

## Environmental Issues in Malaysia - A NGO Perspective

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### ABSTRACT

*The paper discusses the basic concepts behind sustainable development arising from the UN Conference on Environment and Development. It then explores what changes are required in Malaysia to pioneer this form of development, including improved value systems and institutional changes. The author makes an overall assessment of the current state of environmental issues from a NGO perspective. He describes the various Malaysian env. and conservation NGOs and their interactions.*

### ABSTRAK

*Kertas ini membincangkan konsep asas pembangunan berterusan berbangkit dari Persidangan Pertubuhan Bangsa-Bangsa Bersatu mengenai Alam Sekitar dan Pembangunan. Ia kemudiannya memeriksa perubahan-perubahan yang diperlukan di Malaysia bagi merintis bentuk pembangunan ini, termasuk peningkatan sistem nilai dan perubahan institusi. Penulis memberikan suatu penilaian yang menyeluruh mengenai status isu-isu alam sekitar masakini dari perspektif sebuah pertubuhan bukan-Kerajaan. Penulis juga membicarakan tentang pertubuhan-pertubuhan bukan-Kerajaan yang terlibat dengan alam sekitar dan pemuliharaan di Malaysia dan interaksi di antara mereka.*

### INTRODUCTION

The very word *exploitation* connotes negative attitudes and approaches. Perhaps it arises from the concept that God has given Man dominion over Nature so that he can exploit it for his personal gain. The history of mankind has been one of general exploitation - not only of resources but also of other human beings as well. Need I mention slavery, feudalism, the stock exchange, etc?

It is obvious that exploitation can never be benign. Consequently, almost every aspect of exploitation of resources has had adverse environmental impacts. In this paper, I will try to describe why sustainable development can only come about if exploitation is minimised.

Sustainable industrialisation would be counter-productive and exploitative unless it is situated within the context of sustainable development. Hence the need to discuss sustainable development in the first place.

## THE NEED FOR SUSTAINABLE DEVELOPMENT

The need for sustainable development was repeatedly stressed during the UN Conference on Environment & Development held in June 1992 in Rio de Janeiro. The Rio Declaration had the following two relevant principles:

### Principle 3

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

### Principle 4

In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Agenda 21, which was agreed to as the action programme to implement the Rio Declaration, had the following references:

2.6. Experience has shown that sustainable development requires a commitment to sound economic policies and management, an effective and predictable public administration, the integration of environmental concerns into decision-making and progress towards democratic government, in the light of country-specific conditions, which allows for full participation of all parties concerned. These attributes are essential for the fulfilment of the policy directions and objectives listed below.

2.33. Good management that fosters the association of effective, efficient, honest, equitable and accountable public administration with individual rights and opportunities is an essential element for sustainable, broadly based development and sound economic performance at all development levels. All countries should increase their efforts to eradicate mismanagement of public and private affairs, including corruption, taking into account the factors responsible for, and agents involved in, this phenomenon.

2.35. It is necessary to establish, in the light of the country-specific conditions, economic policy reforms that promote the efficient planning and utilization of resources for sustainable development through sound economic and social policies, foster entrepreneurship and the incorporation of social and environmental costs in resource pricing, and remove sources of distortion in the area of trade and investment.

There are a wide range of issues that need positive action if sustainable development is to occur in Malaysia. In addition, we will have to face emerging global environmental issues like ozone depletion, greenhouse effect and disappearing natural resources.

Sustainable development will probably become a major priority [hopefully in the Seventh Malaysia Plan and in implementing the Malaysian Government's commitment to the Langkawi Declaration] but it will have to be properly understood before it can be effectively practised. Such development will require EIAs to be undertaken for policies as well as projects before they are finalized. The following issues will have to be grappled with if this form of development is actually to be implemented in Malaysia so that there is significant improvement in the quality of life of the majority of Malaysians.

1. ***Observation of the right to know & express*** Environmental awareness can only be improved if there is meaningful observation of these two fundamental rights. But major Malaysian legal changes are required for this to be achieved. A Freedom of Information Act must be campaigned for and the annual licensing of publications stopped. Malaysians will have to demand for more information on all important issues, including environmental ones.
2. ***Independent monitoring & audit of all major development activities*** Without such action, we are unlikely to see an improvement in the current unhappy situation. But such action can only be possible if there is adequate public and political commitment. Concurrently, we have to develop more technical expertise and invest in relevant equipment and analytical facilities.
3. ***Recognition of the right to choice as well as of minorities*** All Malaysians, especially our tribal minorities, must be allowed to exercise their right of choice as to development options and the management of the natural resources. Of course, this can only be effectively done if they have access to all views [not just those of the Government]. The present unsatisfactory situation in Sarawak should not be allowed to fester on. Global emergence of tribal issues is only likely to become stronger and Malaysia will be unable to isolate itself from this trend.
4. ***Giant projects and 70 mil. population*** Many of the giant projects that are being planned by the Government like the West Coast Reclamation, the Peninsula's mountain highway, and petrochemical projects, will definitely create environmental stresses that may plague us for the entire decade. The situation will be exacerbated by an ever-increasing population which, instead of creating a bigger market, is more likely to deplete further our already dwindling resources.
5. ***Transboundary pollution*** It is inevitable that Malaysia will be unable to escape from transboundary pollution ranging from the import of polluting industries to beach pollution originating from foreign ships in the Straits of Malacca as well as the South China Sea. Despite the ratification of a number of international treaties, we could also face the dumping of toxic wastes and dangerous industries. Both the greenhouse effect and ozone depletion will

result in transboundary pollution. There are also indications that acid rain may be just around the corner.

6. ***Increased contamination of foods*** At the current rate of agrochemical abuse and shoddy monitoring of food quality, increased contamination of food, both raw and processed, will become a major area of concern. Unless comprehensive monitoring and the promotion of organic farming is seriously done, both the environment and human health will be further jeopardized. Current agricultural practices and food packaging & preservation must be reassessed and environmentally better techniques adopted.

7. ***Transforming a throwaway society into a caring and conserver one*** It is imperative that Malaysian society be quickly transformed from the throwaway one that it is rapidly becoming into one that is more caring and conserving in its use of natural and man-made resources. The campaign for a Bottle Bill that was initiated by FOMCA and EPSM a few years ago needs to get positive response. Rubbish will have to be reduced at source and reuse or recycling encouraged to the widest possible extent.

8. ***Conservation of energy and promotion of renewable sources*** Affluent Malaysians will have to stop wasting energy, especially high quality energy like electricity in boiling water, and the country will have to spend more effort in tapping renewable energy sources like solar and wind. Our oil reserves will be nearing exhaustion and gas may hold out only till about the middle of the 21st century. What do we do after that?

9. ***Public accountability and participatory democracy*** Neither environmental nor consumer issues can be resolved without genuine public accountability by both the public and private sectors. This is an important element of participatory democracy where the public participates at all levels of decision-making. Sustainable development must see this happening in Malaysia, otherwise the current top-down system will continue to create problems for ordinary people.

10. ***Increased unselfishness and voluntaryism*** Unless there is greater unselfishness among Malaysians, both the environmental and public interest movements will continue to face a shortfall of dedicated volunteers and a supportive public. Civic-consciousness can only improve if positive attitudes are developed in all Malaysians at all levels. Activist 'burn-out' will have to be reduced.

11. ***Global thinking and local action*** This approach, currently popular among many activists in the developed world, has yet to take root in Malaysia. We will have to ensure that more local activists and thinking Malaysians become familiar with global environmental issues like the greenhouse effect and are able to initiate local action to help towards the resolution of such problems.

12. **Networking - nationally and internationally** The Malaysian Environmental & Conservation Network will have to be strengthened while at the same time we develop improved networking with other like-minded groups in the South as well as the North. Such networking should become the basis of sharing experiences as well as strengthening commitment.

13. **Mobilizing scarce resources** Mobilizing adequate manpower, finances and even public outreach will remain a major challenge during the coming decade. Not only will we have to retain our current activists but we will have to ensure that younger and fresher blood continues to be infused, especially if our movements are to surge into the 21st century.

14. **Practising what we preach** As always, we will have to ensure that as far as possible, we, both at the personal and the organizational level, practice what we preach. It is always more difficult to be honest than to accuse others of being dishonest.

*We Must Be True To Ourselves As Much As To Our Causes!*

#### VALUES & ETHICS ESSENTIAL FOR SUSTAINABLE DEVELOPMENT

It should be apparent by now that sustainable development requires not only the reinforcement of many existing values but the observation of some new ones as well. Without attempting to follow a strict order of priority, these are:

*Respect* for all lifeforms and their right to exist. This will extend to sustaining the Earth's ecosystems to ensure biological and cultural diversity. *Need*, rather than greed, to be the prime motivating factor for human endeavours. This must be tied up with a commitment to *equity* in all dealings at all levels.

*Observation of fundamental human rights* will help cut back exploitation and give dynamic meaning to all forms of our diversity and the existence of minorities. It will also enable development to be undertaken on an effective partnership basis.

*Responsibility & accountability*, individually and collectively, cannot be overemphasised in order to avoid environmental degradation, corruption, nepotism, and other social ills.

*Transparency* is essential for confidence building and must go hand in hand with accessibility to information / data. This will enable effective *people participation* in relevant decision-making.

*Distaste for violence* will help ensure that conflict is minimised and that dialogue and debate preferred.

*Honesty* in everyday activity and within the professions will not only bring peace of mind but prevent cover-ups and evasion. *Trustworthiness* must go in tandem with this value.

*Spirituality* and *High moral values* are essential to pull humanity back from the treadmill of compulsive & obsessive materialism.

*Prevention* of problems and ills, including those of an environmental or ecological nature, must be the preferred option, rather than resorting to *costly cures*.

*Sharing*, rather than donating or transferring, should be preferred, whether of technology, knowledge or financial resources.

*Trusteeship*, not the concept of ownership, will help ensure that existing environmental and other resources remain available at meaningful levels to future generations. The appropriate slogan is *we have borrowed this world from our children*.

*Restoration* of ecological balance and effective level of harmony with Nature must become yet another cardinal principle.

*Humility*, without self-abnegation, must once again become a sought-after virtue among all leaders, especially within the professions.

*Gender differences* and all other grounds for discrimination must be consistently renounced.

*Public good*, in all its forms, must be restored to its pre-eminence among all professionals.

## MALAYSIAN ENVIRONMENTAL ISSUES

We can examine these from about a dozen angles.

### INFORMATION AND AWARENESS

The past 7 years have seen some significant disclosures of information and openness by the Department of Environment [DOE]. We now have access to some of their water, noise and air monitoring data while the Factories and Machinery Department [FMD] has made available the results of a couple of their occupational health studies. But on the other hand, the Nuclear Energy Unit has disclosed very little data on the Asian Rare Earth plant in bkt. Merah and many are wondering what the level of hazardous waste being dumped into our rivers is.

But overall the information available on environmental parameters is still incomplete, uneven and does not cover the entire nation. One possible source for compiling a national environmental profile is the Director General of Environment's Annual Report. But so far only 7 Reports have been issued. The information generated by the Universities, research institutes and voluntary organizations like EPSM cannot possibly fill the void.

Because there is a general lack of public accountability throughout our political and bureaucratic system that is reinforced by the 'sulit' syndrome (strengthened by the Official Secrets Act), it is not surprising that many of

the EIAs and studies done for State Governments until recently were kept away from the public.

This paucity of data is a major obstacle in increasing environmental awareness among government leaders, politicians, planners, industrialists and the public. Both the Government and the mass media have to carry out a critical self-evaluation of their educative role.

#### NATURAL RESOURCES

Although the rate of deforestation has decreased in Peninsular Malaysia, the scene in Sabah and Sarawak is still alarming. The official claims on the rate of logging and reforestation have not been independently verified. We continue to have grave doubts about the implementation of the National Forestry Policy by the various State Governments. As agriculture and land development move into the foothills and hydroelectric dams continue to be built, our ancient forests are inexorably disappearing [and together with much of the unstudied gene pools]. In addition, most of this development is undertaken *without consulting or giving much meaningful choices to those Malaysians who have lived in these forests for centuries.*

The protection of the fauna and flora within these forests is in jeopardy. Taman Negara has already been partially bitten by the Kenyir Dam and would have been irreparably damaged had the Tembeling Dam been built. Endau Rompin has still not become a national park. A major threat looms at the headwaters of the Rejang River if the huge Bakun Dam is revived.

A number of water-catchments in Peninsular Malaysia have already been adversely affected by logging and other human activity. Our water resources are also adversely affected by high silt loads arising from erosion while aquifer capacities have been lowered.

Soil loss continues as a major problem, being caused to a large extent by agriculture and urbanization, including housing and infrastructure facilities. Levels of 2,000 tonnes/km<sup>2</sup>/yr. of soil loss have been recorded in a number of our river basins. We probably have started mining our soil and very soon most plant nutrients will come almost exclusively from chemical fertilizers. This will mean increased production costs for our plantation and other crops.

As I will show later, our other natural resources including air, water, energy, and marine life are also under stress - either from pollution or over-exploitation. Rapid urbanization and industrialization, without adequate environmental planning, continue to exact a toll on the natural resources and ecosystems.

#### WATER QUALITY

DOE claims that in 1991, out of 87 rivers monitored, 37 were clean while 6 were very polluted. But the basis for such statements is weak as they are made based on about 5 observations per year per sampling station.

In addition to the organic pollutants (both from agrobased industries and sewage) and silt loads, more rivers are receiving heavy metals like copper and lead as well as higher dosages of pesticides and fertilizer run-offs. Almost all the effluents and discharges that enter the municipal drains (including waste oil from petrol stations and rubbish from ordinary Malaysians) end up in our rivers. Despite all the dredging and clearing of even the Sg. Kelang and the existence of the Industrial Effluent Regulations, most of the water pollutants have still not been eliminated at source.

Water quality remains a national problem despite the efforts of DOE and other government agencies. The State Governments and Water Authorities are placing low priority on drinking water quality and as a result waterborne diseases like hepatitis B and typhoid are on the rise again. 940 cases of viral hepatitis occurred in the small town of Kota Belud in late 1988 because of contamination of its water supply.

Annual sanitary surveys have been carried out in few states so far. Surveys of 3 water supplies in 1987 by the Min. of Health's Engineering Services Division found *bacteriological levels to be 12.2 to 70 times above WHO recommended maximum for raw water*. An emerging concern is the increasing use of nonbiodegradable detergents and high residual chlorine levels in drinking water. The loss of 40% [an astounding 70% for certain parts of PJ reported in the Press] of our treated water through the distribution network is also a matter of concern. Water shortfalls have dramatically increased.

#### AIR QUALITY

Whatever studies that are available so far indicate a general deterioration of air quality throughout the country. Even the problems associated with sawmills have not been satisfactorily resolved. Since the lead levels in petrol were halved on 1 July 85 [current limit is 0.15 mg/l], DOE claims that lead levels in air generally declined in 1991. But total suspended particulates in 1991 remained high in industrial and trafficked areas. They reached 300-490 ug/m<sup>3</sup> in PJ during the October haze period. Air pollution caused by motor vehicles cannot be controlled until we have an efficient and clean public transport system.

However we are glad to note that DOE has established a Task Force to curb Motor Vehicle Pollution, although it is starting with those emitting black smoke. We also hope that they, together with PETRONAS, will be able to push for the greater utilization of the much cleaner CNG/LPG. But the threat from coal-fired cement kilns and power stations is now looming large, especially in the Klang Valley.

All our bus stations (especially enclosed ones like Puduraya) and underground car parks are new air pollution hazards. Traffic jams that seem



to be on the increase not only waste fuel but also pollute the air. Open burning of domestic and industrial waste still remains a problem.

The absence of ambient air quality standards is a more acute problem than that of the relevant water quality standards as there is a greater risk of transboundary pollution. Who can say that we are not receiving air pollutants from Thailand, Indonesia and Singapore? We are also disturbed that so far no serious epidemiological studies have been undertaken on the consequences of air pollution in Malaysia.

The Klang Valley's almost permanent haze is a harbinger of air pollution throughout the country. The days of acid rain will increase [having surfaced in 1987 as shown by the Meteorological Service's Report of Aug. 88], if we insist on operating smokestack industries, like steelmaking, that are being phased out in developed countries.

#### LAND MANAGEMENT

Land clearing is still proceeding on a massive scale, causing soil erosion, destruction of natural ecosystems, displacement of tribal people and wildlife, as well as the disfigurement of the landscape, especially by tin-mining. EPSM's calls for controlled contour development of hillsides have been virtually ignored. It is almost impossible to find an effective silt-trap at most housing development sites.

There have been many collapses of highways in the past while landslides and cave-ins are common even at construction sites. The frequency of flashfloods is another adverse indicator of poor management as well as an indictment of the quality of maintenance of our urban drainage systems.

What are we doing to halt the erosion of our beaches and the collapses of our river banks? Building cement bunds is no satisfactory ecological solution. A holistic environmental approach demands the immediate implementation of comprehensive EIAs for all land development.

#### NOISE LEVELS

All the studies done by DOE, FMD and EPSM indicate that noise levels are on the rise. More than 50% of urban workers, school children, pedestrians and residents are exposed to levels way above WHO recommendations, with some levels 16 times those considered acceptable by WHO.

One of the major sources of noise is motorized transport, the worst culprits being motorcycles reaching levels of 97 dBA. Hence some town centres experience noise levels exceeding 100 dBA. Traffic noise is worsened by construction noise, pile-hammers being the worst culprits.

Malaysians are already paying the price for this noisy environment, which includes that created by disco music, by increased hearing impairments. A 6 year Government study published in 1989 showed that a quarter of high-

risk workers were having hearing impairments. What about the vast majority of Malaysians who have yet to undergo audiometric tests?

The Minister of Environment has been promising for more than ten years Noise Abatement Regulations, which have yet to see the light of day. What we have so far is one set to control the noise levels for new motor vehicles which came into force in mid-July 87. The Factories & Machinery [Noise Exposure] Regulations 1989 came into force only on 1.2.89 and cover occupations involving exposure to excessive noise levels. There seem to be powerful vested interests at work causing this unusual delay.

#### MARINE ENVIRONMENT

The prevailing unhappiness among Malaysian fishermen is partly due to marine pollution that has reduced their fish catches. Despite the decrease in size of recent oil spills in the Straits of Malacca, the Straits has not become cleaner because river-borne pollutants and ship discharges have not dramatically decreased. Sewage from tourist complexes along our beaches has not been completely neutralized and neither have Malaysians refrained from littering.

The DOE's 1991 Report claimed that the coastal waters of Malaysia, as in the previous years, continued to be contaminated with oil and grease, total suspended solids, and faecal coliform. Heavy metals such as cadmium, chromium, copper, lead, mercury, and arsenic were also detected at a number of monitoring locations with values exceeding or within the proposed standard. Lead, copper and cadmium were the most widespread.

We doubt that chronic oil pollution from oil drilling and transport has stopped. Tar balls are still being found on some Malaysian beaches, although there is disagreement on their origins. Mangrove swamps are being physically removed or damaged by pollution. Coral reefs, together with their aquatic life, are on the decline.

There seems to be some confusion over who has jurisdiction over marine parks the EQA or the Fisheries Act? The Ministry of Environment or of Agriculture? The 1985 amendments to the EQA introduce a third Ministry, that of Transport, which now has a say in controlling marine pollution. Will this not become a case of too many cooks spoiling the soup?

We have yet to see any EIAs dealing with the marine environment for projects like the Penang Bridge, Kerteh Industrial Estate or the Langkawi Tourist Complex. Neither have we seen any studies on the accelerated sedimentation of river estuaries especially resulting from the construction and operation of dams. We believe that this is likely to be a serious problem in view of the heavy silt load of Malaysian rivers.

## OCCUPATIONAL HEALTH

This remains a largely neglected environmental issue in Malaysia despite some work by FMD. Very few trade unions or employers bother about the pollution of the working environment. Accidents, rather than diseases, seem to be of greater concern.

Yet it seems that almost all working environments are under stress. High lead levels have already been measured among lead-acid battery workers while the rice-millers syndrome occurs among LPN workers. Quarry workers have been afflicted by silicosis. It is reasonable to expect that many other occupational diseases occur among our workers although there has been no systematic evaluation

It is hoped that the new Occupational Safety and Health Advisory Council will act to improve the situation. {4 years of silence since its announcement were only broken by the Minister of Human Resources in mid-March 91}. While its proposed Institute is a progressive idea, we must regret the exclusion of environmental activists from the Council and express our reservations about the tardiness with which the Government has so far moved. Medical practitioners have not been very co-operative on this issue and employers have so far adopted a rather callous attitude. Like one plantation worker said, *"Whenever we complain to our employers about the risks of handling toxic pesticides, we are told to take the matter up with the government."*

## ENERGY

The outcome of the National Planning Study has still to be made public and there has yet to be any public Energy Policy debate, mainly because the Government has made no attempt to encourage or participate in such a debate. While there is much concern about electricity tariffs, there does not seem to be the same concern for gas, petroleum or kerosene. Is anyone concerned at all about charcoal or firewood prices?

EIAs for major energy projects like the proposed Bakun Dam, the Trans-Peninsular gas pipeline and the Klang Coal Power station have not been made available to the public. There is no doubt that all these will have significant environmental impacts and yet we are being accused of opposing such projects by merely asking for EIAs.

While Tenaga Nasional has recently made no definite statement on nuclear energy [except for the abrupt blurt from the Minister of Energy late last year but which the Cabinet silenced almost immediately], the Nuclear Energy Unit's existence is worrisome since it has not been able to handle adequately even the smaller problem of thorium hydroxide storage in Papan. Until a full and open public evaluation of the nuclear option has been conducted, it would be unreasonable to make a nuclear energy commitment.

Papan has clearly demonstrated that the nuclear proponents have been unable to earn public confidence.

Malaysia has done very little work in soft energy source development and applications, especially when compared with the Philippines. Our oil and gas reserves have distracted us from developing these decentralized and relatively pollution-free energy sources. Biogas generation from palm oil waste is the only exception. But what about all our timber, sawdust, padi husk, animal and even human wastes?

#### HAZARDOUS WASTES

The solid waste problem has still to be satisfactorily handled by most municipalities with only a couple of well-managed sanitary landfills in the country. All that the National Cleanliness Campaign achieved was slightly cleaner urban areas but it did not resolve the rubbish collection and disposal problems.

The packaging industry, through its aggressive promotion of non-returnables, is aggravating the solid waste disposal problem. Our drains and dumps are being increasingly cluttered by the products of a 'throwaway' society that the Government has not curbed, despite repeated pleas by EPSM and consumer groups.

Malaysia is now being confronted with the indiscriminate dumping of sludge and industrial solid wastes which are toxic to living organisms. Naturally we are disappointed that the regulations proposed by DOE in 1984 are only now being enforced and a toxic waste disposal site has yet to become operational. It is also regrettable that radioactive wastes are not covered by these regulations as they now fall under the jurisdiction of the Nuclear Energy Unit.

#### ENVIRONMENTAL IMPACT ASSESSMENTS (EIAs)

The Federal Government's promises of mandatory EIAs for major projects, made in the Third Malaysia Plan [reiterated in the Fifth Malaysia Plan] were only translated into binding regulations on 1st April 88. Consequently the few EIAs done, until 1989, had been little more than 'window dressings'. Almost all of them were undertaken well after the sites had been chosen and equipment purchased, the latest example being that for Asian Rare Earth's Disposal Site.

There have been only 6 invitations to the public to comment on any EIA [the first in April 89 for the Titanium Dioxide Project in Terengganu]. In a few other instances the participation has been confined to the appointment of a representative on the Ad-hoc Review Panels.

Most of EPSM's calls from comprehensive public EIAs have been ignored. Since the earlier mentioned projects for which no EIAs have been produced

are all from the public sector, it is not surprising at all that the private sector still avoids EIAs. Yet how can we prevent pollution if EIAs are not made an integral part of the planning process?

Let us hope that the EIA Order 1987 [and its improvements] will be implemented effectively from now on and that prevention of pollution will become an acceptable procedure in Malaysia.

#### LEGISLATION AND ENFORCEMENT

Although the EQA and the Pesticides Act are more than 18 years old, their overall impact on environmental quality is inadequate. There are many loopholes in the laws but what is even more disappointing is that enforcement has been patchy. We keep on hearing about polluting activities that seem to escape any action from DOE or other enforcement agencies. Then people have asked why is it that prosecuting officers have never appealed against the very lenient sentences meted out so far by the courts on polluters.

We believe that there is much room for improving enforcement because the current management and manpower problems of the enforcement agencies are not insurmountable. But why they have not been surmounted only the relevant Ministers and their officials can explain.

We are sometimes told that the law seeks to persuade and guide (although Malaysia has some of the world's harshest laws on other issues like drugs and freedom of expression) and not to punish. Obviously the persuasion and guidance has been ineffective since many of the laws are ignored. There is also much overlap between laws and Departments.

#### MALAYSIAN INSTITUTIONAL CHANGES SUGGESTED

In order to generate the necessary political & administrative will to overcome environmental problems, the following changes are suggested [not in any order of priority].

- The Environmental Quality Council [EQC] should be revamped along the lines of the American Council for Environmental Quality, reporting directly to the PM or Parliament. It should be responsible for the Annual Env. Quality Report with inputs from all relevant Government agencies, including the Dept. of Environment [DOE], and should vet all environmental legislation before it is tabled in Parliament. It should not have more than 15 members, equally divided between technocrats, industrialists, and environmental activists and serviced by a small staff of researchers and lawyers.
- The DOE should be beefed up along the lines of the American Env. Protection Agency and should take over the administration of laws like the Pesticides Act. It would also coordinate with the strengthened EQC to administer effectively the EIA requirements. There should be a significant

improvement in the quality of its staff and a quantum leap in financial resources. Serious attempts should be made to privatise routine monitoring but DOE should be in a position to conduct checks on the quality of privatised work.

- The Factories & Machinery Dept. [FMD] should assume more of the functions of the American Occupational Safety & Health Authority and should work closely with DOE and the Ministry of Health. It should also assist in assessing production technologies for the environment friendliness.
- The Environmental Health Div. and the Occupational Health Unit of the Ministry of Health should merge. They should supervise the work of public health inspectors in the local authorities and coordinate activities with DOE & FMD via the EQC. The administration of the Food Act and related regulations should be their joint responsibility.
- The Economic Planning Unit in the PM's Dept. needs to make a clear cut commitment to sustainable development, not just in mere words, but by ensuring that its officers are environmentally aware and participating wholeheartedly in national and international discussions on sustainable development. Together with the Treasury and research organizations, it should develop effective natural resource accounting methods and procedures.
- MIDA and the Ministry of International Trade & Industry will have to be more proactive on environmental issues when soliciting foreign investments. Their key officers will have to be adequately trained in local environmental legislation, especially EIA requirements, with particular emphasis on their overseas mission representatives. They should also ensure that all missions, including those from the States, going overseas to seek project investments should make a point to adequately inform potential investors of our environmental requirements.
- The Local Government Div. of the Ministry of Local Government & Housing should set up an effective coordination system with the DOE, FMD and the Ministry of Health to ensure that its present cleanliness campaign is implemented on a sustainable basis by ALL local authorities.
- The Ministry of Primary Industries and its subsidiary agencies need not only to become more transparent but will have to produce more innovative plans to manage Malaysia's natural resources on a sustainable basis. One important task will be to establish a comprehensive National Genetic Resource Data Bank. Another would be to make deforestation activities comply with all existing legal requirements and to drastically revamp the logging concession system.
- The Ministry of Agriculture should transfer the control of agrochemicals to the DOE and immediately work with it and the Ministry of Health to monitor the impact of present agricultural practices on the physical environment and human health. It should support the Malaysian Organic Farming Network to study and promote organic farming within the country. Its Fisheries Dept.

should work closely with the Marine Dept. [under the Ministry of Transport] to curb marine pollution and conserve marine areas & resources.

- The Ministry of Energy, together with PETRONAS, should frame a National Energy Policy that should be consistent with sustainable development. This could be best done by subjecting the policy to public review and a comprehensive EIA. It should also make annual allocations to support research in renewable sources and uses.

- FMM, MICCI and other industry groups should become more active and open about the environmental policies and activities of their members. They should encourage the conducting of EIAs and green audits. Some form of coordinating mechanism needs to be established to meet these requirements as well as to provide international representation. They should demonstrate, at least annually, to the public and their shareholders how well they are complying with the Valdez Principles.

- The vast majority of medium and small scale firms need to be helped in choosing environmentally sound technology and complying with environmental standards. This could perhaps be best done through a joint Govt.-industry Advisory Council, which should be established on the joint initiative of the Ministry of International Trade and the Ministry of Environment.

- All the environmental groups should attempt to coordinate their activities and share their views, preferably under the existing Malaysian Environmental & Conservation Network. They should be open and willing to dialogue, both nationally and internationally, without necessarily compromising their independence.

- Political interest will have to be generated, not only to confront national but international environmental issues as well. For this purpose, civil servants will have to work together with the relevant technical departments, industry and environmental groups to provide meaningful information and the motivation for proactive action by our politicians.

- An Environmental Ombudsman should be immediately appointed to investigate and expose complaints against environmental polluters, however high or powerful they be. He should be a person of high integrity, appointed by the Yang di Pertuan Agong for a minimum period of 6 years and should be given the power to summon witnesses. His annual report should be tabled in Parliament.

- The mass media, especially RTM, TV3 and one leading newspaper from each of the major languages, should establish environmental desks to cover environmental news as well as to help in the regular environmental education of the Malaysian public. They should remove self-censoring sub-editors and make investigative journalism a norm in the environmental field.

## MALAYSIAN ENVIRONMENTAL NGOS AND THEIR INTERACTIONS

The NGOs concerned with environment have been in existence in Malaysia for many years with the oldest being the Malayan Nature Society (MNS). The Environmental Protection Society Malaysia (EPSM) was formed in 1974 after the World Environment Declaration in Stockholm in 1972 heralded the advent of environmental protection groups on a global scale. Sahabat Alam Malaysia (SAM) was formed in 1978 while the Ecological Association of Malaysia was launched only in Jan. 1992.

Since its inception, EPSM has been involved in the protection of the environment and nature conservation. It has advocated the prudent use of environmental resources through sustainable development. EPSM has paid special attention to issues connected with policy and regulations. It has worked closely with the Department of Environment (DOE) which comes under the Ministry of Science, Technology and Environment (MSTE) and other relevant agencies to plan and conduct studies to raise the environmental awareness of the public. Details of its networking and cooperation with NGOs are given later on.

In carrying out the above activities, EPSM has been guided by the following aims and objectives since its inception:

1. To prevent the deterioration of our environment as a result of human activities.
2. To control activities that contribute towards the deterioration of our environment.
3. To initiate measures for the improvement of our environment.
4. To stimulate public concern for the state of our environment.

The effectiveness of EPSM in carrying out its task has been impeded by its image of an instigator in environmental conflicts, although it is untrue as it participates in most issues when requested to do so. In fact, it has collaborated, when invited, with Federal Government Ministries like that of Transport and Finance in addition to MSTE. But, on the other hand, almost no State Government has officially requested its involvement and the Ministry of Energy has ignored almost all EPSM's requests for dialogue. In 1986, it was identified by a Federal Minister as one of the 7 thorns in the Government's side! Thus it has a multi-faceted relationship with the Malaysian Government.

This fact has been spelled out many times by the President of EPSM using the number of members registered with the society as an index to measure environmental awareness among Malaysians. It is still low with its membership below 100 from a Malaysian population of 18 million. A sharp drop was especially observed after the Internal Security Act [ISA] was used to detain 108 Malaysian in 1987 in the "Operation Lallang" of which 3 were environmentalists (the Vice-President of EPSM was the first to be arrested).



While EPSM is a pressure group, it has not been possible for it to carry out its functions as practised in developed nations. This fact is due to the Malaysian socio-politico-economic environment being so restrictive. For example, there is no scope for formal lobbying. All forms of mass media are under the tight control of the government, restricting the extent to which the NGOs can use the mass media to achieve their objectives. Other inhibitors are repressive laws like the Official Secrets Act [OSA], ISA, Sedition Act, Societies Act etc.

As a result of all these constraints, pressures can only be exerted by:

1. Direct representation, either through letters or memoranda.
2. Mobilization of public support through signature campaign, press statements and petitions.
3. Adverse publicity by letters to the editor, press conferences, publication of monitoring work, and seminars/fora.
4. Small demonstrations and physical protests.
5. Co-ordinated joint public campaigns run over a period of time.
6. Increasing public awareness through sensitization\* processes.
7. Product and service boycott, to a limited extent.

[\* sensitization has been done through the whole range of informal environmental education activities which are elaborated upon later]

EPSM's efforts in environmental awareness raising came in forms such as enviro-walks, seminars, press statements (which of late have been often blacked out), studies, campaigns, discussion and interviews (local and international) and publications.

EPSM has also been instrumental in launching a series of campaigns together with other public interest groups. These can be categorised as follows:

1. **Anti-logging** the Endau-Rompin Campaign (1977-78) was against logging which had been permitted in a proposed National Park by the Pahang State Government. It involved MNS, SGS and for short periods WWFM, besides EPSM. The campaign managed to stop further logging in the area, other than the already alienated 12,000 acres.
2. **Noise & Air Pollution** the Anti-Concorde Campaign (1977-78) was run to oppose the proposed overflights by the Concorde plane on its way to Singapore from London, in conjunction with British groups. After a 6 month trial period, the overflights were abandoned.
  - the Batu Caves Campaign (1979-80) managed to stop limestone quarrying activities in the vicinity of the famous Hindu Temple and the Batu Caves themselves which were important nesting areas for bats as well as home to rare endemic plants. The Caves are an important tourist spot located just outside Kuala Lumpur. Organisations participating in the campaign were the Friends of Batu Caves, MNS, EPSM, SGS, DAP, and ALIRAN.

3. **Dams** the Tembeling [National Park] Dam Campaign (1982-83) was against a hydroelectric dam proposed in Peninsular Malaysia's only National Park. It is discussed in detail as Case Study 2 of this paper;

- the Bakun Dam Campaign (1985-90) was against a huge 2000 MW dam proposed for Sarawak and details are referred to in Case Study 4.

4. **Human Rights** the Societies Act Amendment Campaign (1981-83) sought to oppose changes that the Government wanted to make to legislation which already restricted and inhibited the functioning of groups like EPSM. It brought together a broad coalition of religious groups, trade unions, environmental groups, social action groups, journalists, and even political parties. The final amendments passed by Parliament were less severe than the original proposals;

- the Anti-Official Secret Act Campaign (1986) was again triggered by the Government proposal to tighten the Official Secrets Act. Despite wide ranging opposition from almost every public interest group, including lawyers and journalists, the Malaysian Government rammed through Parliament the unaltered amendments;

- the Freedom of Information Campaign (1986-87) was run in reaction to the proposed amendments to the OSA. It was initiated by EPSM, NUJ, the Bar Council and ALIRAN but was brought to a sudden halt by the Oct. 87 arrests under the ISA;

- the Anti-Internal Security Act Campaign (since 87) has been in place ever since the ISA arrests of 1987 demonstrated that not even social activists are safe from this draconian law.

5. **Radioactive & Hazardous Wastes** the Papan & Bukit Merah Anti-Radioactive Campaign (1984-87) started with concern about the storage of low-level radioactive waste at the small town of Papan but eventually shifted to the thorium production facility near Bukit Merah which produced the waste. Details of this campaign are given in Case Study 1;

- the Hazardous Waste Control Campaign (since 1985) has been aimed at controlling through effective legislation and management the generation and disposal of all non-radioactive toxic wastes. Parts of the campaign are elaborated in Case Study 3.

6. **Pollution Prevention** the Environmental Impact Assessment Implementation Campaign (since 1988) has sought to ensure that the Government's EIA Procedure is effectively implemented so that pollution can be prevented from the implementation of major projects. It has involved EPSM representatives serving on a number of Ad Hoc Review Panels for specific EIA Reports; and

6. **Hill Conservation** the Penang Hill Conservation Campaign (since 1990) has sought to conserve the serene environment of Penang Hill against a major

tourism project. EPSM has joined the Consumers Association of Penang, MNS, SAM, ALIRAN, and ABIM in an informal grouping called Friends of Penang Hill which is spearheading the campaign.

Studies carried out include Water Quality Survey of Klang River (1975-6), Land Mismanagement Study of the Klang Valley (1977), Solid Waste Study of the Klang Valley (1978-9), Environmental Studies of Petaling Jaya, Taiping and Kelang (1980-1) and Hazardous Waste Study of Klang Valley (1985)

EPSM has organised the Declaration on the Environment (1977) [*a first attempt to get Malaysian public support on general environmental issues*], conducted an Environmental Journalism Seminar (1978) [*another Malaysian first aimed at getting working journalists informed about the broad range of environmental problems*], Sun Day (1978), the Decade Review Seminar (1982), conducted Envirowalks (1983-5) [*participatory activities held in every state capital during which ordinary environmental problems were identified and some parameters measured*], Protectors & Polluters of the Malaysian Environment Awards (since 1985) and jointly Malaysian Environmental Agenda for the 1990s Workshop (1990).

In seeking to educate the public, EPSM has published the quarterly Alam Sekitar magazine, a broad coverage of environmentally related topics, since 1987. Its targets are the registered members, subscribers, institutions of higher learning (both local and overseas), schools, NGOs (local and international), government bodies etc.

Previous paragraphs have indicated the range of networking done with other Malaysian NGOs. In addition, an environmental network known as MECN (Malaysian Environmental and Conservation Network) was formed in May 1989 comprising of MNS, CETDEM, FOMCA and EPSM to facilitate local networking and to adopt common positions on major environmental and conservation issues within Malaysia and work together in other areas of cooperation. It has subsequently been enlarged with the participation of WWFM and ENSEARCH.

EPSM's relationships with other NGOs, especially environment and conservation-oriented ones, have been mixed. It has been quite difficult to work with SAM - even when they participated in joint campaigns as in the case of Papan and Tembeling, they had an agenda of their own, which they rarely shared with the rest. This may perhaps be due to the fact that they have large numbers of full-time staff who can spend more time in the field. There is also an element of competing for the same environmental turf and asserting a different identity. SAM has shared little information with local NGOs.

Our relationship with MNS has been much better. We have been able to work more honestly and consistently. But then because of the nature of MNS's mandate and membership, there have been certain issues like low-level radiation when MNS has held back. Their position on logging is still

scientifically conservative but they responded positively when invited to join MECN.

ENSEARCH has a different approach to environmental issues, being made up of environmental consultants, equipment suppliers, academics, and multinationals. They have stayed away from most of the campaigns although they have invited EPSM representatives to some of their seminars and meetings. They only joined MECN in early 91 but have supplied very little information for sharing.

The best interaction is with CETDEM - the majority of whose Board members are also EPSM members. In addition, the two share premises, a documentation centre, computers, and the chief executive. CETDEM undertakes studies whose results are made available to EPSM and helps demonstrate some of EPSM's alternative ideas, like the organic farm. But generally, CETDEM has not been involved in campaigns. Naturally, it was one of the founder members of MECN and is its current coordinator.

WWFM has generally stayed aloof from EPSM and other NGOs, preferring to work at the upper Government and corporate levels. But it finally joined MECN in early 91 and has worked jointly with MNS on a couple of issues. It probably is one of the wealthiest NGOs. It has never joined actively in any of the campaigns coordinated by EPSM.

EPSM has managed to get FOMCA involved in a number of environmental education activities, including that against throwaways, low-level radioactive waste, and dams. But because of its federal structure, cooperation has depended very much on the personalities of the incumbent President and Secretary-General. FOMCA was one of the founder members of MECN.

The Consumers Association of Penang [CAP], like its affiliate SAM, has a much stronger international profile than a record of active collaboration with EPSM and other local NGOs. The only current joint campaign in which all three are involved with MNS as well, is that on Penang Hill Conservation. The only major local NGO with which it has been known to have active collaboration is ABIM.

The other NGOs, which have on occasions collaborated with EPSM, are the graduates group SGS, the reform movement ALIRAN, trade union groupings like MTUC, student federation PKPIM, Muslim youth group ABIM, political parties like DAP and Parti Rakyat, the Malaysian Association of Engineers, the Association of Women Lawyers, the Bar Council, and local groups like PARC and Friends of Batu Caves.

As regards the relationship with Government and its appreciation of EPSM's environmental activities, the track record has been uneven. In the early 70s, even the Department of Environment was hostile and antagonistic but over the last decade it has become more positive and appreciative. This is probably due to both a change in personalities [in the Minister as well as the Director General] as well as a realisation of the commitment and

consistency of EPSM efforts to improve environmental quality since its formation.

EPSM has reciprocated this positive change by serving more often on the various committees of both the Ministry as well as DOE. It played an active role in the Environmental Education Committee and currently serves on the Environmental Law Review Committee being chaired by the Deputy Minister. There has been also active involvement in EIA Ad Hoc Review Panels, seminars to prepare Malaysia's positions in UNCED, as well as Climate Negotiations. Inputs have also been invited and given on the Montreal Protocol, Basle Convention, and proposed National Environmental Policy.

Other Government agencies have been more wary and distant. The Pesticides Board invited interactions only over the period 1986 - 89, the Ministry of Primary Industries solicited direct inputs to the proposed Malaysian Forestry Action Plan only in Nov. 91, and the Finance Ministry made its first invitation to the annual pre-Budget Dialogue also in 91. As mentioned earlier, the Ministry of Education invited only short inputs to the proposed Man & Environment curriculum while the Prime Minister's Department had us participate in just one discussion on social indicators in the early 80s. EPSM contributed towards the drafting of the KL Environmental Action Plan in the mid-80s but this has now been virtually abandoned. We also provided comments on proposed amendments to the Road Transport Act and were invited in July 91 by the Ministry of Foreign Affairs to discuss positions for the 3rd UNCED PrepCom.

The official broadcast media, represented by Radio Television Malaysia [RTM] made one documentary on pollution of the Klang River with the active collaboration of EPSM almost 10 years ago. Since then, it has only rarely broadcast views of and interviews with EPSM officials. On its own, it has not produced any indepth environmental probes.

There have been even less opportunities to interact with the State Governments and local authorities. KL City Hall invited EPSM comments on its Structure Plan in the early 80s and a study was done for the PJ Municipal Council around the same period. The Sabah Ministry of Environmental Development has been purchasing 100 copies of each issue of *Alam Sekitar* for the past few years and distributing them gratis to selected schools. Beyond these and a couple of seminars, there has been hardly any positive interaction.

Instead, because of the strong and vocal independent positions that EPSM has consistently taken since 1974, there have been almost regular criticisms from both Government Ministers and members of the ruling political coalition. These have ranged from talking politics to being anti-development, from being crypto-socialists to anti-national, from retarding progress to being subversive. The most passive form has been to ignore all our comments and maintain a wall of silence. The most aggressive actions were the demonstration

against EPSM and its President in 1986 and the arrest of its Vice President under the ISA in 1987.

In the Malaysian political culture, being anti-Government is tantamount to being pro-Opposition. And it is only a short step from there to being branded anti-national and subversive. This is then virtually a kiss of death as far as media coverage and mainstream societal acceptance are concerned. Only the brave and the really committed will then continue to associate with you. To some degree, this negative image has undermined the effectiveness of almost all EPSM activities, including those dealing with environmental education.

The dilemma that EPSM has thus faced is this - should it sugar-coat its messages thickly enough for them to be approved by the most conservative elements or should it continue to present the truth as it perceives it? While it has tried hard to be inoffensive, there is a limit after which the messages are lost and the facts obscured. It seems to be easier to talk about symptoms than the root causes behind most environmental problems - anywhere!

The above factors must affect the sustainability of any environmental education approach. Ideally, one should try to get maximum public participation and involvement. But this is impossible without simultaneously increasing the democratic space within which to operate. To do this, EPSM and other Malaysian NGOs will have to engage in activities to increase respect for fundamental human rights in Malaysia. In fact, environmental activities cannot be conducted independent of human rights education and practice!

## CONCLUSION

While we often bemoan the lack of a political will to resolve environmental problems, it is vital to realise that this will can only be influenced if there is strong public and legal environmental commitment. Ideally, all three should work in tandem. Our challenge should be to make this happen!

Environmental organizations, whether in Malaysia or in any other part of the globe, will have to seize all available opportunities to work for a cleaner and more equitable world. How they do so will vary from country to country and organization to organization. But they must not let the opportunities slip away!

Politicians will have to work hard to understand the dynamics between environment and development. Then only can they provide the leadership to achieve sustainable development and not *repeat the discredited models of the North!*

*Abbreviations:*

CETDEM = Centre for Environment, Technology & Development, Malaysia  
DOE = Department of Environment  
EIA = Environmental Impact Assessment  
FMM = Federation of Malaysian Manufacturers  
MICCI = Malaysian International Chamber of Commerce & Industry  
MIDA = Malaysian Industrial Development Authority

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