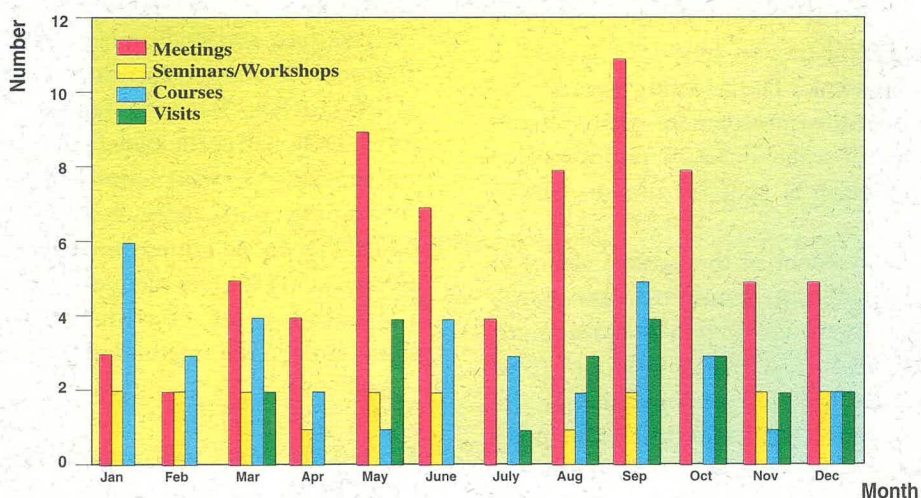


Figure 8.2 Department of Environment : Participation in Environmental Assignments Outside Malaysia, according to Month, 1995

served in the UNEP Governing Council. The Department helped to co-ordinate the Internship Programme for Officials for Enhancement of Communication Flow organised by UNEP/ROAP, Bangkok between April 3-14, 1995. The response to this initiative was encouraging and Malaysia was represented by officials of the Penang Development Corporation and Sarawak Rivers Board.

As the UNEP National Focal Point, DOE also participated actively in meetings, seminars, and courses organised by UNEP agencies, such as:

- (i) 8th Session of the Legal and Technical Working Group to Draft a Protocol on Liability and Compensation, Geneva, Switzerland, February 20-24, 1995
- (ii) Joint INFOTERRA/DSE Training

Course on Environmental Information Services, Bangkok, Thailand, February 27- March 10, 1995

- (iii) Informal Consultations on Montreal Protocol, Cairns, Australia, April 3-4, 1995
- (iv) UNEP/UNCTAD Expert Group Meeting on Internisation of Environmental Cost, New York, USA, April 10-11, 1995
- (v) 18th Session of the UNEP Governing Council, Nairobi, Kenya, May 15-26, 1995
- (vi) Workshop on Economic Principles to Improve Environmental Management of Freshwater Resources, Nairobi, Kenya, June 14-16, 1995
- (vii) 8th Session of the Technical Working

- Group on Guidelines of the Basel Convention, Geneva, June 22-23, 1995
- (viii) 3rd Intersessional Meeting of the Extended Bureau of the Basel Convention, Geneva, June 26-28, 1995
 - (ix) Expert Group Meeting on the ASEAN State of Environment Report, Manila, Philippines, July 4-6, 1995
 - (x) 4th Intersessional Meeting of the Extended Bureau of the Basel Convention, Geneva, Sept. 14-15, 1995
 - (xi) 3rd Meeting of the Conference of Parties to the Basel Convention, Geneva, Sept. 18-22, 1995
 - (xii) Meeting on Progress of ODS Phase-out Project under UNDP and Follow-up with International CFC and Halon Conference, Washington D.C., Oct. 16-20, 1995
 - (xiii) Environmental Management Seminar, Bangkok, Thailand, Oct. 16-27, 1995
 - (xiv) Inter-governmental Meeting of the Marine Environment from Land-based Activities, Washington D.C., Oct. 23-Nov. 3, 1995
 - (xv) NIEM Workshop on Regulatory Options for Fostering Improved Environmental Management in Pulp and Paper Industry, Bangkok, Thailand, Nov. 15-18, 1995
 - (xvi) UNEP Regional Workshop on Energy Planning, Beijing, China, Nov. 23-24, 1995
 - (xvii) Workshop on the Application of Methodologies, Bali, Indonesia, Nov. 27-Dec. 1, 1995
 - (xviii) 18th Consultative Meeting of Contracting Parties to the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, Dec. 4-8, 1995
 - (xix) Technical Assessment and Study Tour on Non HCFC Technology, Stockholm, Sweden, Dec. 11-13, 1995
 - (xx) Second Bureau Meeting to the Seventh Meeting of the Parties to the Montreal Protocol, Vienna, Austria Dec. 5-17, 1995
 - (xxi) 9th Session of the Technical Working Group on Guidelines of the Basel Convention, Bonn, Germany, Dec. 11-13, 1995



