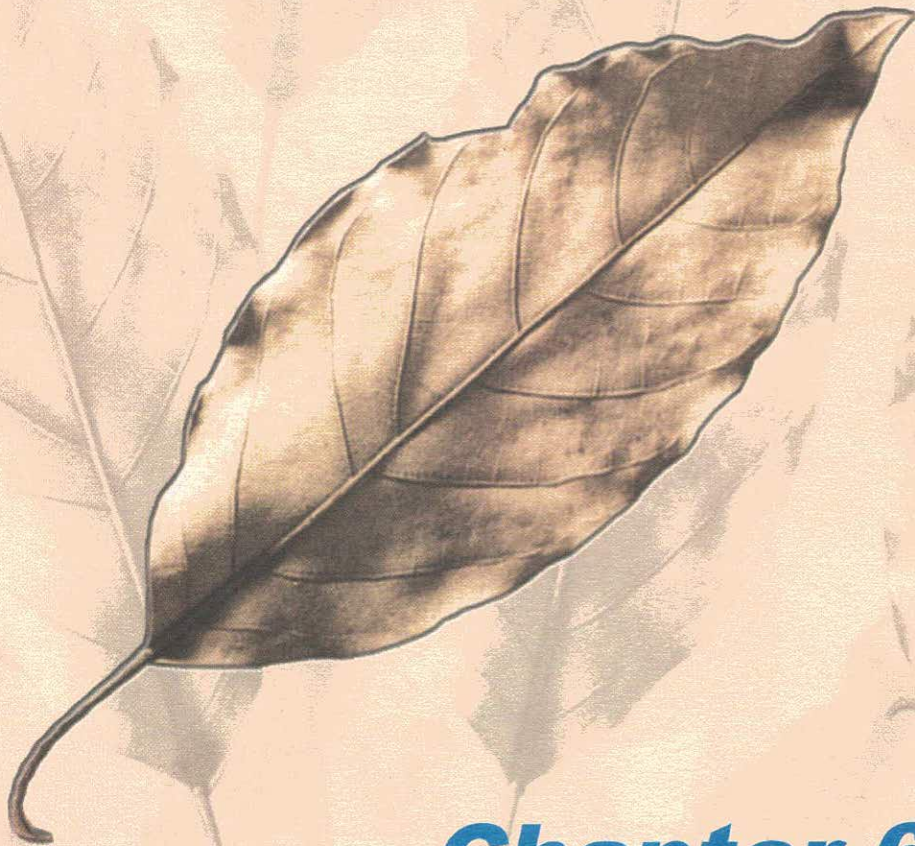


Bab 6



Chapter 6

PROMOSI PENDIDIKAN, KESEDARAN AWAM DAN SEBARAN MAKLUMAT ALAM SEKITAR

PENDAHULUAN

Meskipun aktiviti penguatkuasaan undang-undang diperhebatkan setiap tahun, promosi kesedaran alam sekitar menerusi aktiviti pendidikan dan penyebaran maklumat tetap kekal sebagai satu komponen yang penting dan strategik dalam pengurusan alam sekitar mampan yang diterajui oleh Jabatan Alam Sekitar semenjak tahun 1975. Faedah yang dihasilkan boleh merupakan ketara dan tidak ketara, dan dalam analisis akhir didapati proses ini menanamkan nilai kesedaran yang tinggi, menghasilkan ilmu pengetahuan dan membentuk skil serta sikap terhadap pemahaman yang lebih baik dan penghargaan terhadap interaksi di antara manusia dan alam sekitarnya.

PROMOTING EDUCATION, PUBLIC AWARENESS AND INFORMATION DISSEMINATION

INTRODUCTION

Notwithstanding the intensification of regulatory enforcement activities progressively over the years, the promotion of environmental awareness through educational activities and dissemination of environmental information remained an essential and strategic component of sustainable environmental management, spearheaded by the Department of Environment since its inception in 1975. The benefits to be derived can be both tangible and intangible, and in the final analysis, the process inculcates values, creates greater awareness, generates knowledge and develops skills and attitude for a better understanding and appreciation of the interaction between man and his environment.



Y.B Menteri dengan pemenang PRIAS 2000
Y.B Minister with PRIAS winner 2000

Promosi Kesedaran Alam Sekitar (Aktiviti Ko-Kurikulum)

Projek Wira Alam

Projek Wira Alam merupakan satu program kesedaran yang unik yang dianjurkan oleh Jabatan Alam Sekitar dengan kerjasama Persatuan Pencinta Alam Malaysia (MNS) bagi pelajar-pelajar di antara umur 10 - 16 tahun. Ianya bertujuan bagi menanam kesedaran alam sekitar dan memupuk nilai-nilai murni alam sekitar di samping memotivasikan pelajar-pelajar sekolah agar bergiat aktif dalam usaha perlindungan dan pembaikan alam sekitar. Projek ini

Promotion of Environmental Awareness (extracurricular school activities)

“Wira Alam” Project

Wira Alam is a unique project implemented by DOE in collaboration with the Malaysian Nature Society (MNS) for students between the age of 10 to 16 years old. It aims to inculcate environmental awareness and values as well as motivates school children to participate in environmental improvement and protection activities. The project was jointly launched by the Minister of Education, YB Dato' Seri Najib

telah dilancarkan bersama dengan rasminya oleh Menteri Pendidikan Malaysia, YB Dato' Seri Najib Abdul Razak dan Menteri Sains, Teknologi dan Alam Sekitar, YB Datuk Law Hieng Ding pada 5 Jun 1998 bersempena dengan sambutan Hari Alam Sekitar Sedunia.

Projek ini mengandungi 3 buah buku aktiviti yang melambangkan 3 peringkat berbeza dalam pencapaian usaha alam sekitar seseorang pelajar iaitu Wira Diri, Wira Komuniti dan Wira Alam yang mana juga turut melambangkan penglibatan pelajar tersebut dalam projek-projek kesedaran, komuniti dan alam sekitar. Pada 25 Oktober 2000, kumpulan pertama pelajar berjumlah 43 orang dari 3 buah sekolah iaitu SMK Convent (Klang), SMK Bandar Baru Bangi dan SMK Sri Utama (Damansara) telah berjaya mencapai pengiktirafan tahap Wira Komuniti.

Pada 17 Jun 2000, kumpulan pertama pelajar berjumlah 33 orang dari SMK Agaseh, Lahad Datu, Sabah telah berjaya melengkapkan tugas di tahap Wira Diri. Bagi meningkatkan penglibatan pelajar-pelajar dari Negeri Sabah, satu bengkel untuk 35 orang guru-guru Kelab Pencinta Alam Sabah telah diadakan pada 19 Jun 2000 dengan kerjasama Yayasan Sabah. Kedua-dua majlis telah dirasmikan oleh Timbalan Menteri Sains, Teknologi dan Alam Sekitar, YB Dato' Hj. Zainal bin Dahalan.

Di Sarawak, satu siri bengkel telah diadakan di Sarikei, Miri dan Kuching pada masing-masing 23, 26 dan 28 Julai 2000 setelah pelancaran rasminya dibuat oleh YB Datuk Law Hieng Ding, Menteri Sains, Teknologi dan Alam Sekitar pada 23 Julai 2000 di Sarikei. Kesemua bengkel ini telah berjaya menarik penyertaan dari 123 orang guru.

Setelah dilancarkan pada tahun 1998, Projek Wira Alam telah disertai oleh 4,627 pelajar dari 77 buah sekolah menengah dan rendah (**Jadual 6.0**).

Kem Kesedaran Alam Sekitar (KeKAS)

Tujuh buah modul kem kesedaran alam sekitar telah dihasilkan pada tahun 1994 dengan kerjasama berbagai pertubuhan bukan kerajaan (Persatuan Pencinta Alam Malaysia (MNS), Dana Hidupan Liar Malaysia (WWF), Centre for Environment Technology

Abdul Razak and the Minister of Science, Technology and the Environment, YB Datuk Law Hieng Ding on 5 June 1998 in conjunction with the 1998 World Environment Day.

Essentially the project consists of three activity booklets for three different levels of environmental achievements (Wira Diri, Wira Komuniti and Wira Alam) representing depth and scale of involvement in the project; personal community level and the environment at large. On 25 October 2000, the first group of 43 students from 3 schools namely, SMK Convent (Klang), SMK Bandar Baru Bangi and SMK Sri Utama (Damansara) succeeded in achieving the "Wira Komuniti" award.

On 17 June 2000, the first group of 33 students from SMK Agaseh, Lahad Datu, Sabah completed the Wira Diri level. To support this effort, on 19 June 2000, a workshop for 35 Nature Club teachers in Sabah was organised with the cooperation of the Sabah Nature Club at Yayasan Sabah. Both functions were officiated by the Deputy Minister of Science, Technology and the Environment, YB Dato' Hj. Zainal bin Dahalan.

In Sarawak, a series of workshop were organised in Sarikei, Miri and Kuching on 23, 26 and 28 July 2000 respectively, following the launching of the Wira Alam Project in Sarikei, Sarawak by YB Datuk Law Hieng Ding, Minister of Science, Technology and the Environment on 23 July 2000. A total of 123 teachers participated at the workshops.

*Since its launching in 1998, 4,627 students from 77 secondary and primary schools had participated in the project (**Table 6.0**)*

Environmental Awareness Camps

Seven environmental awareness camp modules were developed in 1994 in collaboration with several Environmental NGOs (Malaysian Nature Society, Worldwide Fund for Nature Malaysia, Centre for Environment Technology & Development Malaysia, Consumer

and Development, Malaysia (CETDEM), Gabungan Persatuan-Persatuan Pengguna Malaysia (FOMCA)), pihak universiti (universiti Putra Malaysia, Universiti Malaya) dan Golden Hope Plantation Bhd iaitu Ekosistem Sungai, Ekosistem Pinggir Pantai, Ekosistem Hutan, Ekosistem Tanah Tinggi, Ekosistem Pertanian Organik, Ekosistem Bandar dan Ekosistem Perladangan. 14 buah KeKAS telah dianjurkan sebagai percubaan terhadap modul-modul yang dihasilkan sebelum ianya digunakan dengan meluas. Semenjak tahun berikutnya, KeKAS telah dianjurkan sebagai acara tahunan untuk pelajar-pelajar sekolah. Sehingga kini, 119 buah KeKAS telah berjaya dianjurkan.

Dalam tahun 2000 sahaja, 31 buah KeKAS telah dianjurkan oleh JAS Negeri dengan kerjasama Pertubuhan Bukan Kerajaan dan pihak swasta untuk kedua-dua golongan pelajar dan guru (**Jadual 6.1**).

Bengkel Latihan bagi membimbing guru-guru bagi menggunakan modul-modul KeKAS telah dianjurkan pada 24 - 27 April 2000 di Tekam Plantation Resort, Jerantut yang dihadiri oleh 53 orang guru terpilih dari seluruh Malaysia dan 2 orang wakil dari setiap JAS Negeri. 40 orang guru yang telah menjalani latihan tersebut telah diberikan peruntukan sebanyak tidak melebihi RM3,000 di bawah Rancangan Malaysia Ketujuh bagi menganjurkan KeKAS untuk pelajar-pelajar mereka dengan bantuan dan kerjasama pejabat JAS Negeri (**Jadual 6.2**).

Promosi Kesedaran Alam Sekitar Melalui Pertandingan Bertemakan Alam Sekitar

Projek Riadah Alam Sekitar (PRIAS)

PRIAS lahir dari usahasama antara Jabatan Alam Sekitar, Kementerian Pendidikan Malaysia, Persatuan Ahli-Ahli Sains Malaysia (MSA) dan Tetra Pak Sdn.Bhd. Objektif utama projek ini adalah bagi menanam kesedaran dan memupuk nilai-nilai murni alam sekitar di kalangan masyarakat muda.

Dalam tahun 2000, 34 buah penyertaan telah disenaraipendekkan oleh Jabatan Pendidikan Negeri seluruh Malaysia dan telah diadili di peringkat kebangsaan.

Association for Selangor & the Federal Territory), the Universities (Universiti Putra Malaysia, Universiti Malaya) and Golden Hope Plantation Berhad: River Ecosystem, Marine Ecosystem, Forest Ecosystem, Highland Ecosystem, Organic Farming Ecosystem, Urban Ecosystem and Plantation Ecosystem. Fourteen Environmental Awareness (EA) Camps were initially conducted to test and fine-tune the modules before its full implementation. Since then, EA camps had been held regularly for school children in different parts of the country. To date a total 119 camps had been conducted.

In the year 2000 alone, 31 camps were organised by the DOE State Offices with cooperation from NGOs and the private sector for both teachers and students (Table 6.1).

A "Train the Trainers" Workshop was held at the Tekam Plantation Resort, Jerantut, Pahang on 24-27 April 2000 which was attended by 53 teachers from selected schools all over Malaysia and two representatives from each DOE State Office. Following the workshop, 40 teachers were granted RM3,000 each under the Seventh Malaysia Plan allocation to conduct their own camps with the support of DOE State Offices (Table 6.2).

Promotion of Environmental Awareness via Environmental-theme Competition

PRIAS (Environment Awareness Project – Scrap Book Competition)

The PRIAS project is a joint effort by the Department of Environment, the Ministry of Education, the Malaysian Scientific Association and Tetra Pak Sdn. Bhd; the principal objective being to instill environmental awareness and develop good environmental habits among the younger members of society.

In the year 2000, 34 entries were received from State Education Departments throughout Malaysia which were shortlisted for competition at the national level.

Penyertaan yang berjaya adalah

- ◆ SMK Greenroad, Kuching (Tempat Pertama)
- ◆ SMK Lutong, Miri, Sarawak (Tempat Kedua)
- ◆ SMK Jalan Damai, Bukit Mertajam, Pulau Pinang (Tempat Ketiga)

Pertandingan Debat Alam Sekitar Antara Institusi Pengajian Tinggi 2000

Pertandingan Debat Alam Sekitar Antara Institusi Pengajian Tinggi telah mula dianjurkan semenjak tahun 1990 lagi. Pada tahun 2000, 11 buah institusi Pengajian Tinggi Awam telah mengambil bahagian. Pertandingan tersebut telah diadakan di Universiti Malaysia Sarawak pada 18-24 Julai 2000. Kumpulan Pendebat dari Universiti Islam Antarabangsa Malaysia (UIAM) yang diwakili oleh Shahrul Sherrina Yanti Khairul Azman, Norjima Habib Mohamed, Ahmad Badrulhisham Che Kasim dan Syamsul Hidayat Mohd. Syariff telah berjaya menjadi Johan dan merebut Piala Pusingan setelah menewaskan Universiti Teknologi MARA (UiTM). Johan menerima sebuah Piala Pusinan dan wang tunai RM3,000 dan pendebat terbaik yang jatuh kepada pendebat dari UIAM iaitu Syamsul Hidayat Mohd. Syariff yang menerima Piala Pendebat Terbaik yang dihadiahkan oleh Ketua Pengarah Alam Sekitar dan wang tunai RM300.00. Topik bagi perdebatan akhir tersebut adalah "Pendidikan Menentukan Keberterusan Keharmonian Alam Sekitar".

Pertandingan Debat Alam Sekitar Antara Universiti ASEAN 2000

Berdasarkan kepada kejayaan penganjuran Pertandingan Debat Alam Sekitar Antara Universiti ASEAN 1999 di Malaysia, Jabatan Alam Sekitar sekali lagi telah diminta oleh negara-negara ASEAN yang bertanding untuk menjadi tuan rumah bagi pertandingan tersebut buat kedua kalinya bersempena dengan sambutan Tahun Alam Sekitar ASEAN 2000.

Pertandingan ini telah dianjurkan dengan kerjasama Bahagian Hal Ehwal Pelajar Univesriti Malaya pada 3-9 September 2000. Cambodia, Indonesia, Philippines, Singapore, Thailand, Malaysia dan Vietnam telah mengambil bahagian di mana setiap negara diwakili oleh satu kumpulan pendebat

The winning entries for 2000 which were selected by an independent panel of judges were:

- ◆ *SMK Greenroad, Kuching (1st prize)*
- ◆ *SMK Lutong, Miri, Sarawak (2nd prize)*
- ◆ *SMK Jalan Damai, Bukit Mertajam, Pulau Pinang (3rd prize)*

Inter-Varsity Environmental Debate 2000 (Bahasa Malaysia)

The Inter-Varsity Environmental Debate for public institutions of higher learning in Malaysia had been organised since 1990. In 2000, 11 institutions of higher learning took part. The event was held at Universiti Malaysia Sarawak on 18-24 July 1999.

The team from the International Islamic University Malaysia (UIA) represented by Shahrul Sherrina Yanti Khairul Azman, Norjima Habib Mohamed, Ahmad Badrulhisham Che Kasim and Syamsul Hidayat Mohd. Shariff took home the Challenge Trophy overcoming the team from Universiti Teknologi MARA (UITM). The winning team received a Challenge Trophy and a cash prize of RM3,000.00 and the Best Speaker from UIAM, Syamsul Hidayat Mohd. Syariff received a trophy donated by the Director-General of Environment and a cash prize of RM300.00. The topic for the final was "Pendidikan Menentukan Keberterusan Keharmonian Alam Sekitar".

ASEAN Inter-Varsity Environmental Debate 2000

Based on the success of the First ASEAN Inter-Varsity Environmental Debate in 1999 in Malaysia, the Department of Environment was again requested by the ASEAN participating teams to host another such event in conjunction with ASEAN Environment Year 2000.

Thus the Second ASEAN Inter-Varsity Environmental Debate was organised in collaboration with the Student Affairs Department of the University of Malaya between 3-9 September 2000. Cambodia, Indonesia,

seramai 4 orang pelajar.

Pendebat dari Malaysia iaitu dari Kumpulan A yang diwakili oleh Choong Mei Yee (UM), Mediha Mahmood (UIAM), Mohd. Sani Mohd. Ismail (UIAM) dan Tizreena Mohd. Ismail (UPM) telah berjaya merangkul Piala Pusingan dan wang tunai RM5,000.00. Pendebat Terbaik jatuh kepada Jonathan Yuen Djia Chiang dari Singapura (NUS). Topik bagi perdebatan akhir adalah "That Trade Liberalization is a Threat to Sustainable Development". Ahli-Ahli panel hakim pula adalah terdiri dari pakar-pakar alam sekitar dan pegawai-pegawai yang dicalonkan oleh negara-negara yang mengambil bahagian.

Peraduan Menulis Cerita Pendek Bertemakan Alam Sekitar 2000

Pertandingan ini telah dilancarkan pada 26 Januari 2000 oleh YB Datuk Law Hieng Ding. Setelah tarikh tutup penyertaan pada 30 Mei 2000 berakhir, 171 dan 131 buah penyertaan telah diterima bagi kedua-dua kategori di bawah 18 tahun dan 18 tahun ke atas. Panel-panel hakim adalah diketuai oleh 2 orang penulis bebas iaitu Puan Zaharah Nawawi (untuk kategori di bawah 18 tahun) dan En. Mohamad Ali Majod (bagi kategori 18 tahun ke atas). Penyertaan yang berjaya adalah seperti yang disenaraikan seperti di **Jadual 6.3**.

Promosi Kesedaran Orang Awam (Kempen Untuk Orang Awam)

Minggu Alam Sekitar Malaysia

Sambutan Minggu Alam Sekitar Malaysia 2000 (MASM) telah diadakan pada 21 - 27 Oktober 2000, merupakan MASM ke sebelas sejak Deklarasi Langkawi Mengenai Alam Sekitar dan Pembangunan pada tahun 1989 oleh Ketua-Ketua Kerajaan Komanwel. Pelancaran rasmi MASM 2000 telah diadakan di Shah Alam Selangor.

YB Datuk Law Hieng Ding, Menteri Sains, Teknologi dan Alam Sekitar telah mewakili Perdana Menteri, YAB Dato' Seri Dr. Mahathir Mohamad untuk melancarkan MASM 2000 di Dataran Shah Alam, Selangor. Menteri Besar Selangor, YAB Dato Dr.

Philippines, Singapore, Thailand, Malaysia and Vietnam registered for the debate. Each participating team comprised of four undergraduates.

The Malaysian Team A represented by Choong Mei Yee (UM) , Mediha Mahmood (UIAM), Mohd. Sani Mohd. Ismail (UIAM) and Tizreena Mohd. Ismail (UPM) won the Challenge Trophy and a cash prize of RM5,000.00. The Best Speaker Trophy was given to Jonathan Yuen Djia Chiang from Singapore (NUS). The topic for the final debate was "That Trade Liberalization is a threat to Sustainable Development". The panel of adjudicators were made up of officials and experts nominated by ASEAN member countries.

Short-Story Writing Competition 2000 (Bahasa Malaysia)

*The competition was launched on 26 January 2000 by YB Datuk Law Hieng Ding. After the closing date on 30 May 2000, 171 and 131 entries were received for the below 18 and over 18 categories respectively. The two panels of judges were headed by two professional freelance writers namely, Puan Zaharah Nawawi for the below 18 category and En. Mohamad Ali Majod for the above 18 category. The winning entries are shown in **Table 6.3**.*

Promotion of Public Awareness (Public campaigns)

Malaysia Environment Week

The Malaysia Environment Week for 2000 (MASM) was held on 21 – 27 October 2000, the eleventh MASM since the 1989 Langkawi Declaration on Environment and Development was signed by the Commonwealth Heads of Government. The official launching of MASM 2000 was held at Shah Alam, Selangor.

YB Datuk Law Hieng Ding, the Minister of Science, Technology and the Environment represented the Prime Minister, YAB Dato' Seri Dr. Mahathir Mohamad to officially launch

Mohamad Khir Toyo juga turut hadir sebagai tetamu kehormat. Tema Sambutan MASM 2000 ialah "Alam Sekitar Dihargai, Kesejahteraan Dihargai". Antara tetamu kenamaan yang turut hadir ialah Timbalan Menteri Sains, Teknologi dan Alam Sekitar, Ahli-Ahli EXCO Kerajaan Negeri Yang Bertanggungjawab Terhadap Alam Sekitar, H.E. Mr. Chitsaka Chipaziwa, Pesuruhjaya Tinggi Zimbabwe dan beberapa orang wakil diplomat ke Malaysia, Ketua Pegawai Eksekutif dari pihak industri dan NGOs.

Antara aktiviti yang dijalankan sepanjang minggu adalah:

- ◆ Majlis Pelancaran "Pressed Fresh Flower".
- ◆ Pameran bertemakan Alam Sekitar.
- ◆ Pertandingan Melukis Oleh Pelajar Sekolah.
- ◆ Mesyuarat Ahli-Ahli EXCO Kerajaan Negeri Yang Bertanggungjawab Terhadap Alam Sekitar.
- ◆ Penyampaian Anugerah Langkawi 2000.
- ◆ Konsert Alam.
- ◆ Pelancaran Kempen Lebuhraya Bersih dan Ceria.
- ◆ Forum Mengenai Alam Sekitar.
- ◆ Seminar "ISO 14000 Kesedaran Alam Sekitar untuk SMI".
- ◆ Rekreasi Air.
- ◆ Kem Kesedaran Alam Sekitar.
- ◆ "Envirohunt".

Sambutan 25 Tahun Penubuhan JAS (Jubli Perak)

Jabatan telah menyambut Sambutan Jubli Perak pada 15 November 2000. Bersempena dengan Sambutan ini, satu seminar dan pameran telah diadakan bagi memaparkan pencapaian dan kejayaan dalam pengurusan alam sekitar dalam tempoh 25 tahun yang lepas. Maklumbalas yang diterima dari orang ramai di seminar tersebut telah diambil maklum untuk dimasukkan sebagai program dan aktiviti Jabatan. Beberapa organisasi alam sekitar utama dan NGOs telah mengambil bahagian dalam pameran ini.

MASM 2000 at Dataran Shah Alam, Selangor. The Menteri Besar of Selangor, YAB Dato Seri Mohamad Khir Toyo also graced the occasion. The theme for MASM 2000 was "Alam Sekitar Dihargai, Kesejahteraan Dinikmati". Among the dignitaries present were the Deputy Minister of Science, Technology and the Environment, State Executive Council Members responsible for environmental matters from all states, Members of Parliament, Selangor State Assemblymen, senior government officials, H.E. Mr. Chitsaka Chipaziwa, the High Commissioner of Zimbabwe and several representatives from diplomatic missions in Malaysia, the industrial sector CEO's and NGOs.

Among the activities throughout the week were:

- ◆ *Pressed Fresh Flower Launching Ceremony*
- ◆ *Environmental Exhibition*
- ◆ *Drawing Competition for School Children*
- ◆ *Meeting of Executive Council Members responsible for Environmental Affairs (MEXCOE)*
- ◆ *Presentation of Langkawi Award 2000*
- ◆ *Enviro-Concert*
- ◆ *Launching of Clean Highway Campaign*
- ◆ *Forum on Environment*
- ◆ *SMI Environmental Awareness ISO 14000 Seminar*
- ◆ *Envirocamp*
- ◆ *Water Recreation*
- ◆ *Envirohunt*

DOE 25th Anniversary (Silver Jubilee)

The department celebrated its Silver Jubilee on 15 September 2000. In conjunction with this anniversary, a Seminar-cum-Exhibition was held showcasing achievements and successes in environmental management over the last 25 years. Public feedback received at the seminar would be considered for incorporation into programmes and activities of the department. Several leading environmental organisations and NGOs also took part in the exhibition.

Promosi Kesedaran Alam Sekitar (Media Massa) Kwiz Alam Sekitar

Kwiz Kesedaran Alam Sekitar untuk orang awam dan anak-kanak telah diadakan setiap hari Khamis antara jam 3.30 – 4.00 petang dan setiap hari Sabtu antara jam 11.30 – 12.00 tengahari di Radio 1, RTM. Topik-topik spesifik dibincangkan di setiap sesi dan selepas itu pendengar dijemput untuk membuat panggilan untuk menjawab soalan yang dikemukakan. Setiap pemenang diberi RM 50.00.

Melalui kesempatan ini juga, JAS dapat menyampaikan maklumat kepada orang awam mengenai aktiviti yang akan dijalankan dan menyebarkan maklumat mengenai alam sekitar.

Anugerah Alam Sekitar dan Pengiktirafan

Anugerah Langkawi

Anugerah Langkawi merupakan anugerah paling berprestij di Malaysia diberi bagi mengiktiraf sumbangan emerlang dalam bidang pengurusan alam sekitar, pemuliharaan dan perlindungan. Anugerah Langkawi 2001 telah diberikan kepada Prof. Dr. Muhamad bin Awang, Timbalan Naib Canselor (Pembangunan) Universiti Putra Malaysia, yang menerima wang tunai berjumlah RM 10,000.00, sebuah plak

dan Sijil yang ditandatangani oleh Seri Paduka Baginda Yang di-Pertuan Agong. Malam Anugerah Langkawi ini juga telah di hadiri oleh tetamu DiRaja, Seri Paduka Baginda Yang di-Pertuan Agong dan Raja Permaisuri Agong. YAB Dato Menteri Besar Selangor serta isteri, YB Menteri Sains, Teknologi dan Alam Sekitar, Ahli-Ahli EXCO Kerajaan Negeri, pegawai-pegawai kanan dan wakil-wakil ketua masyarakat juga mengahdiri majlis ini.

Promotion of Environmental Awareness (Mass Media) Environmental Quizzes

Environmental Awareness Quizzes for children and the public were conducted every Thursday between 3.30pm – 4.00pm and every Saturday between 11.30am – 12.00pm on Radio 1, RTM. A specific environmental topic was discussed at every session after which listeners were invited to call in to provide answers to the questions posed. Each correct answer received RM50.00.

With the airtime available, DOE could also inform the public of forthcoming activities as well as disseminating environmental messages.

Environmental Awards and Recognition

Langkawi Award



Penyampaian Anugerah Langkawi 2000
Presentation of Langkawi Award 2000

The Langkawi Award is the most prestigious environmental award in Malaysia given in recognition of significant contribution to the field of environmental management, conservation and protection. The 2000 Langkawi Award was given to Prof. Dr. Muhamad bin Awang, Deputy Vice Chancellor (Development) of Universiti Putra Malaysia, which consisted of RM 10,000 cash prize, a plaque

and a certificate signed by Seri Paduka Baginda Yang DiPertuan Agong. The 2000 Langkawi Night was graced by the presence of His Majesty Seri Paduka Baginda Yang DiPertuan Agong and the Raja Permaisuri Agong. The Menteri Besar of Selangor and his wife, the Menteri Sains, Teknologi and the Environment and his wife, State Executive Councillors, senior officials and members of the public also attended the function.

Anugerah Warga Alam

Anugerah warga Alam telah diberikan kepada Encik Karamsingh Walia dari TV3 dan sebuah pertubuhan bukan kerajaan yang aktif mengenai hal-ehwal alam sekitar iaitu TrEES (Treat Every Environment Sepecial). Setiap pemenang telah menerima Sijil dan Pingat. Anugerah Warga Alam pertama kali diperkenalkan pada

tahun 1999, berasaskan kepada sumbangan secara sukarela, perkhidmatan dan amalan yang menjurus kepada pemuliharaan dan perlindungan alam sekitar.

Anugerah Kewartawanan Alam Sekitar ICI/CCM (EJA)

Anugerah Kewartawanan Alam Sekitar ICI/CCM (EJA) yang disokong oleh Menteri Sains, Teknologi dan Alam Sekitar telah diperkenalkan untuk sebagai pengiktirafan kepada wartawan alam sekitar kerana memberi kesamarataan, maklumat dan bertanggungjawab membuat laporan melalui media cetak dan elektronik serta berita bergambar. Ketua Pengarah Alam Sekitar merupakan Ahli Panel Hakim EJA. Sebanyak 170 penyertaan telah diterima pada tahun 2000. Pemenang telah menerima hadiah daripada YB Dato Law Hieng Ding, Menteri Sains, Teknologi dan Alam Sekitar pada 16 Oktober 2000 (**Jadual 6.4**)

Anugerah Hibiscus Perdana Menteri

Anugerah berprestij Hibiscus Perdana Menteri telah diperkenalkan pada tahun 1996 sebagai anugerah alam sekitar terulung kepada sektor perniagaan dan industri di Malaysia. Anugerah tahun 2000/2001 akan disampaikan pada February 2002. Pemenang Anugerah ini akan menerima plak, sijil dan dibenarkan menggunakan logo "Green Hibiscus" untuk tujuan publisiti.

Green Citizen Award



Penyampaian Anugerah Warga Alam 2000
Presentation of Green Citizen Award 2000

The Green Citizen Awards for 2000 were given to Mr. Karamsingh Walia from TV3 and TrEES (Treat Every Environment Special), an active environmental NGO. Each received a certificate and a medal. The Green Citizen

Award was first introduced in 1999 to give recognition to voluntary acts, deeds or services towards environmental conservation and protection.

ICI/CCM Environmental Journalism Award (EJA)

The ICI/CCM Environmental Journalism Award which is supported by the Ministry of Science, Technology and the Environment has been introduced to give recognition to Malaysian environmental journalists for providing balanced, informative and responsible reporting through the print and electronic media as well as photojournalism. The Director-General of Environment is a member of the EJA Panel of Judges. A record 170 entries were received in 2000. The winners received their prizes from YB Datuk Law Hieng Ding, the Minister of Science, Technology and the Environment on 16 October 2000 (Table 6.4).

Prime Minister Hibiscus Award

This prestigious Prime Minister Hibiscus Award was introduced in 1996 as a premier private sector environmental excellence award for business and industry in Malaysia. The 2000/2001 award will be presented in February 2002. Winners of the award will receive a plaque and a certificate and will also be entitled to use the Green Hibiscus logo for publicity purposes.

Projek Millineum Gift of Trees

Projek "Millineum Gift of Trees" telah dilancarkan oleh Perdana Menteri, YAB Dato' Seri Dr. Mahathir Mohamad pada 15 Oktober 2000 di Taman Bukit Jalil, Kuala Lumpur bersempena Hari Habitat Sedunia 2000. Pada hari yang sama, direkodkan 110,641 batang pokok telah di tanam dalam masa 1 minit oleh seluruh warganegara di pelbagai lokasi di seluruh Malaysia. JAS amat berbangga kerana turut terlibat dalam projek penanaman pokok ini.

Promosi Kesedaran menerusi Kerjasama Sektor Swasta

Sepanjang tahun, JAS telah dijemput untuk mengambil bahagian dan menganjurkan bersama beberapa aktiviti promosi alam sekitar seperti pameran, seminar, ceramah, dialog, pertandingan dan projek khidmat masyarakat dengan badan korporat dan sektor swasta.

Promosi Kesedaran Alam Sekitar (Kerjasama Antarabangsa)

Forum Alam Sekitar Belia ASEAN (5 – 8 Jun 2000, Singapura)

Jabatan telah memilih dua orang calon untuk mewakili Malaysia ke Forum Alam Sekitar Belia ASEAN yang dianjurkan oleh Majlis Anugerah Kebangsaan Pencapaian Belia Singapura (NYAAC) yang disokong oleh Hongkong and Shanghai Banking Corporation (HSBC), Majlis Alam Sekitar Singapura dan Kementerian Alam Sekitar Singapura. Forum dianjurkan bersempena dengan Tahun Alam Sekitar ASEAN 2000. Cik Choong Mei Yee (Universiti Malaya) dan Cik Tizreena Mohd Ismail (Universiti Putra Malaysia) telah terpilih untuk menyertai forum ini.

Millennium Gift of Trees Project

The "Millennium Gift of Trees" project was launched by the Prime Minister, YAB Dato' Seri Dr. Mahathir Mohamad on 15 October 2000 at Taman Bukit Jalil, Kuala Lumpur in conjunction with World Habitat Day 2000. On the same day, a record 110,641 trees were planted in one minute at many locations throughout Malaysia. DOE was proud to be associated with this tree planting effort.



Projek "Millennium Gift of Trees"
"Millennium Gift of Trees" Project

Promoting Awareness via Co-operation with Private Sector

Throughout the year, DOE was invited to participate and jointly organised a number of environmental promotion activities such as exhibitions, seminars, talks, dialogues,

competitions and community services projects with corporate bodies and the private sector.

Promotion of Environmental Awareness (International Cooperation)

ASEAN Youth Forum on the Environment (5-8 June 2000, Singapore)

The department selected two candidates to represent Malaysia at the ASEAN Youth Forum on Environment organised by the Singapore National Youth Achievement Award Council (NYAAC) with the support of the Hongkong and Shanghai Banking Corporation (HSBC), the Singapore Environment Council and Ministry of the Environment, Singapore. The forum was organised in conjunction with the ASEAN Environment Year 2000. Ms. Choong Mei Yee (Universiti Malaya) and Ms. Tizreena Mohd. Ismail (Universiti Putra Malaysia) were chosen to participate in the forum.

Jadual 6.0 Jabatan Alam Sekitar: Bilangan Penyertaan Pelajar /Sekolah dalam Projek Wira Alam, 2000
 Table 6.0 Department of Environment: Number of Participants (Students/Schools) in Wira Alam Project, 2000

| No | Negeri/State | Nama Sekolah/School | Tahap/Level 1 | | | Tahap/Level 2 | | | Tahap/Level 3 | | |
|----|-----------------|--|---|---------------------------------|------------|---------------|---------------|-----------|---------------|-----------|-----------|
| | | | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 |
| 1 | Perlis | tiada/none | | | | | | | | | |
| 2 | Kedah | 1. SMK Jerai, Kupang 2. SMK St. Nicholas, Alor Setar 3. SMK Sg. Petani, Sg. Petani 4. SMK Bukit Selambau, Sg. Petani 5. SMK Tunku Sofiah, Alor Setar 6. SMK Baling, Baling | 31 | 105 80 2 80 45 | 50 | 1 | | 15 1 | | | |
| | | JUMLAH / TOTAL | 31 | 312 | 50 | 1 | 16 | - | - | - | - |
| 3 | P.Pinang | 1. SMJK Union, Georgetown 2. SK Sg. Dua, Butterworth | 1 | 81 | | | | | | | |
| | | JUMLAH / TOTAL | 1 | 81 | - | - | - | - | - | - | - |
| 4 | Perak | 1. SRJK (Cina) Man Ming, Gopeng 2. SRJK (Cina) Perak, Ipoh 3. SM Yuk Choy, Ipoh 4. SMK Convent, Taiping 5. SM Sains Raja Tun Azlan Shah, Taiping 6. SMJK Ave Maria Convent, Ipoh 7. SK Kuala Pari, Menglembu 8. SMK Jelai, Batu Kurau 9. SMK Hua Lian, Taiping | 10 32 62 | 80 43 3 24 20 15 | | | 13 20 5 | | | | |
| | | JUMLAH / TOTAL | 104 | 185 | - | - | 38 | - | - | - | - |
| 5 | Selangor | 1. SK Damansara Utama, Petaling Jaya 2. SMK (P) Convent Klang, Klang 3. SMK Bandar Baru Bangi, Bangi 4. Sek. Sri Bestari, Damansara 5. SMK Bandar Sunway 6. SMK Tengku Ampuan Jemaah, P. Klang 7. SMK (P) Raja Zarina, P. Klang 8. SMK Sri Utama, Petaling Jaya 9. SMK Sri Gombak, Gombak 10. SMK Kuala Kubu Baru, Kuala Kubu Baru 11. SMK Ideal Heights, Batu Caves | 220 83 30 20 41 47 50 30 33 | 2 7 6 31 7 | | 7 6 26 | 6 35 | 19 | 15 | 9 | |
| | | JUMLAH / TOTAL | - | 554 | 86 | - | 39 | 49 | - | 19 | 24 |
| 6 | Kuala Lumpur | 1. SM Aminuddin Baki, Kg. Pandan 2. SM Sri Ampang, Ampang 3. SM Puteri Jaya, Jalan Pasar | 160 96 120 | | | | | | | | |
| | | JUMLAH / TOTAL | - | 376 | - | - | - | - | - | - | - |
| 7 | Negeri Sembilan | 1. SMK Puteri, Seremban 2. SMK Labu, Labu 3. SMK Pasoh Dua, Simpang Pertang 4. Kolej Tunku Khursiah, Seremban | 160 61 30 | 93 20 125 | | | | | | | |
| | | JUMLAH / TOTAL | - | 251 | 238 | - | - | - | - | - | - |
| 8 | Melaka | 1. SMK Durian Tunggal, Melaka Tengah 2. SMK Tinggi Melaka, Melaka Tengah | 36 | 150 | | 64 | | | | | |
| | | JUMLAH / TOTAL | - | 36 | 150 | - | 64 | - | - | - | - |
| 9 | Johor | 1. SMK Bandar Maharani, Muar 2. SMK Tengku Mahkota, Muar 3. SK Pengkalan Besar 4. SMK Tun Dr. Ismail, Muar 5. SK Permas Jaya (1), Johor Bharu | 36 83 | 21 115 | 44 | 10 | | | | | |
| | | JUMLAH / TOTAL | 119 | 136 | 44 | - | 10 | - | - | - | - |

| No. | Negeri/State | Sekolah/School | Tahap/Level 1 | | | Tahap/Level 2 | | | Tahap/Level 3 | | |
|-----|--------------|---|---------------|----------------------------------|--|---------------|------------|-----------|---------------|-----------|-----------|
| | | | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 | 1998 | 1999 | 2000 |
| 0 | Pahang | 1. SMK Mengkarak 2. SMK Tanah Putih, Kuantan 3. SMK Triang, Triang 4. SMK Bandar Kerayong 5. SMK (LKTP) Tembangau (1) 6. SMK Bera, Triang 7. SMK Purun, Triang 8. SMK Beserah, Kuantan | 5 | 2 | 56 | | 15 | 4 | | | |
| | | JUMLAH /TOTAL | 5 | 177 | 141 | - | 15 | 4 | - | - | - |
| 1 | Terengganu | 1. SMK Chung Hwa Wei Sin, Kuala Terengganu | | 87 | | | | | | | |
| | | JUMLAH /TOTAL | | 87 | | | | | | | |
| 2 | Kelantan | 1. SMK Sultan Ismail, Kota Bahru 2. SMK Mengkebang, Kuala Krai 3. SMK Zainab 1, Kota Bharu 4. SMK Palong Kalong, Kota Bahru 5. Maktab Sultan Ismail, Kota Bahru 6. SMK Nipah, Bachok 7. SMK Melor, Kota Bahru 8. SMK Kubang Kerian, Kubang Kerian | | 30 66 70 32 10 30 | | | | | | | |
| | | JUMLAH /TOTAL | - | 238 | 82 | - | - | - | - | - | - |
| 3. | Sabah | 1. SMK Agaseh, Lahad Datu 2. SMK Sg. Damit, Tamparuli 3. SK Sri Tanjung Papat 1, Sandakan 4. Maktab Sabah, K. Kinabalu 5. SMK Peter Mojuntin, Penampang 6. SMK St. Michael, Penampang 7. SMK Sanzac, Tanjung Aru | 34 | 28 15 | 38 200 81 126 39 | 23 | | 5 | 4 | | 2 |
| | | JUMLAH /TOTAL | 34 | 43 | 484 | 23 | - | 5 | 4 | - | 2 |
| 4 | Sarawak | 1. SMK St. Joseph, Miri 2. SMK St. Columba, Miri 3. SMK Tun Abdul Razak, Kuching 4. SMK Baru Bintulu 5. SMK St. Thomas, Kuching 6. SMK Telang Usan, Marudi 7. SMK Padawan, Kuching 8. SMK Teknik Bintulu, Bintulu 9. SMK Bintulu, Bintulu 10. SMK Lutong, Lutong 11. SMK Limbang, Limbang | | 20 | 53 40 40 16 42 126 35 45 110 55 | | | | | | |
| | | JUMLAH /TOTAL | - | 20 | 562 | - | - | - | - | - | - |
| | | JUMLAH BESAR/GRAND TOTAL | 294 | 2496 | 1837 | 24 | 182 | 58 | 4 | 19 | 26 |
| | | JUMLAH BESAR (1998-2000)/GRAND TOTAL (1998-2000) | | 4,627 | | 264 | | | 49 | | |

Jadual 6.1 Jabatan Alam Sekitar: Senarai Kem Kesedaran Alam Sekitar, 2000
 Table 6.1 Department of Environment: List of Environmental Awareness Camps, 2000

| BIL NO | NEGERI STATE | BILANGAN KEM NO. OF CAMPS | TARIKH DATE | BILANGAN HARI DAY | BILANGAN PESERTA PARTICIPANTS | TEMPAT LOCATION |
|--------|---------------------|---------------------------|--|----------------------|---|---|
| 1. | Kedah | 2 | a) 26 - 29 Mei 2000 b) 1 - 4 Sept. 2000 | a) 4 b) 4 | a) 60 Pelajar/students b) 60 Guru/teachers | a) Rimba Takwa, Sik b) Kem Singkir, Merbok |
| 2. | Perlis | 1 | a) 6 - 9 Sept. 2000 | a) 4 | a) 40 Pelajar/students | a) Taman Rekreasi Jab. Hutan, Perlis |
| 3. | Langkawi | 1 | a) 6 - 9 Sept. 2000 | a) 4 | a) 30 Pelajar/students | a) Pasir Tengkorak, Datai |
| 4. | Perak | 2 | a) 26 - 29 Mei 2000 b) 1 - 4 Sept. 2000 | a) 3 b) 3 | a) 42 Pelajar/students b) 20 Guru/teachers | a) Hutan Rekreasi Iata Kijang b) Hutan Rekreasi Guar Manong |
| 5. | P.Pinang | 3 | a) 27 - 30 Mei 2000 b) 2-5 Sept. 2000 c) 11 - 14 Nov. 2000 | a) 4 b) 4 c) 4 | a) 60 Guru/teachers b) 60 Pelajar/students c) 60 Pelajar/students | a) Hutan Lipur Bukit Panchor b) Hutan Lipur Bukit Panchor c) Hutan Lipur Telok Bahang |
| 6. | Kelantan | 2 | a) 27 - 30 Mei 2000 b) 3 - 6 Sept. 2000 | a) 4 b) 4 | a) 60 Pelajar/students b) 40 Guru/teachers | a) Lata tebakah Besut, Terengganu b) Semarak Pasir Puteh, Kelantan |
| 7. | Terengganu | 2 | a) 26 - 29 Mei 2000 b) 2 - 5 Sept. 1999 | a) 4 b) 4 | a) 53 Pelajar/students b) 43 Guru/teachers | a) Majlis Perbandaran Kuantan b) Cheneh, Kermaman (ICRR) |
| 8. | Pahang | 2 | a) 23 - 25 Mei 2000 b) 30 Mei - 1 Jun | a) 3 b) 3 | a) 45 Guru/teachers b) 44 Pelajar/students | a) Kuala Tahan Resort, Jerantut b) Dusun Eco Resort, Bentong |
| 9. | Temerloh | 1 | a) 28 Mei - 1 Jun | a) 4 | a) 35 Pelajar/students | a) Bukit Tinggi Resort |
| 10. | Selangor | 2 | a) 31 Mei - 3 Jun b) 1 - 4 Sept. 2000 | a) 4 b) 3 | a) 40 Pelajar/students b) 40 Guru/teachers | a) Fraser's Hill, Pahang b) FRIM, Kepong |
| 11. | W.P. K. L | 2 | a) 24 - 26 Mei 2000 b) 2 - 5 Sept. 2000 | a) 4 b) 4 | a) 40 Pelajar/students b) 40 Guru/teachers | a) Dusun Eco-Resort, Bentong b) Talang Nature Camp, N. Sembilan |
| 12. | N.Sembilan | 2 | a) 22 - 25 Mei 2000 b) 3 - 6 Sept. 2000 | a) 4 b) 4 | a) 30 Guru/teachers b) 40 Pelajar/students | a) Empangan Talang, K.Pilah b) Jeram Tengkek, Kuala Pilah |
| 13. | Melaka | 2 | a) 22 - 25 Mei 2000 b) 4 - 7 Sept. 2000 | a) 4 b) 4 | a) 40 Guru/teachers b) 40 Pelajar/students | a) Pengkalan Balak, Melaka b) FRIM, Kuala Selangor |
| 14. | Johor | 2 | a) 21 - 23 Mac 2000 b) 23 - 25 Mei 2000 | a) 3 b) 3 | a) 40 Guru/teachers b) 40 Pelajar/students | a) Gunung ledang Resort, Muar b) Gunung Ledang Resort, Muar |
| 15. | Sabah | 2 | a) 24 - 26 Mei 2000 b) 1 - 4 Sept. 2000 | a) 4 b) 4 | a) 40 Guru/teachers b) 40 Pelajar/students | a) Beringis Resort, Papar b) Poring Hot Spring, Ranau |
| 16. | Sarawak | 2 | a) 20 - 23 April 2000 b) 4 - 7 Sept. 2000 | a) 4 b) 4 | a) 40 Pelajar/students b) 40 Guru/teachers | a) Taman Negara Similajau, b) Taman Negara Bako, Kuching |
| 17. | Ibupejabat | 1 | 11 - 16 Nov. 2000 | a) 5 | a) 60 Pelajar/students | a) Pulau Carey, Selangor |
| | JUMLAH/TOTAL | 31 | | 118 | 1362 | |

Table 6.2 Department of Environment: List of DOE sponsored Environmental Awareness Camps organised by School Teachers, 2000

| Bil/No. | Negeri/State | Nama Sekolah/Schools | Tempat Kem/Venue | Tarikh/Date |
|---|-----------------|---|---|---|
| 1. | Perlis | 1. Sekolah Kebangsaan Pauh, Arau | Tasoh Asoh Training Centre, Perlis | 15 – 18 Sept. 2000 |
| 2. | Kedah | 1. SMK Tunku Putera, 09100 Baling 2. Sek. Men. Keb. Batu 17, Guar Chempedak | Pusat Rekreasi Lata Bukit Hijau, Baling Kaw. Hutan Simpan Wang Kellan, Perlis | 4 – 7 Sept. 2000 6 – 10 Sept. 2000 |
| 3. | P.Pinang | 1. S.J.K.(C) Kay Sin, 14020 Bukit Mertajam | Pusat Ko-kurikulum Bukit Mertajam | 25 – 27 Ogos 2000 |
| 4. | Perak | 1. SMK Idris Shah, Kopisan baru, 31600 Gopeng, 2. SMJK Choong Hua, 35500 Bidar 3. SMK Sungkai, 35600 Sungkai | SK Ulu Geruntum, Gopeng, Perak Pusat Temakan Rusa, Menderang, Sungkai, Pusat Hidupan Liar Menderang Sungkai, Kem Puncak Kemensah, Hulu Kelang, Taman Alam Kuala Selangor | 8 – 10 Sept 2000 25 – 27 Ogos 2000 11 – 13 Ogos 2000 25 – 27 Ogos 2000 |
| 5. | Selangor | 1. SMK Taman Selayang, 68100 Batu Caves 2. Sek. Keb. Rantau Panjang, 42100 Klang 3. Sek. Keb. Kebun Baharu, 42500 Kuala Langat 4. SMK Convent Kajang, 43000 Kajang | FRIM, Kepong, Selangor FRIM Kepong, Selangor | 29 Sept. 1 Okt. 2000 1 – 3 Sept. 2000 |
| 6. | WP Kuala Lumpur | 1. SMK Convent Bukit Nanas, Jalan Bukit Nanas 2. SMK Raja Ali, Jalan Ipoh | The Woods Ulu Yam Perdana, Selangor The Woods Ulu Yam Perdana, Selangor | 13 – 15 Oktober 2000 22 – 24 Julai 2000 |
| 7. | Melaka | 1. SMK Iskandar Shah, 77000 Jasin 2. SMK Infant Jesus Convent, Bandar Hilir 3. SMK Dato Dol Said, 78000 Alor Gajah 4. SMK Seri Tanjung, Tanjung Kling | Sg. Asahan, Asahan, Melaka Bt. Maloi, Jolo, Negeri Sembilan Batu Maloi, Johol, Negeri Sembilan Pusat Ko-kurikulum, Lanchang, Melaka | 28 – 30 Julai 2000 1 – 3 Sept. 2000 27 – 29 Okt. 2000 20 – 22 Okt. 2000 |
| 8. | N. Sembilan | 1. SMK Dato' Mohd Said, 71800 Nilai 2. SMK Dato' Undang Musa Al-Haj, Jebebu 3. SMK Senawang, 70450 Seremban 4. SMK Pendeta Zaaba, 70400 Seremban | Taman Negara Endau Rompin Jeram Gading, Jebebu, Negeri Sembilan Hutan Lipur Lenggeng, Negeri Sembilan Bt. 13, Port Dickson, Negeri Sembilan | 3 – 6 Sept. 2000 4 – 6 Ogos 2000 29 Sept. – 1 Okt. 2000 27 – 29 Okt. 2000 |
| 9. | Johor | 1. SMK Tun Mamat, 84900 Tangkak 2. SMK Bandar Maharani, 84000 Muar | Pusat Ko-kurikulum, Tangkak, Johor Pejabat Pertanian Muar Selatan, Johor | 25 – 27 Ogos 2000 4 – 6 Ogos 2000 |
| 10. | Pahang | 1. SMK Jengka 10, 26400 Bandar Jengka 2. SMK Dato Shahbandar Hussain, 27600 Raub | Kem Indera Mahkota, Kuantan Pusat Rekreasi Pulau Chekas, Raub, Pahang | 15 – 18 Sept. 2000 4 – 6 Ogos 2000 |
| 11. | Terengganu | 1. SMK Chalok, 21450 Setiu 2. SMK Padang Midin, 21400 Kuala Terengganu | Peladang Agro Resort, Setiu, Terengganu Setiu Agricultural Resort, Terengganu | 3 – 5 Ogos 2000 27 – 29 Julai 2000 |
| 12. | Kelantan | 1. SMK Mengkebang, 18000 Kuala Krai 2. SMK Sri Gunung, 16390 Bachok 3. SMK Tok Janggut, 16800 Pasir Puteh 4. Sek. Keb. Chicha Menyabong, Kota Bharu 5. SMK Bersis Kubor Besar, 16350 Bachok | Taman Negara Kuala Koh, Gua Musang, Pusat Ko-kurikulum Tangok, Kelantan Hutan Lipur Bukit Bakar, Machang Kem Bukit Keluang, Besut, Terengganu Hutan Lipur Bkt. Bakar, Machang, Kelantan | 5 – 8 Sept. 2000 30 Ogos – 2 Sept. 2000 6 – 9 Sept. 2000 20 – 23 Sept. 2000 2 – 5 Sept. 2000 |
| 13. | Sabah | 1. SMK Gunaanad, 89007 Keningau 2. SMK Agaseh, 91112 Lahad Datu 3. SMK Taun Gusi, 89158 Kota Belud | Taman Negara Kinabalu, Sabah Lembah Danum, Lahad Datu, Sabah Taman Negara Mensilau, Kundasang | 27 – 30 Ogos 2000 15 – 18 Sept. 2000 4 – 6 Sept. 2000 |
| 14. | Sarawak | 1. SMK Tebakang, 94750 Tebakang, Serian 2. SMK Kabong, 94650 Kabong 3. SMK Sematan, 94100 Sematan 4. SMK Santubong, 93000 Kuching 5. SMK Kaliaka, 95300 Roban, Sri Aman | Kem Belia Pueh, Sematan, Sarawak Tg. Kembang Beach Resort, Kabong Tapak Perkhemahan SMK Sematan Pusat Ko-kurikulum Pendidikan Sarawak Bukit Tenggalat, Saratok, Sarawak | 2 – 5 November 2000 17 – 20 Ogos 2000 4 – 6 September 2000 30 Ogos- 2 Sept. 2000 1 – 4 September 2000 |
| Jumlah Keseluruhan/Total : 40 Buah Kem/Camps | | | | |

Jadual 6.3 Jabatan Alam Sekitar: Pemenang Pertandingan Menulis Cerita Pendek Kanak-Kanak Bertemakan Alam Sekitar, 2000
 Table 6.3 Department of Environment: Winners of Environmental Short-Story Writing Competition, 2000

| Kategori Pelajar (di bawah 18 tahun) <i>Student Category (below 18 years old)</i> | | Kategori Dewasa (di atas 18 tahun) <i>Adult Category (above 18 years old)</i> | |
|---|-----------------|--|-------------|
| TAJUK/TITLE | PEMENANG/WINNER | PEMENANG/WINNER | TAJUK/TITLE |
| Hadiah Pertama/Grand Prize (RM1,500.00) Menanti Hujan - Nadiah Zakariah (Selangor) | | Hadiah Pertama/Grand Prize (RM3,000.00) Jais b. Sahok (Sarawak) - Bujang Batu dan Pokok di Depan Rumahku | |
| Hadiah Kedua/2nd. Prize (RM750.00) Berpisah Jua Akhirnya - Nur Hazwani Mohd. Jamili (Melaka) | | Hadiah Kedua/2nd. Prize (RM1,500.00) Mohamad Farid Mahfodz (Selangor) - Sejernih Kaca | |
| Hadiah Ketiga/3rd. Prize (RM500.00) Perjalanan Orca - Ngu Chai Ping (Sarawak) | | Hadiah Ketiga/3rd. Prize (RM1,000.00) Moh Azam bin Rezali (WP KL) (WP KL) - Sebatang Pokok di Taman Rahsia | |
| Hadiah Saguhati/Consolation Prizes (RM100.00 each) Menaruh Harapan - Ayunezah Yusoff (Selangor) | | Hadiah Saguhati/Consolation Prizes (RM200.00 each) Saroja Theavy a/p Balakrishanan- a/p Balakrishanan (Selangor) - Misteri Hutan Malar Hijau | |
| Kami Ingin Hidup Lagi - Nur Shuhada bt. Zaid (Melaka) | | Muharsafa Kirana bin Bacho Mohamad (Sabah) - Surat dari Cliliwung | |
| Pengorbanan yang Ikhlas - Lai Tze Kiat (Sarawak) | | Syed Mahathir bin Syed Ibrahim - Pak Tua Bukit Bintangor | |
| Setulus Hati - Puteri Nor Aznie Fahsyar | | Zalina Ab. Wahab (WP KL) - Orb yang Kerdil | |
| Kempen Pungutan Tin - Jericho Ha Chin Chin (Sarawak) | | Abd. Ghani b.Che Hasan (WP KL) - Khabar dari Bukit Serenti | |
| Bumiku Duniamu Jua - Farahadilah Husna bt. Tuah (WP KL) | | Norhisham bin Mustaffa (Kelantan) - Keruh di Hulu | |
| Pengembaraan Si Nyalang - Farahan Atiqah bt. Zaini (Sarawak) | | Tuan Zainab binti Wi (Selangor) - Rimba yang Terusik | |

Jadual 6.4 Jabatan Alam Sekitar: Pemenang Anugerah Kewartawanan Alam Sekitar, 2000
 Table 6.4 Department of Environment: Winners of Environmental Journalism Award, 2000

| | |
|--|---|
| <p>Media Cetak Inggeris/English Print Media</p> <p>Rencana/Features</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Custodian of Tasik Bera" Oleh Tan Cheng Li (The Star)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Re-Use" Oleh Meng Yew Choong (The Star)</p> <p>Laporan Berita/News Reports</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Dangerous Storage of Potassium Cyanide" Oleh Esther Tan (New Straits Times)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Blasts at Dump Shake Residents" Oleh Edward Rajendra (The Sun)</p> | <p>Media Cetak Bahasa Malaysia/Bahasa Malaysia Print Media</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Pemanasan Global Ancaman Penduduk" Oleh Salina Abdullah (Berita Harian)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Tasik Bera Syurga Pencinta Alam" Oleh Nurul Hazren Masitom (Berita Harian)</p> <p>"Banjir Kilat" Oleh Noor Azam Shairi, Ahmad Syahir Kassim (Utusan Malaysia)</p> <p><u>Surat Kepujian/Letter of Commendation</u></p> <p>"Mengimbangi Pengurusan Sumber Air dan Pembangunan" Oleh Magendra Rajagopal (Berita Harian)</p> |
| <p>Media Cetak Cina/Chinese Print Media</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Applying Sustainable Development in Business" Oleh Sin Wai Leng (China Press)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Lanjak Eatiman Wildlife Sanctuary" Oleh Chieng Mei (Sin Jew Jit Poh/Mulu Press)</p> <p><u>Surat Kepujian/Letter of Commendation</u></p> <p>"The Safety Issue of Genetically-Modified Food" Oleh Koh Yoke Moi (Nanyang Siang Pau)</p> <p>"Birds" Oleh Ng Soon Keong (Nanyang Siang Pau)</p> | <p>Media Cetak Tamil/Tamil Print Media</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Protect Our Rivers" Oleh Munnisamy a/l Irrision (Tamil Nesan)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Tanah Runtuh di Cameron Highlands" Oleh Rajendra a/l Perumal (Malaysian Nanban)</p> |
| <p>Berita Bergambar/Photo Journalism</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Oily Beach" Oleh CV Chong (New Sabah Times)</p> <p>"Dirt Beside the Shrive" Oleh Hoe Shou Chai (China Press)</p> | <p>Media Elektronik/Electronic Media</p> <p><u>Hadiah Utama/Grand Prize RM 5,000.00</u></p> <p>"Jenayah Alam-Nasib Sungai Selangor" Oleh Abdullah Abdul Hamid, Mazlin Nordin (Pengeluar) (Majalah 3, TV3)</p> <p><u>Hadiah Khas/Special Mention RM 1,000.00</u></p> <p>"Musuh Dalam Selimut" Oleh Karam Singh Walia (TV3 News Special Report)</p> |

Maklumat Alam Sekitar

Penerbitan maklumat alam sekitar merupakan salah satu cara efektif untuk mempromosikan kesedaran dan pendidikan alam sekitar. Pada tahun 2000, Jabatan Alam Sekitar telah menerbitkan sejumlah 147,200 bahan terbitan yang terdiri daripada Laporan Kualiti Alam Sekeliling 1999, Laporan Tahunan 1999, majalah Era Hijau, majalah IMPAK, garis panduan, risalah dan poster yang diedarkan kepada agensi-agensi kerajaan, perpustakaan, pertubuhan bukan kerajaan, institusi pendidikan dan lain-lain lagi (**Rajah 6.0**).

Sebaran Maklumat Alam Sekitar

Pada tahun 2000, sebanyak 2,219 pertanyaan telah diterima melalui pengguna perpustakaan, surat menyurat, email, laman-web JAS dan INFOTERRA (**Rajah 6.1 & Rajah 6.2**).

Sistem Rujukan Antarabangsa untuk Sumber-Sumber Maklumat mengenai Alam Sekitar (INFOTERRA)

INFOTERRA merupakan sistem jaringan maklumat alam sekitar yang telah diwujudkan oleh Program Alam Sekitar Pertubuhan Bangsa-Bangsa Bersatu (UNEP). INFOTERRA bertindak sebagai sistem rujukan kepada NFPs (National Focal Points) dalam membekalkan maklumat alam Sekitar.

JAS bertindak sebagai pusat INFOTERRA kepada Malaysia. Sepanjang tahun 2000, sejumlah 30 pertanyaan telah diterima daripada USA, Singapura, Kenya, German, Uganda, Mesir, Thailand, Ireland dan Jepun. Di samping itu, pertanyaan daripada pengguna tempatan datangnya daripada kakitangan kerajaan, pelajar dan pihak-pihak swasta.

Maklumat-maklumat alam sekitar yang dipohon adalah seperti pencemaran udara, kumbahan dan effluen-effluen perindustrian, kualiti air bawah tanah, kualiti air, bahan buangan terjadual, EIA, undang-undang dan peraturan Alam Sekitar di Malaysia, eutrofikasi, bahan-bahan kimia, majalah-majalah alam sekitar dan juga berkenaan pertubuhan bukan kerajaan yang berkaitan dengan alam sekitar di Malaysia.

Environmental Information

*The publication and dissemination of environmental information is undeniably an effective means of promoting environmental awareness and education. In the year 2000, DOE published more than 147,200 copies of information materials such as the 1999 Environmental Quality Report, the 1999 Annual Report, Era Hijau magazine, IMPAK magazine, environmental guidelines, brochures and posters which were disseminated to government agencies, libraries, NGOs, educational institutions and others (**Figure 6.0**).*

Dissemination of Environmental Information

*In the year 2000, some 2,219 enquiries were received from library users through letters, email, DOE Homepage and INFOTERRA (**Figures 6.1 & 6.2**).*

International Referral System for Sources of Environmental Information (INFOTERRA)

UNEP/INFOTERRA essentially consists of a network of National Focal Points which serve as a global referral system for environmental information.

DOE acts as the focal point for INFOTERRA in Malaysia. Throughout 2000, 30 enquiries were received through the INFOTERRA network from USA, Singapore, Kenya, Germany, Uganda, Egypt, Thailand, Ireland and Japan. Local enquiries were also received from government agencies, students and the private sector.

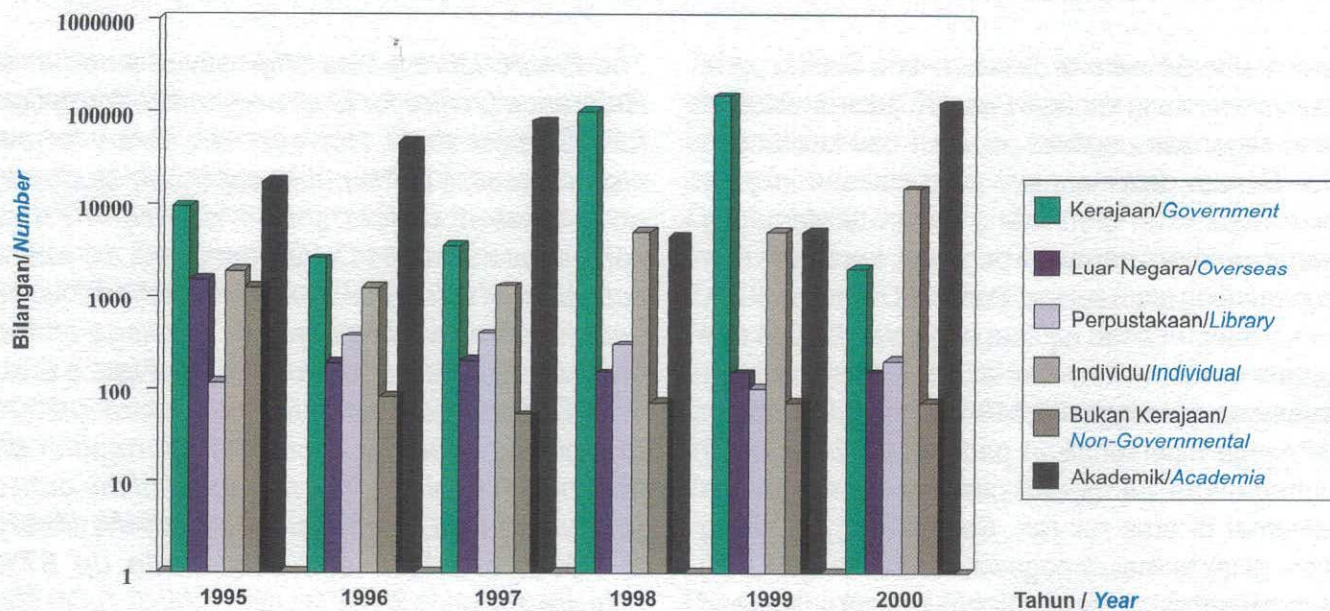
The type of information sought after were those pertaining to air pollution, sewage and industrial effluent, groundwater quality, water quality, scheduled wastes, EIA, environmental laws and regulations in Malaysia, eutrophication, chemical substances, environmental magazines, and also those relating to non-governmental organizations in Malaysia.

Perkhidmatan Perpustakaan-Enviro

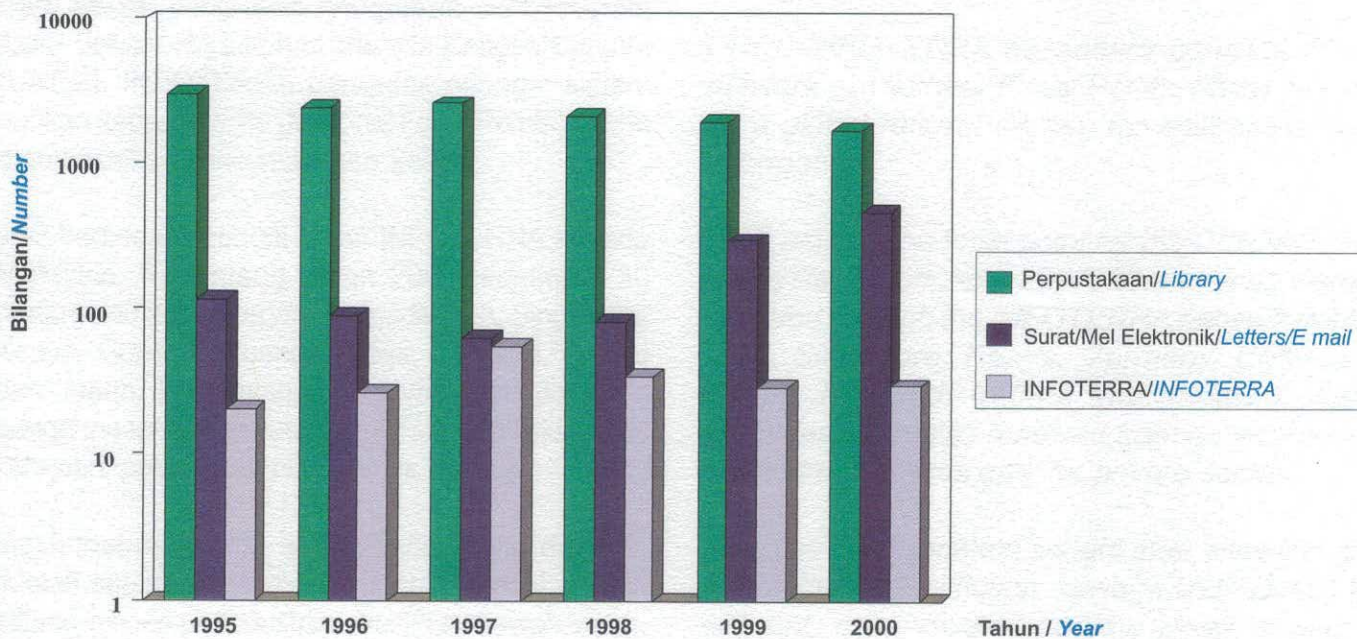
Perpustakaan-Enviro di Jabatan Alam Sekitar pada asalnya dirancang sebagai Pusat Rujukan Maklumat untuk kegunaan pegawai-pegawai dan kakitangan JAS. Namun demikian, kini perpustakaan ini juga boleh digunakan oleh orang awam terutamanya pelajar-pelajar, pegawai-pegawai kerajaan dan rperunding alam sekitar. Pada 31 Disember 2000, koleksi bahan-bahan rujukan berjumlah 23,043 dan malah keratan-keratan akhbar alam sekitar bertambah sehingga 65,340 (**Rajah 6.3**). Sistem ILMU juga diperkenalkan pada tahun 2000 untuk memudahkan pengguna-pengguna mengakses maklumat di atas rak-rak. Sejumlah 1,724 orang awam (tidak termasuk pegawai dan kakitangan JAS) telah menggunakan perkhidmatan perpustakaan pada tahun 2000, yang mana 87% daripadanya terdiri dari pelajar-pelajar (**Rajah 6.4**).

Enviro-Library Services

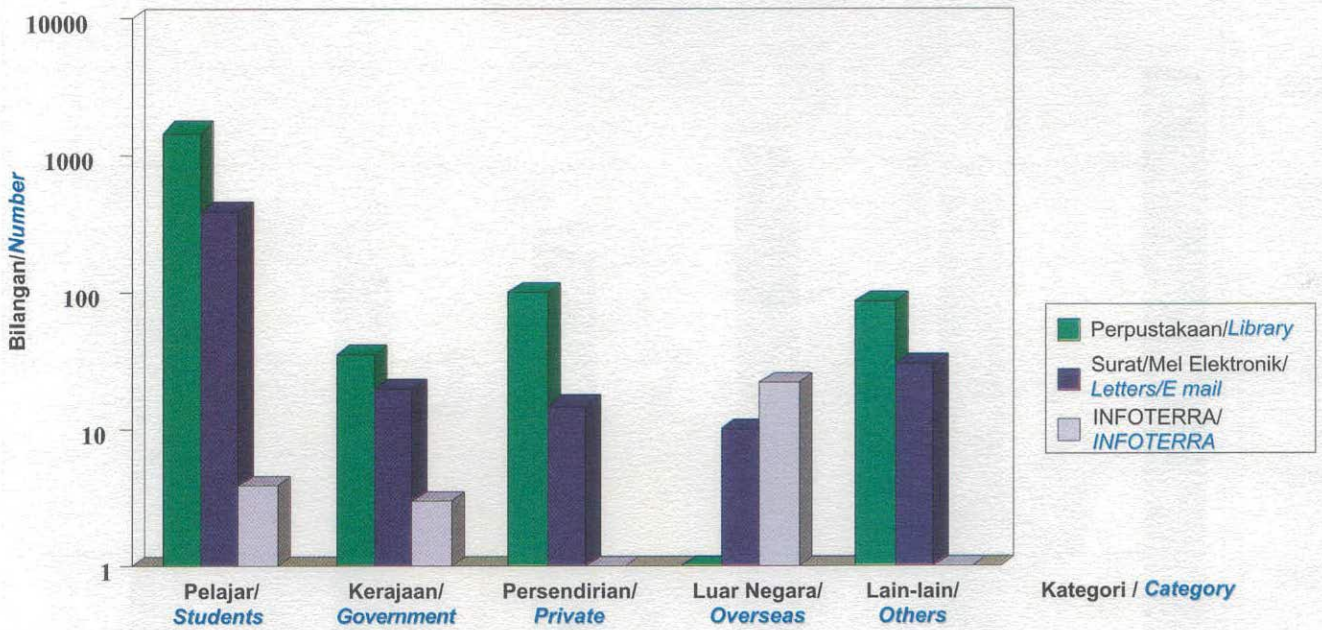
*The Enviro-Library was originally planned as a Reference Centre for Environmental Information for DOE personnel. However, the library is now also accessible to the public especially students, government officials and environmental consultants. As of 31 December 2000, the entire collection of reference materials totalled 23,043 and the number of newspaper clippings on the environment increased to 65,340 (**Figure 6.3**). The ILMU System was also introduced in 2000 to facilitate speedier access to information on the shelf. A total of 1,724 members of the public (excluding DOE staff) made use of the library in 2000, of which students made up 87% (**Figure 6.4**).*



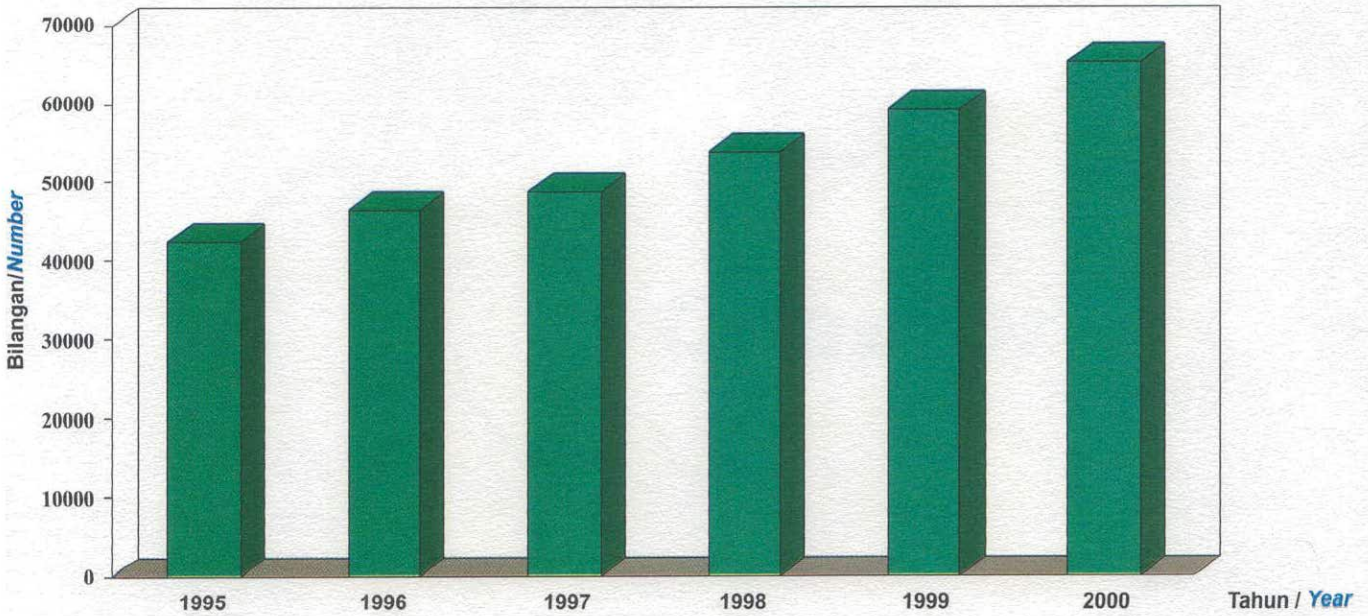
Rajah 6.0 Jabatan Alam Sekitar: Penyebaran Terbitan-Terbitan Alam Sekitar, 1995-2000
 Figure 6.0 Department of Environment: Dissemination of Environmental Publications, 1995-2000



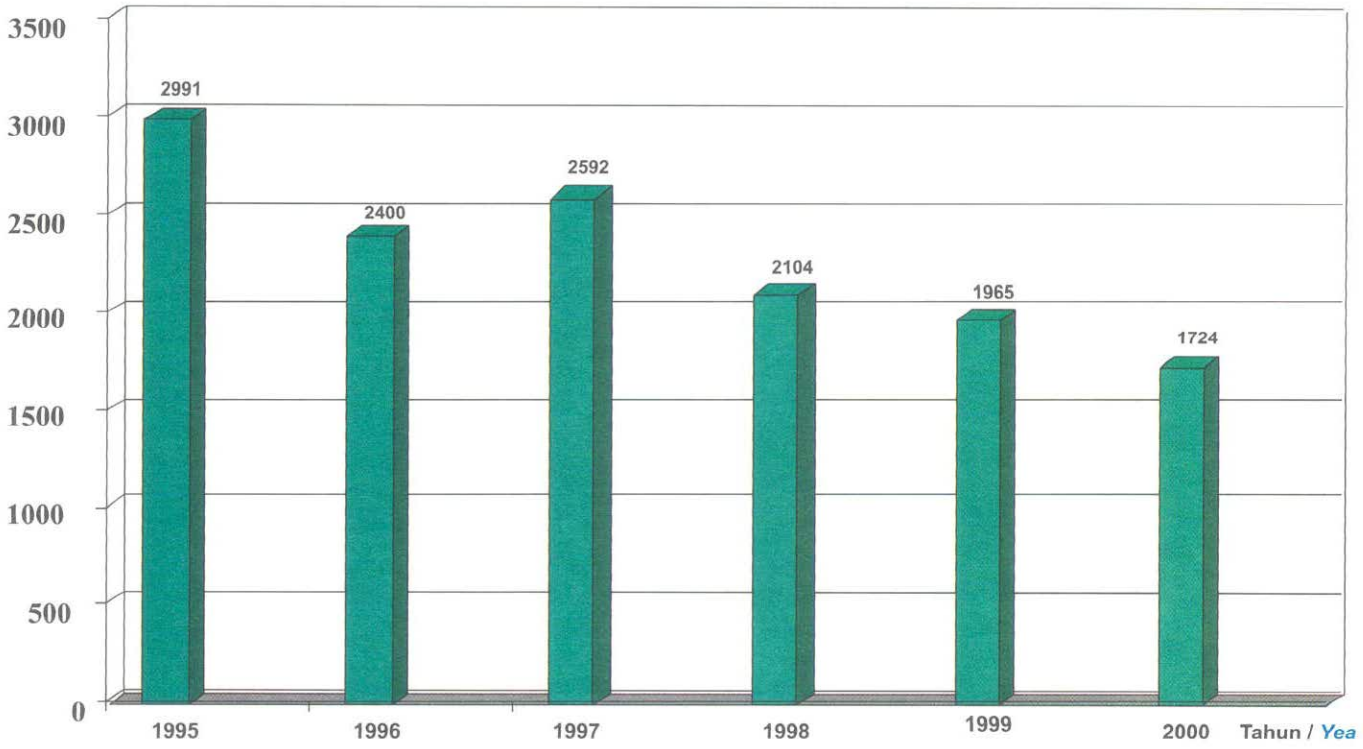
Rajah 6.1 Jabatan Alam Sekitar: Perkhidmatan Maklumbalas Pertanyaan , 1995-2000
 Figure 6.1 Department of Environment: Query Response Services, 1995-2000



Rajah 6.2 Jabatan Alam Sekitar: Kategori Permohonan Maklumat, 2000
 Figure 6.2 Department of Environment: Category of Information Applications, 2000



Rajah 6.3 Jabatan Alam Sekitar: Bilangan Keratan Akhbar Mengenai Alam Sekitar, 1995-2000
 Figure 6.3 Department of Environment: Number of Newspaper Clippings on Environment, 1995-2000



Rajah 6.4 Jabatan Alam Sekitar: Bilangan Pengguna Perpustakaan, 1995-2000
Figure 6.4 Department of Environment: Numbers of Enviro-Library User, 1995-2000

Bab 7



Chapter 7

AL EHWAL ANTARABANGSA

englibatan aktif JAS di dalam forum tempatan dan antarabangsa di samping bertukar-tukar pandangan mengenai isu-isu alam sekitar dengan pelawat-pelawat antarabangsa terus menjadi arena penting bagi JAS untuk sentiasa seiring dalam mendapatkan perkembangan scenario alam sekitar yang global.

Pada 23 Februari 2000, enam orang pakar JICA bagi awalan Pencemaran dan Alam Sekitar Bandar di bawah naungan *Japan International Cooperation Agency* (JICA), telah melawat JAS. Lawatan ini bertujuan untuk mendapatkan pemahaman mengenai polisi alam sekitar di Malaysia di samping langkah-langkah kawalan pencemaran dan aktiviti-aktiviti yang dijalankan oleh JAS.

Pada 25 Februari 2000, 8 ahli Institut Jururunding Jepun (JCI) telah melawat JAS bagi mengendalikan *ASEAN Environment Protection Market Survey Mission* bagi mengenal pasti peluang perniagaan yang melibatkan pelaburan pemuliharaan alam sekitar di negara-negara ASEAN. Ianya bertujuan untuk mengembangkan hubungan perdagangan dan pelaburan di antara pelabur-pelabur dari Jepun dan Malaysia terutama sekali bagi bidang rawatan air kumbahan dan pelupusan sisa perindustrian.

Pada 8 Mac 2000, 7 ahli '*JICA Study Team for Project Formulation Study on Acid Deposition*' telah melawat JAS. Tujuan utama lawatan ini adalah untuk menyelidik potensi dan arah tujuan bagi kerjasama untuk mengatasi masalah hujan asid di rantau ini.

Dua Pegawai Perlindungan Alam Sekitar dari Jabatan Perlindungan Alam Sekitar di bawah 'Hong Kong Special Administration Region' telah mengunjungi pusat kemudahan pelupusan sisa seperti di tapak-pak pelupusan dan insinerator di Malaysia pada 14-25 Mac 2000.

Delegasi 4 pegawai dari Institut Penyelidikan Hutan Bangladesh telah melawat JAS pada 25 April 2000 untuk bertukar fikiran mengenai peraturan-peraturan alam sekitar serta aktiviti-aktiviti kesedaran alam sekitar.

INTERNATIONAL ENVIRONMENT AFFAIRS

Active participation at international and regional forum and exchanges of views with international visitors on environmental issues remained an important avenue for DOE to keep abreast of development in the global environmental scene.

On 23 February 2000, six JICA Experts on Urban Environment and Pollution Control, under the aegis of the Japan International Cooperation Agency (JICA), visited DOE to understand the environmental policy in Malaysia including pollution control measures and activities of DOE.

On 25 February 2000, 8 members from the Japan Consulting Institute (JCI) visited DOE to conduct an 'ASEAN Environmental Protection Market Survey Mission' to identify business opportunities relating to environment protection investments in ASEAN countries with a view to further developing trade and investment relations for Japanese enterprises with local counterparts particularly in the field of waste water treatment and disposal of industrial wastes.

On 8 March 2000, 7 members of another JICA Study Team for Project Formulation on Acid Deposition visited DOE. The purpose of the visit was to explore possibilities and directions for cooperation to tackle the acid deposition problem in the region.

Two Environmental Protection Officers from the Environmental Protection Department of the Hong Kong Special Administration Region visited waste disposal facilities such as landfills and incinerators in Malaysia on 24-25 March 2000.

A delegation of four officials from the Bangladesh Forest Research Institute visited DOE on 25 April 2000 to exchange views on environmental legislations and environmental awareness activities.

Pada 16 Ogos 2000, 3 pegawai daripada Kerajaan Bandar Manimata, Jepun telah mengunjungi JAS untuk mengkaji reka bentuk institusi bagi Pemulihan dan Pemuliharaan Alam Sekitar di Malaysia di samping bertukar-tukar pandangan mengenai pengurusan alam sekitar.

Sepuluh pelajar peringkat sarjana daripada Fakulti Pengurusan Alam Sekitar, Prince of Songkla University, Thailand telah melawat JAS pada 29 September 2000 untuk memahami dengan lebih jelas lagi polisi dan strategi Malaysia di dalam pengurusan alam sekitar, prosedur EIA dan pengurusan buangan terjadual.

Delegasi yang terdiri daripada lapan pegawai Jabatan Sains dan Teknologi daripada Kementerian Pengangkutan, Vietnam telah melawat JAS pada 22 November 2000. Mereka telah diberikan taklimat mengenai polisi pengurusan alam sekitar; undang-undang alam sekitar; prosedur dan garis panduan EIA di Malaysia.

KERJASAMA DUA HALA

Jawatankuasa Bersama Malaysia-Singapura Mengenai Alam Sekitar (MSJCE)

Mesyuarat MSJCE yang ke 15 telah diadakan pada 15 Februari 2000 di Kuala Lumpur. Ianya telah dipengerusikan bersama oleh Dato' Cheah Kong Wai, Ketua Setiausaha Kementerian Sains, Teknologi dan Alam Sekitar, Malaysia dan Encik Tan Gee Paw, Setiausaha Tetap Kementerian Alam Sekitar, Singapura. Antara isu-isu yang telah dibincangkan adalah: standard pelepasan gas-gas daripada motorsikal dan minyak motorsikal enjin 2 lejang; kualiti air di perairan Johor; pengurusan bahan kimia dan sisa buangan; dan kerjasama bagi mencegah pembuangan haram dari tangki enapcemar. Secara amnya, mesyuarat ini membolehkan kedua-dua buah negara untuk bertukar mengenai perkara-perkara yang berkaitan dengan alam sekitar dan seterusnya membawa satu hubungan kerja yang erat di antara dua negara.

On 16 August 2000, 3 Officials from the Minamata City Government, Japan visited DOE on a mission to study the institutional setup for Environmental Restoration and Conservation in Malaysia as well as exchanging views on environmental management.

Ten postgraduate students (Master-level) from the Faculty of Environmental Management, Prince of Songkla University, Thailand visited DOE on 29 September 2000 to have a better understanding of Malaysia's policy and strategies for environmental management, EIA procedure as well as hazardous waste management.

A delegation of eight officials from the Department of Science and Technology of the Ministry of Transport, Vietnam visited DOE on 22 November 2000. They were briefed on Malaysia's environmental management policies, environmental legislations and EIA procedure and guidelines.

BILATERAL COOPERATION

Malaysia-Singapore Joint Committee on the Environment (MSJCE)

The 15th MSJCE Meeting was held on 15 February 2000 in Kuala Lumpur. The Meeting was co-chaired by Dato' Cheah Kong Wai, Secretary-General of MOSTE, Malaysia and Mr Tan Gee Paw, Permanent Secretary of the Ministry of Environment, Singapore. Among the issues discussed were: motorcycle emission standards and 2-stroke motorcycle engine oils; water quality in the Straits of Johor; management of chemicals and wastes; and cooperation to prevent illegal discharge of tanker sludge. In general, the Meeting enabled both countries to exchange information on relevant environmental matters and brought about closer rapport and working relationship between both countries.

Di mesyuarat MSJCE yang ke 16 yang telah diadakan pada 17-18 November 2000 di Singapura. Mesyuarat ini telah dipengerusikan oleh Encik Tan Gee Paw, Setiausaha Tetap Kementerian Alam Sekitar Singapura dan Dato' Ng Kam Chiu, setiausaha kementerian Sains Teknologi dan Alam Sekitar. Isu-isu berikut telah diutarakan:

- Kawalan pelepasan bahan pencemar dari kenderaan
- Kualiti air di perairan Johor
- Pengurusan bahan kimia dan sisa buangan
- Kerjasama di dalam menghalang pembuangan haram dari tangki enapcemar
- Kawalan terhadap pengangkutan bahan galian dan sisa buangan daripada kerja-kerja pembinaan

Kumpulan Kerja MSJCE untuk Pembersihan Tangki Secara Haram

Kumpulan Kerja ini telah mengadakan perjumpaan pada 18 April 2000 dan 20 September 2000 di Kuala Lumpur dan Singapura masing-masing. Kumpulan Kerja ini telah ditugaskan untuk mereka satu prosedur bagi pembersihan tangki dan pelupusan enapcemar tangki serta pergerakan bahan galian dan sisa buangan daripada kerja-kerja pembinaan di antara Malaysia dan Singapura. Mesyuarat ini turut bersetuju untuk saling membantu dalam bertukar-tukar informasi, dokumentasi dan persampelan minyak daripada kapal.

Lawatan Tahunan di Antara Kementerian Malaysia-Singapura

Delegasi Malaysia yang diketuai oleh Y.B. Datuk Law Hieng Ding, Menteri Sains, Teknologi dan Alam Sekitar, Malaysia telah melawat Singapura pada 5-6 Mei 2000 di atas jemputan Encik Lee Yock Suan, Menteri Alam Sekitar, Singapura. Menteri dari kedua-dua buah negara ini telah mengambil peluang untuk bertukar-tukar pandangan mengenai isu-isu yang mempunyai kepentingan bersama dan perhatian di berikan kepada perkembangan MSJCE terutamanya mengenai pencemaran jerebu merentasi sempadan, kawalan pelepasan pencemar daripada kenderaan dan kualiti air di perairan Johor. Kedua-dua negara bersetuju untuk terus meningkatkan kerjasama di dalam aspek penguatkuasaan bagi mengurangkan pencemaran di perairan Johor.

At the 16th MSJCE Meeting held on 17-18 November 2000 in Singapore. The meeting was jointly by Mr. Tan gee Paw, Permanent Secretary of Ministry of Environment Singapore and Dato' Ng Kam Chin, Secretary-General of The Ministry of Science, Technology & Environment Malaysia. The following issues were highlighted:

- Control of Vehicular Emissions
- Water Quality in the Straits of Johor
- Sound Management of Chemicals and Wastes
- Cooperation to prevent illegal discharge of Tanker Sludge
- Control of Transportation of Excavated Materials and Construction Debris between Malaysia and Singapore.

MSJCE Working Group on Illegal Tanker Cleaning

The Working Group met on 18 April 2000 and 20 September 2000 in Kuala Lumpur and Singapore respectively. The Working Group was tasked to formulate a procedure for tanker cleaning and disposal of tanker sludge and also the movement of excavated materials and construction debris between Malaysia and Singapore. The Meeting also agreed to facilitate each other in the exchange of information, documentation and sampling of oil from ships.

Malaysia-Singapore Annual Ministerial Exchange of Visit

The Malaysian delegation led by the Hon. Datuk Law Hieng Ding, Minister of Science, Technology and the Environment, Malaysia visited Singapore on 5-6 May 2000 at the invitation of the Hon. Mr. Lee Yock Suan, Minister for Environment, Singapore. The two Ministers took the opportunity to exchange views on issues of mutual interest and noted the progress of work carried out by the MSJCE in particular transboundary haze pollution, control of vehicular emission and water quality in the Straits of Johor. Both countries agreed to continue to work closely on the enforcement aspects and also increased cooperation to reduce pollution into the Straits of Johor.

KERJASAMA SERANTAU

Tahun Alam Sekitar ASEAN 2000 (AEY 2000)

Tahun Alam Sekitar ASEAN 2000 (AEY 2000) telah dirasmikan di Bandar Seri Begawan, Brunei Darussalam pada 4 April 2000, dengan tema "Warisan Kita, Masa Hadapan Kita". AEY 2000 dirasmikan dengan tujuan untuk meningkatkan kesedaran awam mengenai kepentingan melindungi alam sekitar dan menyokong usaha-usaha serantau dalam menggalakkan perlindungan alam sekitar serta pembangunan yang lestari.

Mesyuarat Tidak Rasmi Menteri-Menteri Alam Sekitar (IAMME)

Mesyuarat Tidak Rasmi Menteri-Menteri Alam Sekitar yang ke lima telah diadakan selaras dengan perasmian Tahun Alam Sekitar ASEAN 2000 di Bandar Seri Begawan, Brunei Darussalam. Menteri-menteri alam sekitar dari 10 buah negara ASEAN telah bertukar-tukar pandangan mengenai isu-isu alam sekitar yang memerlukan kerjasama serantau seperti pembakaran terbuka dan jerebu, Perancangan Tindakan Strategik ASEAN bagi Alam Sekitar (SPEA), Laporan Alam Sekitar Negara-Negara ASEAN dan acara-acara alam sekitar yang terkini di peringkat serantau dan antarabangsa.

Mesyuarat Pegawai-Pegawai Kanan ASEAN Mengenai Alam Sekitar (ASOEN)

Mesyuarat Pegawai-Pegawai Kanan ASEAN Mengenai Alam Sekitar (ASOEN) yang ke 11 telah diadakan pada 1-3 Ogos 2000 di Hanoi, Vietnam. Mesyuarat ini membincangkan Laporan Pengerusi ASEON berhubung dengan kerjasama di kalangan negara-negara ASEAN bagi aktiviti-aktiviti yang berkaitan dengan alam sekitar.

Kumpulan Kerja Mengenai Persisiran Pantai dan Marin ASEAN

Mesyuarat kedua Kumpulan Kerja Mengenai Persisiran Pantai dan Marin ASEAN telah diadakan di Hanoi, Vietnam pada 8-9 June 2000. Mesyuarat ini telah bersetuju untuk bertukar maklumat mengenai

REGIONAL COOPERATION

ASEAN Environment Year 2000

The ASEAN Environment Year 2000 (AEY 2000) was launched in Bandar Seri Begawan Brunei Darussalam on 4 April 2000, with the theme "Our Heritage, Our Future". AEY 2000 was launched to help increase public awareness of the importance of protecting the environment and to support regional efforts in promoting environmental protection and sustainable development.

Informal ASEAN Ministerial Meeting on Environment (IAMME)

The Fifth Informal ASEAN Ministerial Meeting on Environment was held in conjunction with the launching of the ASEAN Environment Year on 4 April 2000 in Bandar Seri Begawan, Brunei Darussalam. Ministers responsible for the Environment from the 10 ASEAN countries exchanged views on a wide range of environmental issues which required regional cooperation such as open burning and haze. The ASEAN Strategic Plan of Action on the Environment (SPEA), the ASEAN State of the Environment Report, and upcoming environmental events at the regional and global level.

ASEAN Senior Officials on the Environment (ASOEN)

The 11th Meeting of the ASEAN Senior Officials on the Environment (ASOEN) was held on 1-3 August 2000 in Hanoi, Vietnam. The Meeting considered and adopted the Report of the Chairman of ASOEN pertaining to cooperation among ASEAN countries in environmental activities.

ASEAN Working Group on Coastal and Marine Environment

The Second Meeting of the ASEAN Working Group on Coastal and Marine Environment was

persisiran pantai dan marin melalui internet dan juga persetujuan untuk membangunkan garis panduan untuk pengurusan dan pelan pemuliharaan bagi sumber marin termasuklah pengawasan komuniti pantai untuk persekitaran pantai yang bersih. Mesyuarat ini turut memberi perhatian kepada garis panduan kriteria untuk mengenalpasti titik-titik panas bagi pencemaran persisiran pantai dan marin.

Mesyuarat Pasukan Petugas Teknikal ASOEN Mengenai Jerebu (HTTF)

Tiga mesyuarat Pasukan Petugas Teknikal ASOEN Mengenai Jerebu (HTTF) telah diadakan pada tahun 2000 iaitu pada 3 April 2000 di Brunei Darussalam; 1 Ogos 2000 di Hanoi, Vietnam dan di Kota Kinabalu pada 5 Oktober 2000. Mesyuarat-mesyuarat ini telah membincangkan aktiviti-aktiviti semasa untuk melaksanakan Pelan Tindakan Jerebu Serantau dan status perkembangan projek di bawah projek kerjasama ASEAN mengenai jerebu merentasi sempadan.

Mesyuarat Menteri-Menteri Alam Sekitar ASEAN (AMME)

Malaysia telah menjadi tuan rumah bagi AMME keapan di Kota Kinabalu pada 6-7 Oktober 2000. Ianya telah dimulakan dengan Mesyuarat Pegawai-Pegawai Kanan (SOM) yang telah berlangsung pada 5 Oktober 2000. Mesyuarat ini telah disertai oleh menteri-menteri alam sekitar dari Brunei Darussalam, Cambodia, Indonesia, Republik Demokratik Rakyat Laos, Myanmar, Filipina, Singapura, Thailand, Malaysia dan wakil-wakil dari Sekretariat ASEAN. Mesyuarat ini membincangkan kemajuan pelaksanaan Pelan Tindakan Strategik Alam Sekitar ASEAN (SPEA) dan Pelan Tindakan Jerebu Serantau (RHAP). Mesyuarat ini turut menimbangankan dan menggunakan Resolusi Kota Kinabalu bagi Alam Sekitar yang menekankan keperluan ASEAN untuk mengukuhkan institusi dan kapasiti organisasi serta meningkatkan kerjasama di dalam mengenalpasti masalah-masalah alam sekitar. Pada masa yang sama, menteri-menteri ini telah menandatangani Pelan Tindakan Pendidikan Alam Sekitar ASEAN 2000-2005.

held in Hanoi, Vietnam from 8-9 June 2000. The meeting agreed to exchange information on coastal and marine environment through Internet-based information and also agreed to develop guidelines for management and conservation of marine resources including community-based coastal surveillance for clean coastal environment. The meeting also considered guidelines on the criteria for identifying coastal and marine pollution hotspots.

ASOEN Haze Technical Task Force (HTTF)

Three ASOEN Haze Technical Task Force Meetings (HTTF) were held in the year 2000, i.e. in Brunei Darussalam on 3 April 2000, in Hanoi, Vietnam on 1 August 2000 and in Kota Kinabalu, Malaysia on 5 October 2000, respectively. The meetings discussed the current activities for the implementation of the Regional Haze Action Plan and the status of on-going projects under the ASEAN cooperative projects on transboundary haze.

ASEAN Ministerial Meeting on Environment (AMME)

Malaysia hosted the 8th AMME in Kota Kinabalu on 6-7 October 2000. It was preceded by the Senior Officials' Meeting (SOM) which was held on 5 October 2000. The Meeting was attended by Environment Ministers from Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, Philippines, Singapore, Thailand, Malaysia and representatives from the ASEAN Secretariat. The Meeting reviewed the progress of implementation of the ASEAN Strategic Plan of Action on the Environment (SPAEE) and the Regional Haze Action Plan (RHAP). The Meeting also considered and adopted the Kota Kinabalu Resolution on the Environment which reiterated the need for ASEAN to strengthen institutional and organizational capacity and enhance cooperation to address common environmental problems. At the same time the

Mesyuarat Kumpulan Kerja ASEAN Mengenai Perjanjian Pelbagai Hala Alam Sekitar (AWGMEA)

Mesyuarat AWGMEA telah diadakan pada 6-7 July 2000 di Kuala Lumpur. Status pelaksanaan bagi aktiviti-aktiviti di bawah AWGMEA telah disemak dan dibincangkan dengan memfokuskan kepada pembangunan kapasiti, jaringan dan pertukaran maklumat. Isu-isu bagi persefahaman semasa untuk setiap Perjanjian Pelbagai Hala turut dibincangkan. Mesyuarat ini turut menetapkan sebuah negara pemandu dari setiap MEA untuk memantau dengan teliti pembangunan MEA dan memberitahu negara-negara ahli berkenaan implikasi signifikan dan sebarang keadaan yang bakal berlaku.

Kumpulan Kerja ASEAN Mengenai Kepakaran Undang-undang dan Teknikal (WGLTE)

Mesyuarat pertama WGLTE telah diadakan pada 24-25 May 2000, di Jakarta. Mesyuarat ini membincangkan Bidang Rujukan bagi kajian kebolehlaksanaan bagi satu Perjanjian ASEAN mengenai Pencemaran Jerebu Merentasi Sempadan dan juga rumusan bagi proses undang-undang dan garispanduan-garispanduan.

Pasukan Petugas Mengenai Penyelarasan Pencegahan Kebakaran Sub-Serantau (SRFA) bagi Sumatera dan Borneo

Mesyuarat ke 13 bagi Pasukan Petugas SRFA bagi Sumatera telah berlangsung pada 13 Jun 2000 di Jakarta, Indonesia. Mesyuarat ini telah mempertimbangkan kemajuan dalam melaksanakan beberapa langkah kawalan untuk mencegah dan mengurangkan kebakaran di Sumatera. Mesyuarat ini juga mencadangkan untuk pengawasan yang intensif untuk sebarang letusan kebakaran di Sumatera dan penguatkuasaan bagi polisi kebakaran sifar.

Mesyuarat Bersama Pasukan Petugas Mengenai Penyelarasan Pencegahan Kebakaran Sub-Serantau ASEAN (SRFAs) bagi Sumatera dan Borneo yang ke 4 telah di adakan pada 18-19 September 2000.

Ministers endorsed the ASEAN Environment Education Action Plan 2000-2005.

ASEAN Working Group on Multilateral Environmental Agreements (AWGMEA)

The Third Meeting of the ASEAN Working Group on Multilateral Environmental Agreements was held on 6-7 July 2000 in Kuala Lumpur. The implementation status of activities under the AWGMEA was reviewed and discussed with focus on capacity building, networking and information exchange. Issues of common understanding for each multilateral agreement were also deliberated. The meeting also assigned a lead country for each MEA to closely monitor the development of the MEAs and to alert member countries of significant implications and upcoming events.

ASEAN Working Group on Legal and Technical Experts (WGLTE)

The First Meeting of the Working Group of Legal and Technical Experts was held from 24-25 May 2000, in Jakarta. The meeting discussed the Terms of Reference of a feasibility study for a single ASEAN Agreement on Transboundary Haze Pollution and the outline of the legal process and guidelines.

Working Group on Sub-Regional Fire Fighting Arrangement (SRFA) for Sumatra and Borneo

The 13th Meeting of the Working Group on SRFA for Sumatra was held on 13 June 2000, in Jakarta, Indonesia. The meeting deliberated on the progress of implementing the various measures to prevent and mitigate fires in Sumatra. The meeting also recommended close surveillance for outbreak of fires in Sumatra and the enforcement of the zero burning policy.

The 4th Joint Meeting of the Working Groups of the ASEAN Sub-Regional Fire Fighting Arrangements (SRFAs) for Sumatra and Borneo was held on 18-19 September 2000.

Pasukan Undang-Undang Penyelarasan Pencegahan Kebakaran Sub-Serantau ASEAN (SRFA) Mengenai Undang-Undang dan Penguatkuasaan

Mesyuarat pertama bagi Pasukan Undang-Undang SRFA mengenai Undang-undang dan penguatkuasaan telah diadakan di Bintulu, Sarawak pada 28 Ogos 2000. Mesyuarat ini telah dihadiri oleh pegawai-pegawai penguatkuasaan dan penasihat-penasihat undang-undang dari Brunei Darussalam, Indonesia, Singapura dan Malaysia. Mesyuarat ini diadakan untuk membina program dan aktiviti-aktiviti bagi meningkatkan kapasiti serantau dan keupayaan ahli dalam penguatkuasaan undang-undang kebakaran terbuka.

Lawatankuasa Pengurusan Bagi Maklumbalas dan Persediaan Tumpahan Minyak (OSPAR)

Mesyuarat ke 5 OSPAR telah diadakan di Balikpapan, Indonesia pada 28-29 Jun 2000. Mesyuarat membincangkan perkara-perkara berhubung dengan pengurusan kelengkapan projek OSPAR, Sistem Jaringan Maklumat dan isu-isu berkaitan bagi pelaksanaan ASEAN-OSPAR.

ASEAN Sub-Regional Firefighting Arrangement (SRFA) Legal Group on Law and Enforcement

The first meeting of SRFA Legal Group for Law and Enforcement was held in Bintulu, Sarawak on 28 August 2000. The meeting was attended by enforcement officials and legal advisors from Brunei Darussalam, Indonesia, Singapore and Malaysia. The meeting was held to draw up programs and activities to enhance regional capacity and capability in law enforcement on open burning.

Oil Spill Preparedness And Response (OSPAR) Management Committee

The 5th Meeting of OSPAR was held in Balikpapan, Indonesia on 28-29 June 2000. The meeting discussed matters pertaining to management of OSPAR project equipment, Information Network System and relevant issues for the implementation of ASEAN-OSPAR.

Protocol Montreal Bagi Melindungi Lapisan Ozon

Unit Perlindungan Ozon (UPO) terus memainkan peranannya sebagai pusat tumpuan kebangsaan dan pusat serenti dalam menyelaras, memantau dan melaksanakan aktiviti-aktiviti penghapusan bahan pemusnah ozon seperti mana yang dihendaki oleh Protokol Montreal. Sehingga akhir tahun 2000 sejumlah 4376 ODP tan bahan pemusnah lapisan ozon telah dapat dihapuskan dari 118 projek dan aktiviti (**Jadual 7.0**). Dalam hal ini sejumlah 13 misi lawatan oleh agensi-agensi pelaksana projek penghapusan bahan ini telah dilaksanakan bagi memastikan keberkesanan pelaksanaan projek tersebut (**Jadual 7.1**).

Unit ini juga telah menjalankan pemeriksaan ke atas 35 premis bagi tujuan penguatkuasaan dan pengesahan pelaksanaan projek penghapusan bahan-bahan yang boleh menipiskan lapisan ozon. Ini melibatkan lawatan ke atas sektor busar, industri pembuatan pendingin, bengkel kenderaan, pelarut, halon dan Aerosol (**Jadual 7.2**).

Beberapa mesyuarat di dalam dan di luar negara telah dihadiri oleh UPO (**Jadual 7.3(a)** dan **7.3(b)**) bagi memberi pendedahan serta membincangkan komitmen negara terhadap perkembangan isu-isu semasa di dalam negara dan juga di peringkat antarabangsa mengenai bahan pemusnah ozon

Sepanjang tahun 2000 UPO telah menganjurkan beberapa aktiviti pendidikan kesedaran kepada pihak industri, pelajar dan orang awam (**Jadual 7.4**).

Montreal Protocol For Protection Of The Ozone Layer

The Ozone Protection Unit (OPU) is the National Focal Point and One-Stop Center for coordinating, monitoring and implementing activities to phase-out ozone-depleting substances as scheduled under the Montreal Protocol for the Protection of the Ozone Layer. Up till the end of the year, a total of 4,376 tonnes Ozone Depleting Potential (ODP) had been phased out with the completion of 118 projects and activities (**Table 7.0**). Implementing agencies also made 13 mission visits to Malaysia to assess the effectiveness of the phase-out projects (**Table 7.1**).

OPU also conducted enforcement visits to 35 premises to monitor the progress and status of project implementation. These premises included the foam sector, the refrigeration sector, vehicle workshops, solvent, halon and aerosol industries (**Table 7.2**).

A number of local and international meetings were attended by staff of OPU (**Table 7.3(a) & 7.3(b)**) to deliberate on the national commitment to deal with emerging issues within the country and at the international level. Throughout the year, OPU successfully organized various activities on education and awareness for industries, students and the public at large (**Table 7.4**).

Jadual 7.0 MALAYSIA: Projek dan Aktiviti-Aktiviti yang Diluluskan Tabung Multilateral Montreal Protokol
Table 7.0 MALAYSIA: Project and Activities Approved Under the Montreal Protocol Multilateral Fund
 (pada 31 Disember 2000 / as of 31 December 2000)

| SEKTOR SECTORS | BIL. PROJEK/AKTIVITI YANG DILULUSKAN NO. OF APPROVED PROJECTS/ACTIVITIES | KOS COST (USD) |
|---|---|--|
| PENDINGIN UDARA/ PETI SEJUK REFRIGERATION/AIRCONDITIONING (MAC/ COMMERCIAL) | 15 | 11,585,691 |
| PELARUT / SOLVENT | 11 | 2,098,729 |
| BUSAR / FOAM | 65 | 12,942,221 |
| AEROSOL / AEROSOL | 7 | 2,603,063 |
| HALON / HALON | 2 | 922,932 |
| AKTIVITI AM / GENERAL ACTIVITIES | 31 | 2,156,728 |
| METHYL BROMIDE / METHYL BROMIDE | 2 | 235,000 |
| JUMLAH / TOTAL | 133 | 32,514,364 |
| TAHUN YEAR | BIL. AKTIVITI/PROJEK YANG SELESAI NO. OF COMPLETED ACTIVITIES/PROJECTS | ODS YANG TELAH DIHAPUSKAN ODS PHASED-OUT (ODP Tonnes) |
| 1993 | 5 | 150 |
| 1994 | 8 | 82 |
| 1995 | 14 | 348 |
| 1996 | 17 | 530.46 |
| 1997 | 17 | 1,024.8 |
| 1998 | 19 | 663.7 |
| 1999 | 20 | 1022.4 |
| 2000 | 17 | 554.8 |
| JUMLAH / SUB -TOTAL | 30 + (87) =118 | 4,376.16 |
| | PROJEK YANG DIJANGKA SELESAI PROJECT DUE FOR COMPLETION | ODS YANG AKAN DIHAPUSKAN ODS TO BE PHASED-OUT (ODP Ton) |
| 2001 | 15 | 625.6 |
| JUMLAH / SUB-TOTAL | 15 | 625.6 |
| JUMLAH BESAR / GRAND TOTAL | 133 | 5,001.76 |

Jadual 7.1 Jabatan Alam Sekitar: Misi Agensi-agensi Pelaksana Ke Malaysia, 2000
Table 7.1 Department of Environment: Implementation Agencies Missions to Malaysia, 2000

| Nama Agensi Pelaksana / Implementing Agencies | Tarikh/ Date |
|--|--|
| Bank Dunia / World Bank | 19- 21 Januari 2000 / 19-21 January 2000 |
| Bank Dunia / World Bank | 21- 25 Februari 2000 / 21- 25 February 2000 |
| UNEP / UNEP | 19 - 21 Mac 2000 / 19 - 21 March 2000 |
| Sekretariat Tabung Amanah Multilateral <i>Multilateral Fund Secretariat</i> | 2 - 5 Mei 2000 / 2 - 5 May 2000 |
| Bank Dunia / World Bank | 19 - 23 Jun 2000 / 19 - 23 June 2000 |
| UNIDO / UNIDO | 31 Julai - 4 Ogos 2000 / 31 July - 4 August 2000 |
| Bank Dunia / World Bank | 8 - 10 Ogos 2000 / 8-10 August 2000 |
| UNDP / UNDP | 28 - 30 Ogos 2000 / 28-30 August 2000 |
| Bank Dunia / World Bank | 11 - 27 September 2000 / 11-27 September 2000 |
| UNDP / UNDP 2000 | 30 Okt - 3 November 2000 / 30 Oct - 3 November |
| Bank Dunia / World Bank | 13 - 17 November 2000 / 13 - 17 November 2000 |
| UNDP / UNDP | 27 - 30 November 2000 / 27 - 30 November 2000 |
| UNDP / UNDP | 20 Disember 2000 / 20 December 2000 |

Jadual 7.2 Jabatan Alam Sekitar: Bilangan Lawatan Penguatkuasaan, 2000
Table 7.2 Department of Environment: Number of Enforcement Visits, 2000

| Sektor / Sector | Bil. lawatan / No. of visits |
|--|-------------------------------------|
| Busar / Foam | 18 |
| Pendingin / Refrigerant | 6 |
| Bengkel pendingin kenderaan <i>Mobile air conditioning workshop</i> | 5 |
| Pelarut / Solvent | 3 |
| Halon / Halon | 2 |
| Aerosol / Aerosol | 1 |
| Jumlah | 35 |

Jadual 7.3(a) Jabatan Alam Sekitar: Senarai Mesyuarat Kebangsaan, 2000.
Table 7.3(a) Department of Environment: List of National Meetings, 2000

| Aktiviti/ Activities | Tarikh/ Date | Tempat/ Venue |
|---|---|----------------------|
| Mesyuarat Jawatankuasa Petugas Program Kebangsaan Penghapusan CFC (NCFCP) <i>National CFC Phase out Programme (NCFCP) Task Force Meeting</i> | 21 Februari 2000 <i>21 February 2000</i> | Kuala Lumpur |
| Mesyuarat Jawatankuasa Petugas Program Kebangsaan Penghapusan CFC <i>National CFC Phase out Programme (NCFCP) Task Force Meeting</i> | 18 April 2000 <i>18 April 2000</i> | Kuala Lumpur |
| Mesyuarat ke 32 Jawatankuasa Pemandu Kebangsaan Perlindungan Lapisan Ozon <i>32nd National Steering Committee Meeting on The Protection of Ozone Layer</i> | 8 Julai 2000 <i>8 July 2000</i> | Kuala Lumpur |
| Mesyuarat Jawatankuasa Petugas Halon <i>Halon Task Force Meeting</i> | 12 Julai 2000 <i>12 July 2000</i> | Putrajaya |
| Mesyuarat Jawatankuasa Petugas Halon <i>Halon Task Force Meeting</i> | 25 Julai 2000 <i>25 July 2000</i> | Putrajaya |
| Mesyuarat Jawatankuasa Petugas Halon <i>Halon Task Force Meeting</i> | 10 Ogos 2000 <i>10 August 2000</i> | Putrajaya |
| NCFCP – Mesyuarat sektor busar <i>NCFCP - Foam Sector Meeting</i> | 26 September 2000 <i>26 September 2000</i> | Kuala Lumpur |
| NCFCP – Mesyuarat Pengedar – Pengedar bahan pemusnah ozon <i>NCFCP – ODS Distributors' Meeting</i> | 27 September 2000 <i>27 September 2000</i> | Kuala Lumpur |
| Mesyuarat Jawatankuasa Kerja Modul Latihan Mesin Kitar Semula <i>Working Committee Meeting on Training Module for Recycling Machine</i> | 6 Oktober 2000 <i>6 October 2000</i> | Kuala Lumpur |
| NCFCP – Mesyuarat sektor pelarut <i>NCFCP – Solvent Sector Meeting</i> | 16 Oktober 2000 <i>16 October 2000</i> | Kuala Lumpur |
| NCFCP – Mesyuarat sektor pendingin kenderaan <i>NCFCP – MAC Sector Meeting</i> | 17 Oktober 2000 <i>17 October 2000</i> | Kuala Lumpur |
| NCFCP – Mesyuarat sektor pendingin <i>NCFCP – Refrigerant Sector Meeting</i> | 18 Oktober 2000 <i>18 October 2000</i> | Kuala Lumpur |
| Mesyuarat Jawatankuasa Petugas Halon <i>Halon Task Force Meeting</i> | 29 Oktober 2000 <i>29 October 2000</i> | Putrajaya |
| Mesyuarat Kumpulan Kerja Perdagangan dan Penjualan CFC <i>Task Force Committee Meeting on CFC Illegal Trade</i> | 6 November 2000 <i>6 November 2000</i> | Kuala Lumpur |
| Mesyuarat ke 33 Jawatankuasa Pemandu Kebangsaan Perlindungan Lapisan Ozon <i>33rd National Steering Committee Meeting on the Protection of Ozone Layer</i> | 4 Disember 2000 <i>4 December 2000</i> | Kuala Lumpur |
| Mesyuarat Jawatankuasa Petugas Program Kebangsaan Penghapusan CFC <i>National CFCP Task Force Meeting</i> | 14 Disember 2000 <i>14 December 2000</i> | Kuala Lumpur |

Jadual 7.3 (b) Jabatan Alam Sekitar: Senarai Mesyuarat Antarabangsa, 2000
Table 7.3 (b) Department of Environment: List of International Meetings, 2000

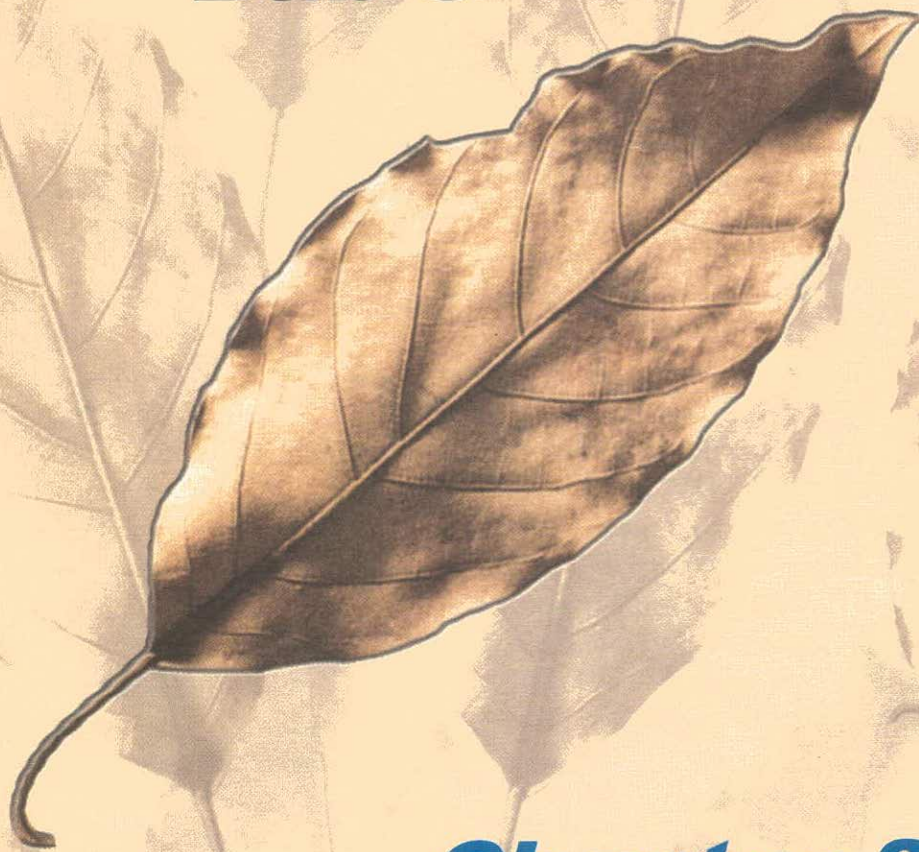
| Aktiviti / Activities | Tarikh/ Date | Tempat/ Venue |
|---|------------------------------|-------------------------------|
| Mesyuarat susulan ODS Network South East Asia & Pacific (ODSNET/ SEAP) | 20 - 22 Mac 2000 | Bangkok, Thailand |
| <i>ODSNET/ SEAP follow-up Meeting</i> | <i>20 - 22 March 2000</i> | <i>Bangkok, Thailand</i> |
| Mesyuarat Ozone Operations Resource Group (OORG) dan worksyop agen kewangan Bank Dunia | 2 - 4 Mei 2000 | Washington DC, USA |
| <i>OORG Meeting and World Bank Financial Agent Workshop</i> | <i>2 - 4 May 2000</i> | <i>Washington DC, USA</i> |
| Mesyuarat mengenai projek UNDP - bahan pemusnah ozon | 5 Mei 2000 | New York, USA |
| <i>Meeting on UNDP's ODS Projects</i> | <i>5 May 2000</i> | <i>New York, USA</i> |
| Worksyop mengenai pengawalan dan pemantauan penggunaan bahan pemusnah ozon. | 22 - 26 Mei 2000 | Pattaya, Thailand |
| <i>Workshop on Control and Monitoring of ODS Consumption</i> | <i>22 - 26 May 2000</i> | <i>Pattaya, Thailand</i> |
| Mesyuarat ke 3 Kumpulan Kerja ASEAN Mengenai Perjanjian Alam Sekitar yang Pelbagai Hala (AWGMEA). | 8 Julai 2000 | Kuala Lumpur, Malaysia |
| <i>Third Meeting of ASEAN Working Group on Multilateral Environmental Agreements</i> | <i>8 July 2000</i> | <i>Kuala Lumpur, Malaysia</i> |
| Mesyuarat 'Open-ended Working Group' (OEWG) | 10 - 13 Julai 2000 | Geneva, Switzerland |
| <i>Open-ended Working Group Meeting</i> | <i>10 - 13 July 2000</i> | <i>Geneva, Switzerland</i> |
| Mesyuarat susulan ODS Network South East Asia & Pacific (ODSNET/ SEAP) | 9 - 13 Oktober 2000 | Vientiane, Laos |
| <i>ODSNET/ SEAP follow-up Meeting</i> | <i>9 - 13 October 2000</i> | <i>Vientiane, Laos</i> |
| Mesyuarat ke 12 Parti kepada Protokol Montreal | 11 - 14 Disember 2000 | Burkina Faso, Afrika |
| <i>12th Meeting of the Party to the Montreal Protocol</i> | <i>11 - 14 December 2000</i> | <i>Burkina Faso, Africa</i> |

Jadual 7.4 Jabatan Alam Sekitar: Aktiviti Kesedaran Mengenai Penghapusan Bahan Pemusnah Ozon, 2000
 Table 7.4 Department of Environment: Ozone Depleting Substances Phaseout Awareness Activities, 2000

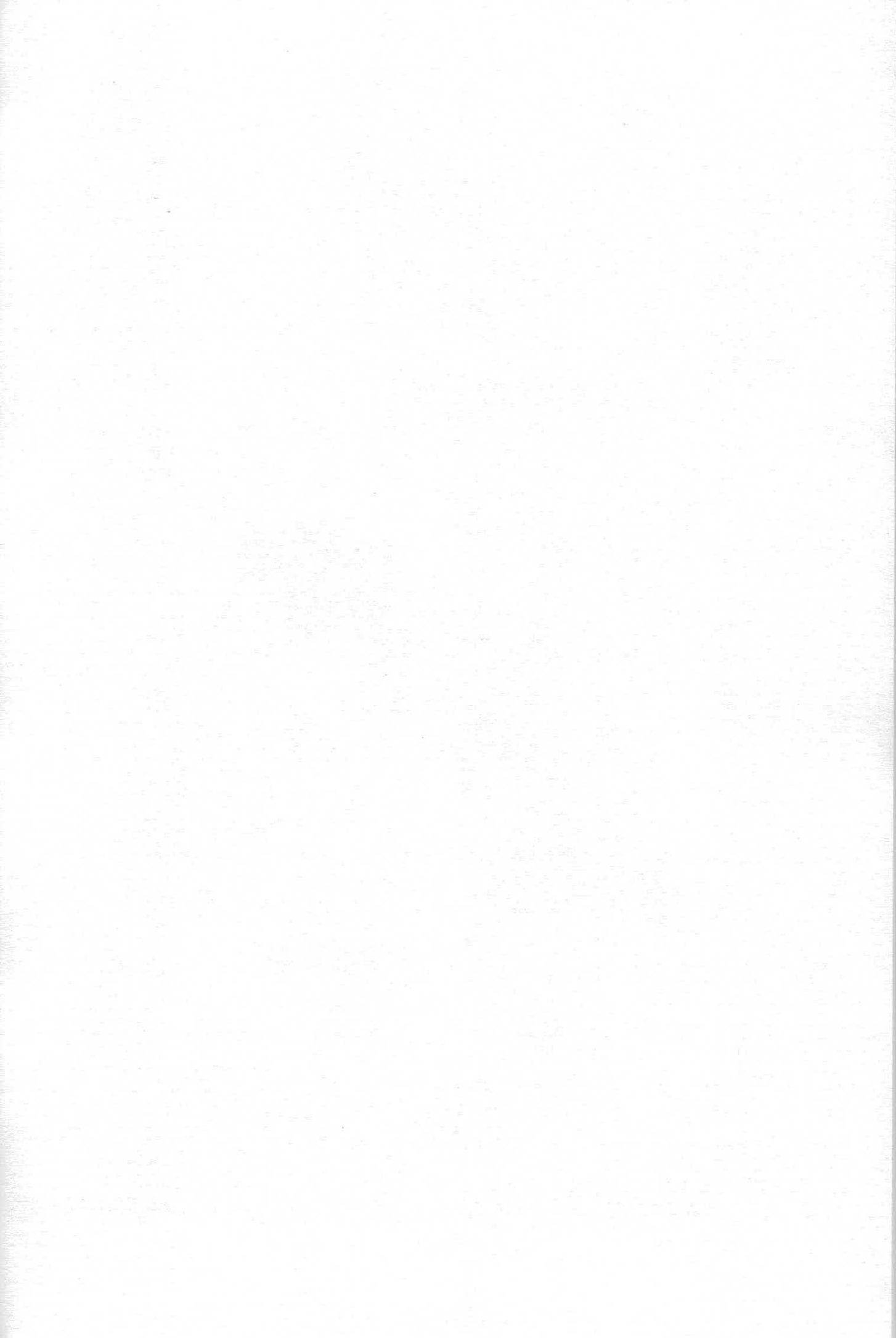
| | | |
|---|---|----------------------|
| Seminar Mengenai Refrigeran <i>Seminar on Refrigerants</i> | 26 Januari 2000 <i>26 January 2000</i> | Kuala Lumpur |
| Bengkel Mengenai Perubahan Iklim <i>Workshop on Climate Change</i> | 1 - 2 Mac 2000 <i>1 - 2 March 2000</i> | Kuala Lumpur |
| Taklimat tentang R & R oleh MASHREA <i>Briefing by MASHREA on R&R Project</i> | 18 Mac 2000 <i>18 March 2000</i> | Kuala Lumpur |
| Pelancaran Mengenai Refrigeran Chiller (Program Mengenai Pemerolehan Guna dan Kitar Semula) <i>Launching of Chiller Refrigerant (Recovery, Reclamation and Recycling) Program</i> | 20 Mac 2000 <i>20 March 2000</i> | Kuala Lumpur |
| Kuiz Alam Sekitar di Radio, RTM 1 <i>Environmental Quiz on Radio, RTM 1</i> | 20 April 2000 <i>20 April 2000</i> | Kuala Lumpur |
| Latihan Seminar Mengenai Refrigeran <i>Training Seminar on Refrigerants</i> | 18 - 19 May 2000 <i>18 - 19 May 2000</i> | Kuala Lumpur |
| Seminar EON Mengenai Refrigeran <i>EON Seminar on Refrigerants</i> | 17 Jun 2000 <i>17 June 2000</i> | Shah Alam, Selangor |
| Kuiz tentang Alam Sekitar di Radio, RTM 1 <i>Environmental Quiz on Radio, RTM 1</i> | 19-23 Jun 2000 <i>19 - 23 June 2000</i> | Kuala Lumpur |
| Taklimat Mengenai Alternatif Methil Bromida oleh Dow Chemical. <i>Briefing on Alternatives of Methyl Bromide by Dow Chemical</i> | 6 - 7 Julai 2000 <i>6 - 7 July 2000</i> | Kepong, Selangor |
| Taklimat Mengenai Peraturan-Peraturan yang Berkaitan dengan ODS <i>Briefing on ODS related Regulations</i> | 21 Julai 2000 <i>21 July 2000</i> | Kuala Lumpur |
| Seminar Mengenai Refrigeran Kepada Pemilik "Vending Machines" <i>Refrigerant Seminar for Vending Machines Owners</i> | 25 Julai 2000 <i>25 July 2000</i> | Kuala Lumpur |
| Latihan Mengenai Pengurusan "Chiller" dan Refrigeran <i>Training for Chiller and Refrigerant Management</i> | 28 - 30 Ogos 2000 <i>28 - 30 August 2000</i> | Johor Bharu, Johor |
| Taklimat Kepada Ahli FMM Mengenai Peraturan Pengurusan Halon dan Refrigeran serta Komitmen Malaysia Terhadap Protokol Montreal <i>Briefing to FMM members on Halon and Refrigerant Management Regulations and Malaysia's Commitment to Montreal Protocol</i> | 11 - 27 September 2000 <i>11 - 27 September 2000</i> | Pulau Pinang |
| Sambutan Hari Ozon - Sidang akhbar, poster dan pameran semasa Sambutan 25 Tahun Jabatan Alam Sekitar <i>Ozone Day Celebration - press release, poster, exhibition during 25th DOE Anniversary</i> | 19 - 20 September 2000 <i>19 - 20 September 2000</i> | Kuala Lumpur |
| Latihan Seminar Mengenai Refrigeran <i>Training Seminar on Refrigerants</i> | 6 Oktober 2000 <i>6 October 2000</i> | Pulau Pinang |
| Latihan Seminar Mengenai Refrigeran <i>Training Seminar on Refrigerants</i> | 9 - 13 Oktober 2000 <i>9 - 13 October 2000</i> | Kota Kinabalu, Sabah |

| Aktiviti / Activities | Tarikh / Date | Tempat / Venue |
|--|--|------------------|
| Latihan Seminar Mengenai Refrigeran Training Seminar on Refrigerants | 16 Oktober 2000 16 October 2000 | Kuching, Sarawak |
| Taklimat Mengenai Protokol Montreal dan Peraturan- Peraturan yang Berkaitan Dengan ODS Kepada Pegawai JAS (Pulau Pinang) <i>Briefing on Montreal Protocol and ODS Regulations to DOE (Penang) Staff</i> | 23 Oktober 2000 23 October 2000 | Pulau Pinang |
| Taklimat Mengenai Protokol Montreal dan Peraturan- Peraturan yang Berkaitan ODS Kepada Pelajar Universiti Malaya. <i>Briefing on Montreal Protocol and ODS Regulations to University Malaya students</i> | 3 – 6 Oktober 2000 3 – 6 October 2000 | Kuala Lumpur |
| Bengkel Mengenai Program Penghapusan Kebangsaan CFC <i>Workshop on National CFC Phase-out Programme</i> | 15 November 2000 15 November 2000 | Shah Alam |
| Taklimat Mengenai Protokol Montreal dan Peraturan- Peraturan yang Berkaitan ODS Kepada Kakitangan Petronas <i>Briefing on Montreal Protocol and ODS Regulations to Petronas Staff</i> | 13 – 17 November 2000 13 - 17 November 2000 | Bangi, Selangor |

Bab 8



Chapter 8



TEKNOLOGI MAKLUMAT

Sepanjang tahun 2000, Bahagian Teknologi Maklumat (BTM) telah melaksanakan beberapa projek ICT di mana sebahagian projek dilaksanakan bersama dengan lain-lain Bahagian di Ibu Pejabat. Projek dan aktiviti tersebut termasuk sistem aplikasi, jaringan, latihan ICT dan perkakasan.

Sistem Aplikasi

Sistem "Electronic Data Interchange (EDI)"

Sistem "Electronic Data Interchange (EDI)" merupakan satu sistem yang berdasarkan kepada 'window based'. Projek ini direkabentuk khas untuk kegunaan Seksyen Buangan Terjadual, Bahagian Kawalan. Bahagian Teknologi Maklumat bertanggungjawab di dalam menyediakan infrastrukturnya iaitu dari segi rangkaian, komputer pelayan dan menggunakan "MS-SQL Relational Database Base Management System (RDBMS)". Sistem EDI ini dibangunkan untuk memenuhi kehendak Jabatan Kastam dan Eksais DiRaja di mana semua agensi kerajaan yang mengeluarkan permit import dan eksport akan dimasukkan dalam Projek Fasa II Sistem Maklumat Kastam (SMK) bagi membolehkan segala urusan dokumentasi eksport/import dibuat secara elektronik sepenuhnya .

Semenjak tahun 1998, semua agensi kerajaan yang mengeluarkan permit import dan eksport (OGA) perlu di "interface" dengan Jabatan Kastam melalui penghantaran mesej "SANCRT (International Movement of Goods Governmental Regulatory Mesage)" melalui antaramuka SMK-DagangNet (Rajah 8.0).

Untuk tujuan di atas semua OGA termasuk JAS dikehendaki menyediakan infrastruktur, talian, perkakasan dan perisian serta prosedur kerja bagi memenuhi kehendak Jabatan Kastam tersebut.

INFORMATION TECHNOLOGY

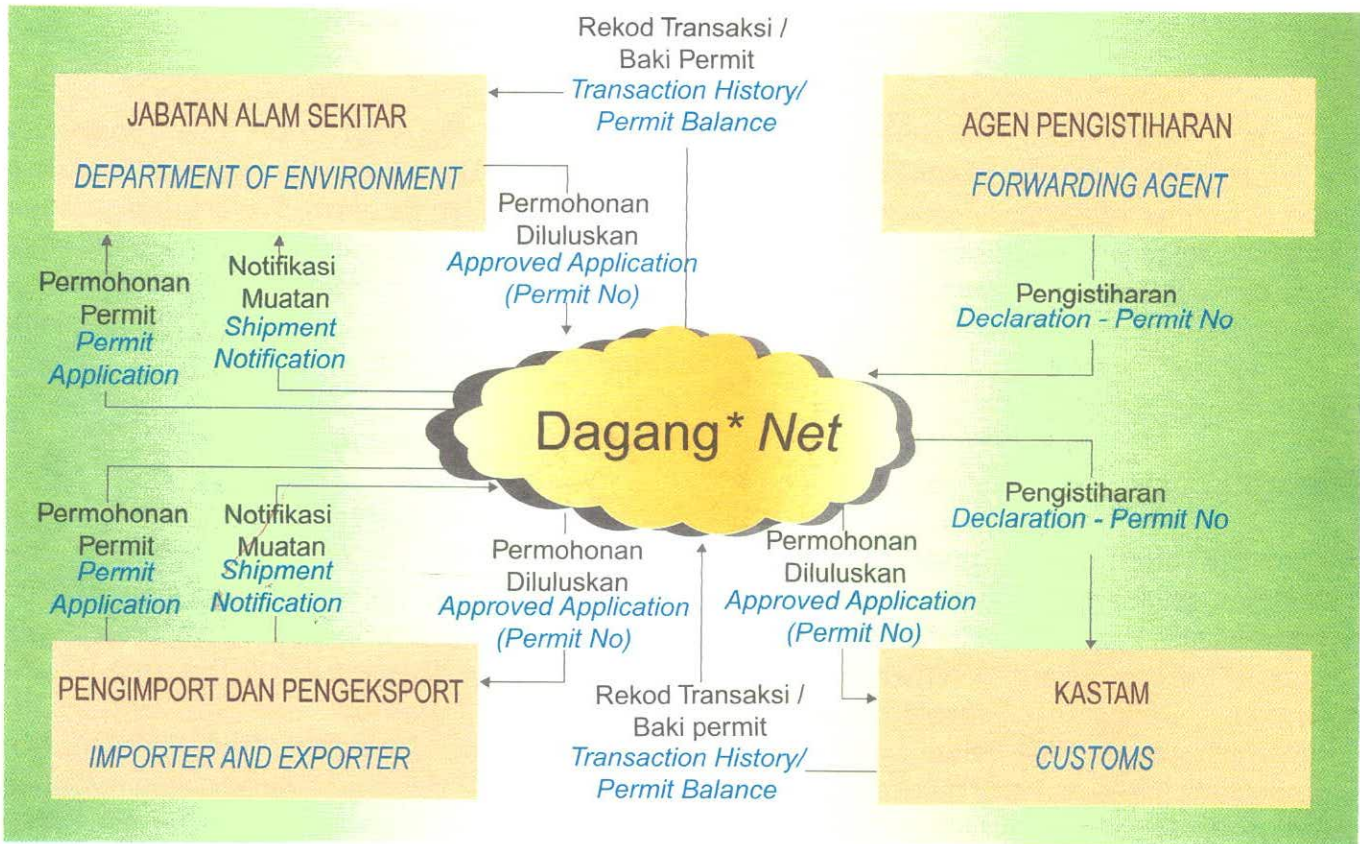
Throughout the year 2000, the Information Technology Division implemented a number of ICT projects, some of which were implemented in collaboration with other Divisions at the Head Office. The project activities included application systems, networking, ICT training and instrumentation.

Application Systems

Electronic Data Interchange

The electronic data interchange system (EDI) is a window-based system. This project was specifically designed for the use of the Scheduled Wastes Section under the Enforcement Division. The Information Technology Division was responsible setting up the infrastructure i.e. network, server, use of MS-SQL Relational Database and Base Management System (RDBMS). The EDI System was developed to meet the requirement of the Royal Customs and Excise Department whereby all government agencies issuing import/export permits had to be included under Phase II of the Customs Information System (SMK) in order to facilitate electronic documentation of import and export.

Since 1998, all government agencies issuing import/export permits (OGA) had to interface with the Customs Department using the SANCRT (International Movement of Goods Governmental Regulatory Message) via interfacing with SMK-DagangNet (Figure 8.0). For this purpose, all OGAs including DOE were required to prepare the infrastructure, line, instrumentation, software and work procedures to meet the requirement.



Rajah 8.0 Jabatan Alam Sekitar: Sistem Electronic Data Interchange
 Figure 8.0 Department of Environment: Electronic Data Interchange System

Dengan adanya Sistem EDI, segala kerja-kerja yang berkaitan dengan urusan pemprosesan dan kelulusan eksport dan import dapat dilaksanakan dengan cepat, tepat dan efisien serta dapat memenuhi piagam pelanggan Jabatan Kastam dan agensi-agensi lain.

Pelaksanaan ISO 9000

Bahagian Sistem Maklumat turut terlibat dalam pengiktirafan anugerah ISO 9000 bagi Bahagian Penilaian Jabatan Alam Sekitar. Bahagian ini dikehendaki menyediakan kaedah penyelenggaraan perkakasan ICT bagi pegawai dan kakitangan Bahagian Penilaian di Ibupejabat JAS, JAS Negeri Sembilan dan JAS Selangor. Kaedah ini juga boleh digunapakai bagi Bahagian-bahagian lain di Jabatan ini.

With the existing EDI system, all work related to processing and approvals for export and import could be implemented expeditiously and efficiently in line with the Client Charter of the Custom Department and other agencies.

Implementation of ISO 9000

The Information System Division assisted the Assessment Division in the process of obtaining ISO 9000 certification especially in respect of preparing the methodology for the maintenance of ICT hardware of the Assessment Division at the Head Office and the Negeri Sembilan and Selangor State DOE. The methodology flow chart can also be utilized by other Divisions in the Department.

E-MAIL

Bilangan pengguna e-mail JAS telah bertambah daripada 349 pengguna pada tahun 1999 kepada 442 orang iaitu pertambahan sebanyak 21%. Peningkatan keupayaan komputer pelayan (server) juga dilakukan selaras dengan permintaan akaun e-mail yang bertambah. E-mail JAS menggunakan Server HP 9000 D Series dengan pengoperasian HP-UX Unix 11.0 manakala perisian e-mail pula ialah Netscape Messaging Server 4.15 iaitu salah satu komponen dalam perisian Iplanet yang mana ia boleh dikendalikan melalui web (web enabled).

Kemajuan e-mail melangkah setapak lagi apabila penggunaan e-mail melalui web (web mail) dilancarkan. Kaedah ini memberi kemudahan kepada semua pegawai dan kakitangan JAS mengendalikan e-mail masing-masing walaupun mereka berada di luar negeri.

PERKAKASAN ICT

Pada tahun 2000, penggunaan komputer peribadi, pencetak dan komputer pelayan telah bertambah kepada 52%, 17% dan 15% masing-masing berbanding dengan tahun sebelumnya. Penambahan tersebut telah meningkatkan keupayaan Jabatan untuk membangunkan pelbagai Sistem Aplikasi.

LATIHAN ICT

Bahagian Teknologi Maklumat bertanggungjawab memberi latihan Teknologi Maklumat kepada semua kakitangan Jabatan Alam Sekitar dan dikendalikan oleh kakitangan Sistem Maklumat atau pengajar daripada luar. Pada tahun 2000 sebanyak lapan (8) latihan telah dikendalikan dan sebanyak 137 kakitangan Jabatan Alam Sekitar Ibu Pejabat dan Negeri/Cawangan telah menghadiri latihan tersebut. Latihan yang dikendalikan adalah seperti penggunaan perisian GIS, Oracle Discoverer, Homepage Tool dan Sistem Aplikasi EDI dan EKAS .

E-MAIL

The number of e-mail users increased from 349 in 1999 to 442, an increase of 21%. The server capacity was also increased in line with the increase in e-mail accounts. JAS e-mail uses the HP 9000 D Series server with the operation of HP-UX Unix 11.0, whereas the e-mail software is via Netscape Messaging Server 4.15, a component of Iplanet software that can be operated through web enabled.

The e-mail service improved further with the introduction of e-mail via web mail. This provided the possibility for all users to use the e-mail even while on duty overseas.

ICT HARDWARES

In the year 2000, the number of PCs, printers and servers increased by 52%, 17% and 15% respectively compared to the previous year. The increase enabled the Department to develop various Application Systems.

ICT TRAINING

The Information Technology Division is responsible for providing IT training to all staff of DOE either conducted by its own staff or with external assistance.

In the year 2000, 8 training sessions took place which were attended by 137 participants from the Head Office & State Offices. The training involved use of GIS, Oracle Discoverer, Homepage Tool and Application for EDI and EKAS I.

Bab 9



Chapter 9

INSTITUT KEMAHIRAN DAN LATIHAN ALAM SEKITAR (IKLAS)

IKLAS telah mula dibina pada Ogos 1999. Sehingga akhir tahun 2000, kemajuan fizikal projek hanya mencapai 75% dengan satu permohonan perlanjutan permohonan pembinaan. Sebab utama kelewatan ialah keadaan tapak yang sukar dan faktor cuaca. Pada tahun 2000, Majlis perletakan batu asas IKLAS telah dapat disempurnakan oleh Y.B Menteri Sains, Teknologi dan Alam Sekitar, Datuk Law Hieng Ding pada 2 Mei 2000. Berdasarkan penjadualan semula projek pembinaan IKLAS, IKLAS akan disiapkan dan dapat diguna sepenuhnya menjelang pertengahan tahun 2001. Program-program latihan Jabatan akan dapat dimantapkan lagi dengan siapnya kemudahan latihan ini.

Pada tahun 2000, program latihan yang telah berjaya dilaksanakan ialah:

Program Sangkutan Di Luar Negara

Pada tahun 2000, satu program sangkutan di Denmark telah dapat dianjurkan di bawah projek Capacity Building for DOE tajaan Danish Cooperation on Environment and Development (DANCED). Program selama seminggu ini telah disertai oleh 8 orang pegawai kanan kerajaan dari pelbagai agensi yang terlibat dalam pengurusan dan pemuliharaan alam sekitar bertujuan untuk bertukar-tukar pendapat dan mengadakan perundingan tentang Pengurusan Alam Sekitar berdasarkan pengalaman negara Denmark.

INSTITUTE FOR ENVIRONMENTAL SKILLS AND TRAINING (IKLAS)

The construction of IKLAS began in August 1999 and was originally scheduled for completion by the end of 2000. On 2 May 2000, the foundation stone laying ceremony was officiated by the Honourable Minister of Science, Technology and Environment, Datuk Law Hieng Ding. The completion date had to be rescheduled to mid-2001 due to delays caused by site and weather conditions.

In 2000, various training programs were successfully implemented as follows:



Penerangan pelan susunatur IKLAS oleh Ketua Pengarah Alam Sekitar / DOE Director-General explaining IKLAS layout



Penanaman pokok sempena majlis perletakan batu asas Bangunan IKLAS / Tree planting during IKLAS Foundation Stone Laying Ceremony



Perletakan Batu Asas Bangunan IKLAS
Laying IKLAS Foundation Stone

• Kursus Luar Jabatan

Sepanjang tahun 2000, IKLAS telah dapat mengendalikan penyertaan 109 orang pegawai dan kakitangan Jabatan dalam beberapa program latihan. Daripada jumlah tersebut, 55 orang telah dapat menyertai program latihan di dalam negeri dan 54 orang lagi telah menyertai program latihan di luar negeri. Program-program latihan tersebut adalah seperti berikut:

| A. Program Latihan (Dalam Negeri) | Penganjur |
|---|----------------------------|
| 1. Kursus Keselamatan Pengurusan Dokumen (15 - 17 Februari 2000) | UNITEN |
| 2. Kursus Penganalisaan Data/Maklumat (13 - 25 Mac 2000) | INTAN |
| 3. Bengkel Persembahan Berkesan Dengan Menggunakan Teknologi Keselamatan Multimedia (Asas) (20 - 25 Mac 2000) | Pejabat Kerajaan/ KSTAS |
| 4. Kursus 'Integrated Environmental Planning and Management (13 Mac - 8 April 2000) | INTAN |
| 5. Kursus Kepimpinan Dan Organisasi Pembelajaran (21 - 23 Mac 2000) | INTAN |
| 6. Kursus Latihan Pertolongan Cemas (25 Mac 2000) | Jabatan Kimia Malaysia |
| 7. Kursus Penyediaan Cadangan Kajian Penyelidikan (27 Mac - 14 April 2000) | INTAN |
| 8. Bengkel 'Environmental Valuation Workshop For Policy Makers: Incorporating Environmental Values in Development Planning and Project Analysis' (7 - 10 April 2001) | UKM |
| 9. Kursus Pemikiran Kreatif Bagi kumpulan Sokongan II (10 - 12 April 2000) | INTAN |
| 10. Kursus Metodologi Penyelidikan (14 - 29 April 2000) | INTAN |
| 11. Kursus LFA : 'Project Preparation Course' (14 - 19 Mei 2000) | UPE |
| 12. Kursus Penguatkuasaan Perundangan (22 - 25 Mei 2000) | JAS |

• Attachment Programme in Denmark, funded by DANCED under the DOE Capacity Building Project

The one week programme was attended by 8 officers from various government agencies involved in environmental management and conservation.

• External Training Programme

Throughout the year, IKLAS facilitated the attendance of 109 DOE staff members to participate in training courses; 55 participants for local courses and 54 attended external training courses:

| A. In country Training Programmes | Organized by |
|---|--|
| 1. Course on Security Document Management (15 - 17 February 2000) | UNITEN |
| 2. Course on Data/Information Analyzing (13 - 25 March 2000) | INTAN |
| 3. Workshop on "Persembahan Berkesan Dengan Menggunakan Teknologi Multimedia (Asas)" (20 - 25 March, 2000) | Pejabat Keselamatan Kerajaan/ KSTAS |
| 4. Integrated Environmental Planning and Management (13 March - 8 April 2000) | INTAN |
| 5. Course on "Kepimpinan Dan Organisasi Pembelajaran" (21 - 23 March 2000) | INTAN |
| 6. Training Course on First - Aid (25 March 2000) | Department of Chemistry, Malaysia |
| 7. Course on Preparation of Research Proposal (27 March - 14 April 2000) | INTAN |
| 8. Environmental Valuation Workshop for Policy Makers: Incorporating Environmental Values in Development Planning and Project Analysis (7 - 10 April 2001) | UKM |
| 9. Course on "Pemikiran Kreatif Bagi Kumpulan Sokongan II (10 - 12 April 2000) | INTAN |
| 10. Course on Research Methodology (14 - 29 April 2000) | INTAN |

| A. Program Latihan (Dalam Negeri) | Penganjur |
|--|---|
| 13. Kursus 'Waste Water Treatment Plant Course' (23 - 25 Mei 2000) | UM |
| 14. Seminar 'Profiting from Waste and By-Product of the Oil Palm Industry' (15 Mei 2000) | FRIM |
| 15. Kursus Persidangan Perkhidmatan Awam Kelima (22 - 25 Mei 2000) | PPTD |
| 16. Kursus 'JAVA Intermediate: Application Development 1/2000' (19 - 22 Jun 2000) | INTAN |
| 17. Seminar 'Environmental Toxicology' (21 - 22 Jun 2000) | IMR |
| 18. 'Executive Seminar on Environmental Toxicology: Chemical safety & Hazardous Waste Management' (20 Jun 2000) | SIRIM |
| 19. 'Workshop on the Management and Conservation of Protected Areas (PA): Administrative and Legislative Issues' (4 - 7 Julai 2000) | INTAN |
| 20. Kursus 'Effective Presentation Skills' (25 - 28 Julai 2000) | IDHL |
| 21. 'Business and Investment Forum for Renewable Energy Efficiency in Asia and the Pacific 2000' (4 - 7 September 2000) | |
| 22. Seminar Penyediaan Panduan Pengurusan Fail dan Rekod Incorporation (24 - 25 Oktober 2000) | M. Jamin Sdn. Bhd. |
| 23. 'Natural Resource Accounting Workshop' | MIER |
| 24. Bengkel Kebangsaan Penggubalan Dasar Pengurusan Zon Pantai Negara (5 - 7 November 2000) | UPEN |
| 25. Bengkel Setiausaha Cemerlang (6 - 8 November 2000) | MINT |
| 26. Seminar Kebangsaan Mengenai Globalisasi dan Liberalisasi (14 November 2000) | Kementerian Kewangan Malaysia/ INTAN |
| 27. 'First Microwave National Remote Sensing Seminar' (16 November 2000) | MACRES |

| A. In country Training Programmes | Organized by |
|--|--|
| 11. Course on LFA : Project Preparation Course (14 - 19 May 2000) | UPE |
| 12. Course on "Penguatkusaan Perundangan Alam Sekitar" (22 - 25 May 2000) | DOE |
| 13. Waste Water Treatment Plant Course (23 - 25 May 2000) | UM |
| 14. Seminar on Profiting from Waste and By-Product of the Oil Palm Industry (15 May 2000) | FRIM |
| 15. Course on "Persidangan Perkhidmatan Awam Kelima" (22 - 25 May 2000) | PPTD |
| 16. Course on JAVA Intermediate: Application Development 1/2000 (19 - 22 Jun 2000) | INTAN |
| 17. Seminar on Environmental Toxicology (21 - 22 Jun 2000) | IMR |
| 18. Executive Seminar on Environmental Toxicology: Chemical Safety & Hazardous Waste Management (20 Jun 2000) | SIRIM |
| 19. Workshop on the Management and Conservation of Protected Areas (PA): Administrative and Legislative Issues. (4 - 7 July 2000) | INTAN |
| 20. Effective Presentation Skills Course (25 - 28 July 2000) | IDHL |
| 21. Business and Investment Forum for Renewable Energy Efficiency in Asia and the Pacific 2000 (4 - 7 September 2000) | |
| 22. Seminar on "Penyediaan Panduan Pengurusan Fail & Rekod" (24 - 25 October 2000) | M. Jamin Incorporation Sdn. Bhd. |
| 23. Natural Resource Accounting Workshop | MIER |
| 24. National Workshop on "Penggubalan Dasar Pengurusan Zon Pantai Negara" (5 - 7 November 2000) | UPE |
| 25. Workshop on "Setiausaha Cemerlang" (6 - 8 November 2000) | MINT |
| 26. National Seminar on Globalization and Liberalization (14 November 2000) | Ministry of Finance Malaysia/ INTAN |

| A. Program Latihan (Dalam Negeri) | Penganjur |
|---|------------------------------------|
| 28. Program 'Development Management' (12 – 17 November 2000) | JPA/BMCC/ PA Consultants |
| 29. Seminar Penerimaan & Penggunaan Data Satelit di Antartika dan Pentadbiran & Logistik Ekspedisi Antartika Jepun (22 November 2000) | KSTAS |
| 30. Bengkel mengenai 'Economic Approaches to Sustainable Development in Malaysia' (23 November 2000) | UPE |
| 31. Seminar Pemantapan Keluarga Siri Ke VIII (25 November 2000) | JAWI |
| 32. 'Workshop on Forest Certification' (Disember 2000) | NTCC |
| 33. Seminar Teknikal NAREM (12 Disember 2000) | MACRES |
| B. Program Latihan (Luar Negeri) | |
| 1. Course on Development of Strategies Against Climate Change, TOKYO, JAPAN (10 Januari - 26 Februari 2000) | JICA |
| 2. Singapore Technical Assistance Programme For Sustainable Development (STAPSD) – Environmental Management, SINGAPORE (10 - 21 Januari 2000) | Environment Agency Singapore |
| 3. Training Course on Technology for G.H.G.s Emission Mitigation, NAGOYA, JAPAN (17 Januari - 6 Mac 2000) | JICA |
| 4. Training Course on Environmental Engineering (Air Pollution) (24 Januari - 12 Mac 2000) | JICA |
| 5. The ASEAN Program on Dioxin and Endocrine Disrupting Compounds, YOKOHAMA, JAPAN (21 - 25 Februari 2000) | AOTS |
| 6. 7 th International Workshop for the ECO ASIA Long Term, KANAGAWA, JAPAN (22 - 23 Februari 2000) | Environment Agency, Japan |
| 7. Environmental Technology Assessment (EnTA) Workshop, MANILA, PHILIPPINES (22 - 25 Februari 2000) | UNEP |
| 8. 1st. Expert Workshop on Assessing National Management Needs of Persistent Toxic Substances, GENEVA, SWITZERLAND (6 - 10 Mac 2000) | UNEP |
| 9. Course on Industrial Hazardous Waste Management, WASHINGTON D.C., USA (6 - 10 Mac 2000) | US - AEP |

| A. In country Training Programmes | Organized by |
|---|--------------------------------------|
| 27. Seminar on First Microwave National Remote Sensing (16 November 2000) | MACRES |
| 28. Development Management Program | JPA/BMCC/ PA Consultants |
| 29. Seminar on "Penerimaan & Penggunaan Data Satelit di Antartika dan Pentadbiran & Logistik Ekspedisi Antartika Jepun" (22 November 2000) | KSTAS |
| 30. Workshop on Economic Approaches to Sustainable Development in Malaysia (23 November 2000) | UPE |
| 31. Seminar on "Pemantapan Keluarga Siri Ke VIII" (25 November 2000) | JAWI |
| 32. Workshop on Forest Certification (6 - 7 December 2000) | NTCC |
| 33. Seminar on Technical NAREM (12 December 2000) | MACRES |
| B. Training Program (Overseas) | |
| 1. Course on Development of Strategies Against Climate Change, TOKYO, JAPAN (10 January - 26 February 2000) | JICA |
| 2. Singapore Technical Assistance Programme For Sustainable Development (STAPSD) – Environmental Management, SINGAPORE (10 - 21 January 2000) | Environment Ministry Singapore |
| 3. Training Course on Technology for GHG's Emission Mitigation, NAGOYA, JAPAN (17 January - 6 March 2000) | JICA |
| 4. Training Course on Environmental Engineering (Air Pollution) (24 January - 12 March 2000) | JICA |
| 5. The ASEAN Program on Dioxin and Endocrine Disrupting Compounds YOKOHAMA, JAPAN (21 - 25 February 2000), | AOTS |
| 6. 7 th International Workshop for the ECO ASIA Long Term, KANAGAWA, JAPAN (22 - 23 February 2000) | Environment Agency, Japan |
| 7. Environmental Technology Assessment (EnTA) Workshop, MANILA, PHILIPPINES (22 - 25 February 2000) | UNEP |

| A. Program Latihan (Dalam Negeri) | Penganjur |
|--|--|
| 10. First Training Course on Hazardous Waste Management and the Implementation of the Basel Convention, SERPONG, INDONESIA (27 - 31 Mac 2000) | EIMA/ BAPEDAL |
| 11. Regional Training Course on Development, Implementation and Management Of Coastal and Marine Environmental Projects, PHILIPPINES AND CHINA (3 - 29 April 2000) | GEF/UNDP/ IMO |
| 12. Regional Workshop of State of the Environment (SOE) Focal Points in Asia and the Pacific 2000, BANGKOK, THAILAND (18 - 21 April 2000) | United Nations |
| 13. Regional (RCA) Training Workshop on Advanced Application of Radiotracers to study Effluent Dispersion into Sea, MUMBAI, INDIA (24 - 29 April 2000) | IAEA |
| 14. Seminars on Investment Opportunities In Malacca and Dialogue Between Chief Minister of Malacca & Potential Investors (25 - 27 April 2000) | IAEA |
| 15. GEF Funded Project – 2nd. Expert Workshop For "Framework for a National Persistent Toxic Substances Management Plant" (1 - 5 Mei 2000) | Perbadanan Kemajuan Negeri Melaka |
| 16. Environmental Impact Assessment (EIA) Training Programme, STOCKHOLM, SWEDEN (2 Mei - 2 Jun 2000) | SIDA |
| 17. 4th Annual Workshop For Financial Agents, WASHINGTON D.C., USA (3 - 4 Mei 2000) | WORLD BANK |
| 18. United States – Asia Environmental Partnership Programme (US – AEP) Environmental Exchange Programme (EEP), COLORADO, USA (8 - 12 Mei 2000) | US - AEP |
| 19. IMO/Environmental Australia Workshop On the Prevention of Marine Pollution in The Asia-Pacific Region, TOWNSVILLE, AUSTRALIA (8 - 12 Mei 2000) | IMO |
| 20. Regional Workshop on Control and Monitoring of ODS Consumption, PATTAYA, THAILAND (22 - 26 Mei 2000) | UNEP |

| A. In country Training Programmes | Organized by |
|--|--|
| 8. 1st. Expert Workshop on Assessing National Management Needs of Persistent Toxic Substances, GENEVA, SWITZERLAND (6 - 10 March 2000) | UNEP |
| 9. Course on Industrial Hazardous Waste Management, WASHINGTON D.C., USA (6 - 10 March 2000) | US - AEP |
| 10. First Training Course on Hazardous Waste Management and the Implementation of the Basel Convention, SERPONG, INDONESIA (27 - 31 March 2000) | EIMA/ BAPEDAL |
| 11. Regional Training Course on Development, Implementation and Management Of Coastal and Marine Environmental Projects, PHILIPPINES AND CHINA (3 - 29 April 2000) | GEF/UNDP /IMO |
| 12. Regional Workshop of State of the Environment (SOE) Focal Points in Asia and the Pacific 2000, BANGKOK, THAILAND (18 - 21 April 2000) | UNEP |
| 13. Regional (RCA) Training Workshop on Advanced Application of Radiotracers to study Effluent Dispersion into Sea, MUMBAI, INDIA (24 - 29 April 2000) | IAEA |
| 14. Seminars on Investment Opportunities In Malacca and Dialogue Between Chief Minister of Malacca & Potential Investors (25 - 27 April 2000) | IAEA |
| 15. GEF Funded Project – 2nd. Expert Workshop For "Framework for a National Persistent Toxic Substances Management Plant" (1 - 5 May 2000) | Perbadanan Kemajuan Negeri Melaka |
| 16. Environmental Impact Assessment (EIA) Training Programme, STOCKHOLM, SWEDEN (2 May - 2 Jun 2000) | SIDA |
| 17. 4th Annual Workshop For Financial Agents, WASHINGTON D.C., USA (3 - 4 May 2000) | WORLD BANK |
| 18. United States – Asia Environmental Partnership Programme (US – AEP) Environmental Exchange Programme (EEP), COLORADO, USA (8 - 12 May 2000) | US - AEP |

| A. Program Latihan (Dalam Negeri) | Penganjur | A. In country Training Programmes | Organized by |
|--|-----------------------------------|--|-----------------------|
| 21. Germany – Singapore Environmental Technology Agency (GSETA): Asia – Pacific Regional Workshop on Energy Efficiency, SINGAPORE (23 - 25 Mei 2000) | GSETA | 19. IMO/Environmental Australia Workshop On the Prevention of Marine Pollution in The Asia-Pacific Region, TOWNSVILLE, AUSTRALIA (8 - 12 May 2000) | IMO |
| 22. Lawatan Rasmi Pengurusan Sisa Pepejal dan Persekitaran Semula (26 Mei – 2 Jun 2000) | Kerajaan Negeri Selangor | 20. Regional Workshop on Control and Monitoring of ODS Consumption, PATTAYA, THAILAND (22 - 26 May 2000) | UNEP |
| 23. Training Course on Environment Management Seminar, OSAKA, JAPAN (5 Jun - 16 Julai 2000) | JICA | 21. Germany – Singapore Environmental Technology Agency (GSETA): Asia – Pacific Regional Workshop on Energy Efficiency, SINGAPORE (23 - 25 May 2000) | GSETA |
| 24. Strategic Planning, Study Tour to Denmark – Focus on Macro Environmental Management, COPENHAGEN, DENMARK (18 - 24 Jun 2000) | DANCED | 22. Official visit Solid Waste Management and Recycling (26 May - 2 Jun 2000) | Selangor Government |
| 25. Training Course on Air Quality, Public Health and Traffic Management, BANGKOK, THAILAND (21 - 23 Jun 2000) | CUC - UEM | 23. Training Course on Environment Management Seminar, OSAKA, JAPAN (5 Jun - 16 July 2000) | JICA |
| 26. Workshop and Training Sessions On Cleaner Production, TAIPEI, TAIWAN (17 - 21 Julai 2000) | ADB | 24. Strategic Planning, Study Tour to Denmark – Focus on Macro Environmental Management, COPENHAGEN, DENMARK (18 - 24 Jun 2000) | DANCED |
| 27. POPS – Regional Training and Management Workshop on Dioxins, Furans and PCB, SEOUL, SOUTH KOREA (24 - 28 Julai 2000) | UNEP | 25. Training Course on "Air Quality, Public Health and Traffic Management", BANGKOK, THAILAND (21 - 23 Jun 2000) | CUC - UEM |
| 28. Integrated Coastal Zone Management (ICZM), HORSHOLAN, DENMARK (21 Ogos - 4 Oktober 2000) | DANCED - ICZM Project | 26. Workshop and Training Sessions On Cleaner Production, TAIPEI, TAIWAN (17 - 21 July 2000) | ADB |
| 29. Workshop APEC – VC 2000, TAIPEI, TAIWAN (4 - 6 September 2000) | APEC - VC Japan | 27. POPS – Regional Training and Management Workshop on Dioxins, Furans and PCB, SEOUL, SOUTH KOREA (24 - 28 July 2000) | UNEP |
| 30. 3rd Asia – Pacific Regional Training Workshop on Hazardous Waste Management in Mining, BEIJING, CHINA (4 - 8 September 2000) | UNEP/SBC | 28. Integrated Coastal Zone Management (ICZM), HORSHOLAN, DENMARK (21 August - 4 October 2000) | DANCED - ICZM Project |
| 31. Lawatan Teknikal Projek Malaysia Aluminium Smelter (MASCO) ke NANKING, CHINA (8 - 12 September 2000) | Kerajaan Negeri Perak | 29. Workshop APEC – VC 2000, TAIPEI, TAIWAN (4 - 6 September 2000) | APEC - VC Japan |
| 32. International Workshop on Next Generation Power Systems for Automobiles, TOKYO, JAPAN (27 - 30 September 2000) | Japan Science & Technology Agency | 30. 3rd Asia – Pacific Regional Training Workshop on Hazardous Waste Management in Mining, BEIJING, CHINA (4 - 8 September 2000) | UNEP/SBC |
| 33. US – AEP Environmental Exchange Programme, USA (30 September - 16 Oktober 2000) | US - AEP | 31. Malaysia Technical Project Aluminium Smelter (MASCO) Visit to China, NANKING, CHINA (8 - 12 September 2000) | Perak Government |

| A. Program Latihan (Dalam Negeri) | Penganjur |
|---|--|
| 34. Oil Pollution Preparedness, Response and cooperation (OPRC) Regional Training Course for Supervisors on – Scene Commanders, SINGAPORE (16 - 20 Oktober 2000) | IMO/ Kerajaan Singapore/ UNDP |
| 35. Training Course on Administration Management for Environmental Restoration and Conservation by Minamata City Government – Lessons from Minamata Disease (Mercury Poisoning), FUKUOKA, JAPAN (16 Oktober - 29 November 2000) | JICA |
| 36. Automobile Technology for the Improvement of Environment Problems, TSUKUBA-SHI, JAPAN (23 Oktober - 16 Disember 2000) | JICA |
| 37. Regional Workshop on Indicators Of Sustainable Development in Asia and the Environment, BANGKOK, THAILAND (16 - 19 Oktober 2000) | UN - ESCAP |
| 38. 9th Regional Seminar on Earth Observation for Tropical Eco – System Management, KHAO YAI, THAILAND (20 - 24 November 2000) | NASDA/ RESTEC |
| 39. International Training Course for Environmental Professionals, TAIPEI, TAIWAN (6 - 10 November 2000) | Taiwan - EPA |
| 40. Training Course Safety and Environment Management for Offshore Petroleum Management, TOKYO, JAPAN (7 November - 3 Disember 2000) | JICA |
| 41. Training Seminar for Port Enforcement Officers, HONGKONG, CHINA (4 - 8 Disember 2000) | UNEP |
| 42. Training Course on integrated Environmental Impact assessment (IEIA) for Coastal and Marine Areas, HONG KONG, CHINA (11 - 16 Disember 2000) | CMC/City Univ. of Hong Kong/ PEMSEA |

| A. In country Training Programmes | Organized by |
|--|--|
| 32. <i>International Workshop on Next Generation Power Systems for Automobiles, TOKYO, JAPAN (27 - 30 September 2000)</i> | Japan Science & Technology Agency |
| 33. <i>US – AEP Environmental Exchange Programme, USA (30 September - 16 October 2000)</i> | US - AEP |
| 34. <i>Oil Pollution Preparedness, Response and Cooperation (OPRC) Regional Training Course for Supervisors/ On – Scene Commanders, SINGAPORE (16 - 20 October 2000)</i> | IMO/ Singapore UNDP |
| 35. <i>Training Course on Administration Management for Environmental Restoration and Conservation by Minamata City Government – Lessons from Minamata Disease (Mercury Poisoning), FUKUOKA, JAPAN (16 October - 29 November 2000)</i> | JICA |
| 36. <i>Automobile Technology for the Improvement of Environmental Problems, TSUKUBA-SHI, JAPAN (23 October - 16 December 2000)</i> | JICA |
| 37. <i>Regional Workshop on Indicators Of Sustainable Development in Asia, BANGKOK, THAILAND (16 - 19 October 2000)</i> | UN - ESCAP |
| 38. <i>9th Regional Seminar on Earth Observation for Tropical Eco – System Management, KHAO YAI, THAILAND (20 - 24 November 2000)</i> | NASDA/ RESTEC |
| 39. <i>International Training Course for Environmental Professionals, TAIPEI, TAIWAN (6 - 10 November 2000)</i> | Taiwan - EPA |
| 40. <i>Training Course Safety and Environment Management for Offshore Petroleum Management, TOKYO, JAPAN (7 November - 3 December 2000)</i> | JICA |
| 41. <i>Training Seminar for Port Enforcement Officers, HONG KONG, CHINA (4 - 8 December 2000)</i> | UNEP |
| 42. <i>Training Course on integrated Environmental Impact assessment (IEIA) for Coastal and Marine Areas, HONG KONG, CHINA (11 - 16 December 2000)</i> | CMC/CityUniv. of Hong Kong/ PEMSEA |

- **Kursus Dalam Jabatan**

Dalam tahun 2000, sebanyak 29 program latihan telah dapat dianjurkan yang melibatkan penyertaan 720 orang pegawai dan kakitangan Jabatan diberbagai peringkat dan 360 orang pegawai dari agensi lain. Kursus-kursus yang telah dapat dianjurkan adalah seperti berikut:

| Kursus | Tarikh |
|--|--------------------|
| 1. Kursus Perintis Mengkaji Laporan EIA | 14 – 18 Feb 2000 |
| 2. Kursus Penguatkuasaan Praktikal | 19 – 25 Mac 2000 |
| 3. Kursus Wastewater Engineering | 16 – 22 April 2000 |
| 4. Kursus Kecemerlangan dan Motivasi Diri | 16 – 18 April 2000 |
| 5. Kursus Induksi Khusus Jabatan | 18 – 22 April 2000 |
| 6. Kursus Penilaian Impak Sosial | 21 - 26 Mei 2000 |
| 7. Kursus Analisa Data Alam Sekitar | 15 - 20 Mei 2000 |
| 8. Seminar Kawalan Tumpahan Minyak dan Pembersihan Pantai Bagi Negeri Terengganu | 5 - 6 Jun 2000 |
| 9. Kursus Asas Pendakwaan | 18 - 24 Jun 2000 |
| 10. Seminar Penyeliaan dan Pengurusan Berkesan (Bil. 1/2000) | 28 Jun 2000 |
| 11. Bengkel Seminar Mengenai Penguatkuasaan Pelupusan Haram dan Pergerakan Buangan Terjadual | 9 - 12 Julai 2000 |
| 12. Kursus Undang-Undang Alam Sekitar Taklimat Peperiksaan | 17 - 19 Julai 2000 |
| 13. Seminar Penyeliaan dan Pengurusan Berkesan (Bil. 2/2000) | 28 Julai 2000 |
| 14. Bengkel Logical Framework Approach (LFA) As A Planning Tool | 29 Julai 2000 |
| 15. Bengkel Kewangan JAS | 24 - 29 Julai 2000 |
| 16. Bengkel Latihan Penguatkuasaan Post – EIA | 7 - 10 Ogos 2000 |
| 17. Kursus Hand-held Personal Gas Detector | 10 -13 Sept 2000 |
| 18. Kursus Prosedur Penguatkuasaan Pencemaran Marin | 18 - 20 Sept 2000 |
| 19. Kursus Penyiasatan dan Penguatkuasaan Peraturan Pembakaran Terbuka (Bil. 1/2000) | 18 - 19 Sept 2000 |

- **In-house Training Programmes**

Twenty nine (29) training programmes for 720 DOE participants and 360 participants from other agencies were successfully implemented.

| Courses | Date |
|---|--------------------|
| 1. Pilot Course on Review of EIA Report | 14 – 18 Feb 2000 |
| 2. Practical Enforcement Course | 19 – 25 March 2000 |
| 3. Wastewater Engineering Course | 16 – 22 April 2000 |
| 4. Enhancement and Self-Motivation Course | 16 - 18 April 2000 |
| 5. Department Induction Course | 18 - 22 April 2000 |
| 6. Social Impact Assessment Course | 21 - 26 May 2000 |
| 7. Environmental Data Analysis Course | 15 - 20 May 2000 |
| 8. Seminar on Oil Spill Contingency Plan and Beach Clean-up for the State of Terengganu | 5 - 6 Jun 2000 |
| 9. Basic Course on Prosecution | 18 - 24 Jun 2000 |
| 10. Seminar on Supervision and Effective Management (No. 1/2000) | 28 Jun 2000 |
| 11. Workshop on Enforcement of Illegal Dumping and Mobility of Scheduled Wastes | 9 - 12 July 2000 |
| 12. Environmental Law Course and Examination Briefing | 17 - 19 July 2000 |
| 13. Seminar on Inspections and Effective Management (No. 2/2000) | 28 July 2000 |
| 14. Workshop on Logical Framework Approach (LFA) As A Planning Tool | 29 July 2000 |
| 15. Workshop on DOE Finance | 24 - 29 July 2000 |
| 16. Workshop on Post – EIA Enforcement | 7 - 10 August 2000 |
| 17. Hand-held Personal Gas Detector Course | 10 -13 Sept 2000 |
| 18. Course on Procedure of Marine Pollution Enforcement | 18 - 20 Sept 2000 |
| 19. Enforcement and Investigation on Open Burning Course (No. 1/2000) | 18 - 19 Sept 2000 |
| 20. Enforcement and Investigation on Open Burning Course (No. 2/2000) | 21 - 22 September |
| 21. Enforcement and Investigation on Open Burning Course (No. 3/2000) | 16 - 17 Oct 2000 |

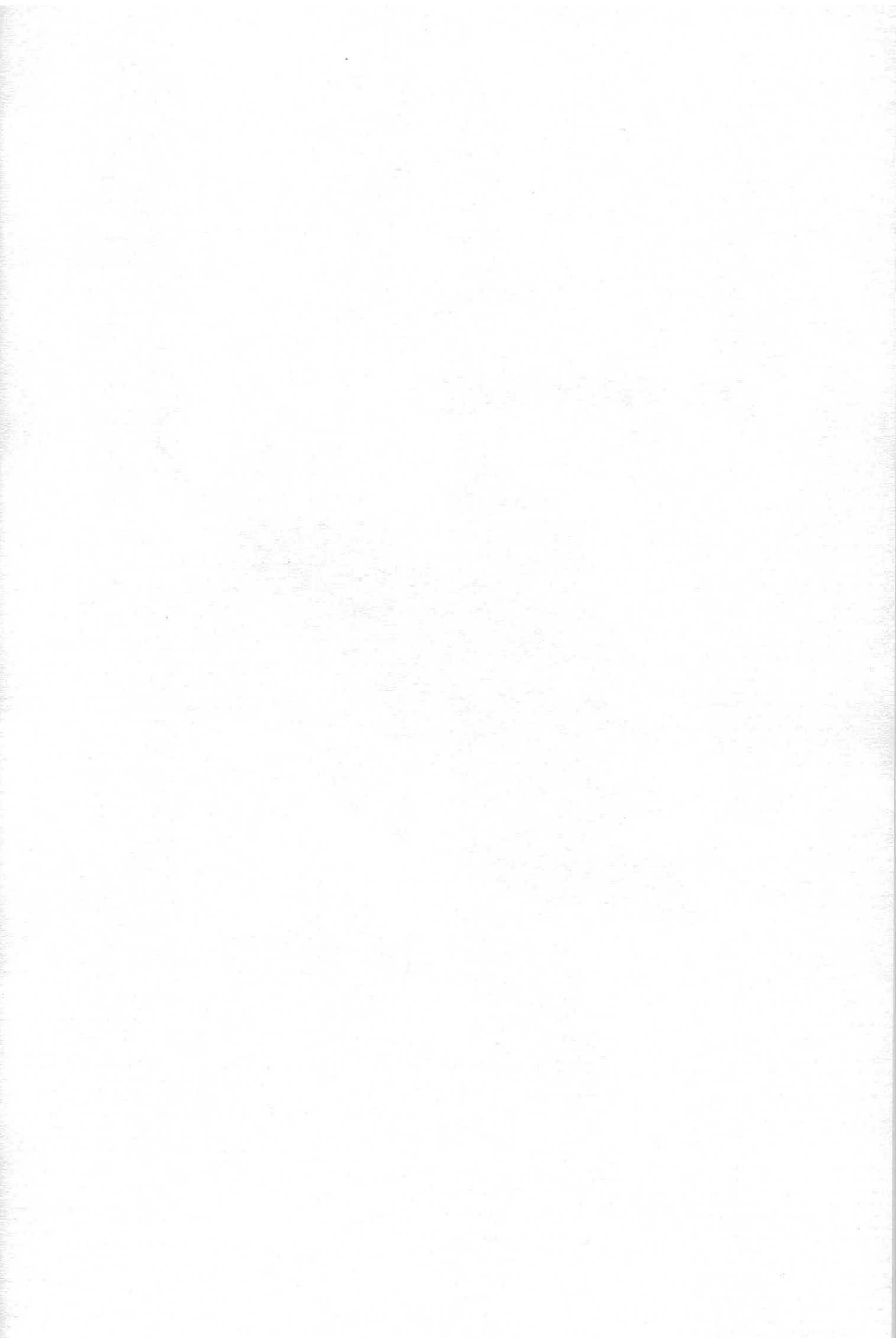
| Kursus | Tarikh |
|---|---------------------|
| 20. Kursus Penyiasatan dan Penguatkuasaan Peraturan Pembakaran Terbuka (Bil. 2/2000) | 21 - 22 Sept 2000 |
| 21. Kursus Penyiasatan dan Penguatkuasaan Peraturan Pembakaran Terbuka (Bil. 3/2000) | 16 - 17 Okt 2000 |
| 22. Kursus Kesedaran Kawalan Tumpahan Minyak dan Pembersihan Pantai Negeri Sarawak | 25 - 27 Okt 2000 |
| 23. Kursus Penilaian Kesan Kesihatan Alam Sekitar | 31 Okt - 2 Nov 2000 |
| 24. Kursus Kesedaran Kawalan Tumpahan Minyak dan Pembersihan Pantai Negeri Pulau Pinang | 7 - 9 Nov 2000 |
| 25. Kursus Penggunaan Aplikasi – Aplikasi Komputer (E – KAS) | 6 - 11 Nov 2000 |
| 26. Kursus Asas Perisian Arcview GIS 2000 | 13 - 15 Nov 2000 |
| 27. Kursus Penyiasatan dan Penguatkuasaan Peraturan Pembakaran Terbuka (Bil. 4/2000) | 16 - 17 Nov 2000 |
| 28. Kursus Waste Water Engineering (Bil. 2/ 2000) | 20 - 25 Nov 2000 |
| 29. Kursus Kesedaran Kawalan Tumpahan Minyak dan Pembersihan Pantai Negeri Sabah | 21 - 23 Nov 2000 |

| Courses | Date |
|--|---------------------|
| 22. Seminar on Oil Spill Contingency Plan and Beach Clean-up for the State of Sarawak | 25 - 27 Oct 2000 |
| 23. Environmental Health Impact Assessment Course | 31 Oct - 2 Nov 2000 |
| 24. Seminar on Oil Spill Contingency Plan and Beach Clean-up for the State of Pulau Pinang | 7 - 9 Nov 2000 |
| 25. Application Course - Computer (E – KAS) | 6 - 11 Nov 2000 |
| 26. Basic Course of Software - Arcview GIS 2000 | 13 - 15 Nov 2000 |
| 27. Enforcement and Investigation on Open Burning Course (No. 4/2000) | 16 - 17 Nov 2000 |
| 28. Waste Water Engineering Course (No. 2/ 2000) | 20 - 25 Nov 2000 |
| 29. Seminar on Oil Spill Contingency Plan and Beach Clean-up for the State of Sabah | 21 - 23 Nov 2000 |

Bab 10



Chapter 10



PROGRAM-PROGRAM BARU

Program Promosi "Cleaner Production" (CP)

Sepanjang tahun 2000 unit teknologi kawalan telah mengadakan beberapa aktiviti yang berkaitan dengan "Cleaner Production" (CP). Secara umumnya aktiviti-aktiviti ini menerapkan kepentingan CP terhadap kilang sadur.

NEW AREAS OF ACTIVITIES

Cleaner Production Promotion Programme

Throughout the year 2000, the Technology Control Unit conducted a number of activities relating to Cleaner Production (CP) especially for the metal finishing and electroplating industries.

Jadual 10.0 Jabatan Alam Sekitar: Aktiviti "Cleaner Production"
Table 10.0 Department of Environment: Schedule of Cleaner Production Activities

| Tarikh / Date | Aktiviti / Activities |
|--------------------------------------|---|
| 5 Mei 2000 5 May 2000 | Perbincangan bersama JAS-SIRIM mengenai aktiviti yang akan dilaksanakan pada tahun 2000 <i>Discussion with JAS-SIRIM regarding activities for year 2000</i> |
| 16 Mei 2000 16 May 2000 | Lawatan bersama JAS-SIRIM ke Kilang Sadur Elektrik Quality Sdn. Bhd. <i>Joint DOE-SIRIM visit to Quality Electroplating Sdn Bhd.</i> |
| 7 Jun 2000 7 June 2000 | Taklimat "Introduction to Cleaner Production" <i>Seminar "Introduction to Cleaner Production"</i> |
| 13 Julai 2000 13 July 2000 | Dialog bersama pengilang-pengilang Sadur Elektrik di Negeri Sembilan <i>Dialogue with electroplating industries in Negeri Sembilan</i> |
| 25 Julai 2000 25 July 2000 | Bengkel "Cleaner Technology As Cost Saving and Prevention Strategies for the Electroplating Industries", anjuran SIRIM/JAS <i>Workshop on "Cleaner Technology as Cost Saving and Prevention Strategies for the Electroplating Industries" organized by SIRIM/DOE</i> |
| 5 September 2000 5 September 2000 | Dialog bersama pengilang sadur elektrik di Wilayah Persekutuan Kuala Lumpur <i>Dialogue with electroplating industries in Kuala Lumpur</i> |
| 5 Oktober 2000 5 October 2000 | Dialog bersama pengilang sadur elektrik di Negeri Selangor <i>Dialogue with electroplating industries in Selangor</i> |
| 3 November 2000 3 November 2000 | Seminar "Code of Practice for Galvanizing Industries" anjuran bersama JAS dan Galvanizing Association of Malaysia. <i>Seminar "Code of Practice for Galvanizing Industries" jointly organized by DOE and Galvanizing Association of Malaysia.</i> |
| November 2000 November 2000 | Penyediaan Buku Kod Amalan untuk kilang sadur dengan kerjasama Malaysian Galvanizing Association <i>Preparation of Book on 'Code of Practice for Electroplating Industry' in collaboration with Malaysian Galvanizing Association</i> |
| Disember 2000 December 2000 | Penyediaan pamphlets "Success Story of Cleaner Production" <i>Preparation of pamphlet "Success Story of Cleaner Production"</i> |

Program-program yang diadakan bertujuan untuk meningkatkan kesedaran dan kefahaman terhadap amalan CP di kalangan pegawai-pegawai JAS dan juga pengusaha-pengusaha industri sadur.

The activities were conducted with the objective of increasing awareness and understanding of CP practices among staff of DOE and the electroplating industries.

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