

Changing Consumption Patterns in Malaysia:

*towards
sustainable
development ...*

A Cause for Concern?



*... and
sustainable
consumption*

A Publication by

ERA
CONSUMER
MALAYSIA

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[Education And Research Association
for Consumers, Malaysia]

“It is becoming more and more evident that consumers are increasingly interested in the world behind the product that they buy. Apart from the price and quality, they want to know how and where and by whom the products have been produced.

This increasing awareness about environmental and social issues is a sign of hope. Governments and industry must build on that.”

Klaus Topfer
Executive Director,
United Nations Environment Programme
Aug 23, 1999

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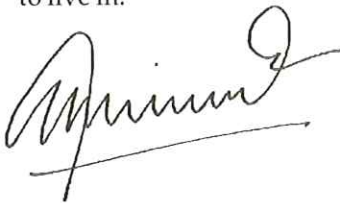
Foreword

It is with feelings of hope for the future that I write these few words, rather than a sense of hopelessness, considering the scant attention given to the environment in the 8th Malaysia Plan.

Organisations like ERA Consumer Malaysia can only hope that this publication, while providing the layman with some useful matters to ponder on, will more so get the authorities to do some sorely needed reflection on the state of our environment.

It will, we hope, move their conscience to work for a sustainable Malaysian environment through policy measures and concrete action, now that the time has come for the mid-term reviews of the 8th Plan and the Third Overall Perspective Plan (OPP3).

A better Malaysia is a better world. With crucial matters like the Kyoto Protocol derailed because of the turn-around by the United States, every little bit that we can do must be done, so that our children will have a better, safer and healthier world to live in.



MARIMUTHU NADASON
President
ERA Consumer Malaysia

Changing Consumption Patterns in Malaysia: A Cause for Concern?

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(Education and Research Association for Consumers, Malaysia)

ERA CONSUMER is a voluntary, non-political and non-profit organisation. ERA focuses on issues ranging from food security, human rights, environment, and consumer rights to women's rights for a socially just and equitable society.

Preface

This special publication by ERA Consumer Malaysia on the consumption patterns in Malaysia is brought out to serve as our argument for better consumer awareness among the citizens and for the authorities to pay greater attention to the philosophies of sustainable development and sustainable consumption.

Sustainable consumption means consuming differently, and more efficiently. It focuses on the demand side of the economy. Changing consumption patterns represents one of the major challenges identified at the Rio Earth Summit in 1992. Over-consumption by the world's richest people and under-consumption by the poorest leads to environmental degradation and a lower quality of life.

The ideas of sustainable development and sustainable consumption are not new, whether to Malaysia or to the rest of the world. These principles of development have been espoused by the United Nations and many governments of the world for a long time.

It was out of concern for the manner in which development was taking place around the world, especially in the emerging economies, that organisations like the United Nations have debated on and called for sustainable development and sustainable consumption. We have to keep the Earth going for the many generations to come.

Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organisations of the United Nations system, governments and major groups in every area in which the human being impacts on the environment.

Agenda 21, the Rio Declaration on Environment and Development, and the Statement of Principles for the Sustainable Management of Forests were adopted by more than 178 governments at the United Nations Conference on Environment and Development (UNCED or the Earth Summit), which was held in Rio de Janeiro, Brazil, from June 3 to 14, 1992.

The Commission on Sustainable Development (CSD) was created in December 1992 to ensure effective follow-up of UNCED and to monitor and report on implementation of the agreements at the local, national, regional and international levels. It was agreed that a five-year review of Earth Summit progress would be made in 1997 by the United Nations General Assembly meeting in special session.

The 55th General Assembly session decided in December 2000 that the CSD would serve as the central organising body for the 2002 World Summit on Sustainable Development, which is to be held in Johannesburg, South Africa.

Revision of the UN Guidelines for Consumer Protection

The United Nations Guidelines for Consumer Protection were unanimously adopted by the UN General Assembly on April 10, 1985. These guidelines are to serve as general principles for the protection of consumers, especially those in the developing countries.

The guidelines call on governments to develop, strengthen or maintain a strong consumer protection policy, taking into account the UN guidelines in accordance with the economic and social circumstances of the country, the needs of its population and in consideration of the costs and benefits of the proposed measures.

In later years, these guidelines alone were considered insufficient. At the request of the UN Economic and Social Council (ECOSOC), the Commission on Sustainable Development (CSD) prepared an extension of the UN Guidelines on Consumer Protection to include sustainable consumption.

An Inter-Regional Expert Group Meeting on the extension of the UN Guidelines on Consumer Protection, hosted by the Environment Secretariat of the State Government of São Paulo, was held from Jan 28 to 30, 1998.

This meeting was organised by the CSD, the Federative Republic of Brazil, and the State Government of São Paulo, upon the request of ECOSOC at its substantive session of 1997. A background document, titled *Consumer Protection and Sustainable Consumption: New Guidelines for the Global Consumer*, was then drafted.

A report of the UN Secretary-General, titled *Consumer Protection Guidelines for Sustainable Consumption*, based on the São Paulo meeting, was submitted to the Commission on Sustainable Development at its 6th session in 1998.

Based on the text drafted by the São Paulo meeting, and on informal inter-governmental consultations held at the UN in late 1998, the 7th session of the CSD adopted a revised text for the Guidelines. That text was endorsed by the UN Economic and Social Council in July 1999 and adopted by the General Assembly in its decision 54/449. The full text of the section on the promotion of sustainable consumption in the revised UN Guidelines for Consumer Protection is given as an appendix at the end of our special report.

The State of Our Earth

In recent years, much of the news about our planet, the Earth, from scientists involved in various disciplines, has been bleak. If mankind does not treat the planet with greater care and respect, we will just be continuing our path to doom, meaning the end of the Earth's ability to sustain life.

We are faced with a whole series of global problems harming the biosphere and human life in alarming ways that may soon become irreversible. These problems include:

- Climatic instability as a result of the emission of a wide range of gases such as the greenhouse gases (carbon dioxide, methane and nitrous oxide), chemical gases from industrial activities such as halocarbons and sulphur hexafluoride, all of which are causing irreparable damage to the protective ozone layer;
- The depletion of top soils from croplands and the pollution of land and water as the result of widespread use of agricultural chemicals;
- The expansion of deserts and the receding of forests;
- The shrinking in numbers of plant and animal species and the introduction of new strains of crops through tinkering with the genetic make-up of domesticated plants; and
- The uncontrolled growth of the human population.

Scientists are in agreement that these critical problems cannot be understood or looked at in isolation. The problems are interconnected and interdependent, and need global efforts to tackle.

Some of the most recent reports on the state of our planet today from concerned scientists give a very bleak picture indeed. A report by the Worldwide Fund for Nature (WWF) released in Geneva in July 2002 states that the Earth is running out of space and resources and that if man is to continue to survive after the year 2050 when all resources for his survival will run out, then man has to colonise two planets, each of the size of the Earth!

The *Living Planet* report by the WWF, which is based on scientific data collected from around the world, reveals that more than a third of the natural world has been destroyed by humans over the last three decades. It warns that unless consumption rates are dramatically and rapidly lowered, the planet will no longer

1 The Observer, London

be able to sustain its growing population.

This report has been backed by other reports published in the Proceedings of the National Academy of Sciences of the United States which state that the “consumption of forests energy and land by humans is exceeding the rate at which the Earth can replenish itself”.² This study, conducted by the California-based Redefining Progress, a non-profit institution concerned with environmental conservation and its economics, warns that failure to rein in humanity’s overuse of natural resources could send the planet into “ecological bankruptcy”.

The experts say that the seas will be emptied of all fish while the forests, which absorb the carbon dioxide emissions, are completely destroyed and freshwater supplies become scarce and polluted. Either the people will have to curb their extravagant lifestyles or leave the onus to scientists to find another planet to sustain human life. Since this is unlikely to happen, the only option is to cut consumption now.

The *Living Planet* study unearthed the following facts:

- Systematic exploitation of the planet’s oceans have caused the North Atlantic cod stocks to collapse from an estimated spawning stock of 264,000 tonnes in 1970 to below 60,000 tonnes in 1995.
- Between 1970 and 2002, the Earth’s forest cover shrank by about 12%, the ocean’s biodiversity shrank by about 33% and freshwater ecosystems shrank by about 55%.
- Scientists who examined data for 350 kinds of mammals, birds, reptiles and fish found that the numbers of many of these species have more than halved. Figures from the World Conservation Monitoring Centre in Cambridge, England, show that black rhino numbers have fallen from 65,000 in 1970 to around 3,100 now, while African elephant numbers have fallen from 1.2 million in 1980 to 500,000 in 2001.
- Bird populations in Britain have been badly hit. The corn bunting population declined by 92% between 1970 and 2000, the tree sparrow by 90% and the spotted flycatcher by 70%. Experts say it is difficult to ascertain how many species have vanished because a species has to disappear for 50 years before it can be declared extinct.

The studies by Redefining Progress state that humanity’s demand for resources had soared during the past 40 years to a level where it would take the planet 1.2 years to regenerate what people remove each year.

2 Christopher Doering, Reuters News Service

This study details the population's impact on the Earth with a quantitative number, measuring the "ecological footprint" of human activities such as marine fishery, harvesting timber, building infrastructure and burning fossil fuel that emits carbon dioxide into the atmosphere. Researchers then used government data and various estimates to determine how much land would be required to meet human demand for these actions.

The US scientists found that in 1999, a person consumed 2.3 hectares of land. The global average was slightly lower than that of industrialised countries such as the United States and the United Kingdom where 9.6 hectares and 5.3 hectares respectively per person were consumed.

While some factors that went into the study may be disputed, it can be largely accepted as a reliable representation of the rate of the planet's deterioration, for a similar reading was obtained in the *Living Planet* study of the WWF in Britain.

The WWF report, based on factors such as a nation's consumption of grain, fish, wood and fresh water along with its emissions of carbon dioxide from cars and industries, also provided a similar "ecological footprint" for each country, showing how much land is required to support each resident. The United States' consumption footprint is 12.2 hectares of land per head of population, compared to Britain's 6.29ha, Western Europe as a whole at 6.28ha, Ethiopia's two hectares and just half a hectare for Burundi, the country that consumes the least resources.

Yet another recent study into a key environmental problem, global warming, warns of the acceleration of the problem as a result of cheap air travel. The study by the Friends of the Earth of Britain says that while millions of Britons are thrilled with cut-price air fares from budget airlines, cheap air fares are encouraging more and more people to fly instead of using the more eco-friendly rail transport.

The FoE study states that some 16,000 commercial aircraft pump out 600 million tonnes of carbon dioxide every year. Environmentalists see aviation as the world's fastest growing man-made source of carbon dioxide in the atmosphere and therefore a major contributor to global warming.³

Experts say that flying is more damaging than driving because carbon dioxide, water vapour and nitrogen oxide spewed high in the air enter the ozone layer straightaway. When emitted at ground level, most of the last two elements evaporate.

Airlines can offer extremely cheap flights because aviation fuel, unlike motor fuels, is tax-free on international flights. This is because of a 1944 agreement to promote the then fledgling aviation industry. Aviation fuel escaped being

³ Sujata Rao, Reuters news Service

included in the Kyoto Protocol on greenhouse gases because of difficulties in allocating responsibilities between countries for the aircraft emissions.

Environmentalists are now calling for a levy on jet fuel, arguing that with most aviation concentrated in Europe and the United States, the absence of a jet fuel tax means that the rest of the world is effectively subsidising travel – and pollution – by the planet's wealthiest people.

With such bleak readings on the environment from the various sectors, concerned scientists are now hoping that the Earth Summit to be held in Johannesburg, South Africa, in August 2002, the most important environmental negotiations for a decade, will not be derailed by governments of the West, particularly the George W. Bush administration of the United States, and industry lobbyists.

The preparatory meeting for the Rio + 10 Summit, held in Bali in early June 2002, was marred by disputes between developed nations and the poorer states and non-governmental organisations (NGOs), despite efforts by some British politicians to broker compromises on key issues. The United States, which sent 300 delegates to the Bali meeting, blocked many of the key initiatives on energy use, biodiversity and corporate responsibility.

Also presented at the Bali meeting was a global survey on the progress achieved by governments in implementing the Sustainable Consumption Guidelines, which were ratified by the United Nations General Assembly in 1999 as part of the UN Guidelines on Consumer Protection.

A total of 150 governments approved the guidelines in 1999 but only about 80 governments promote research into sustainable consumption while an equal number measure the progress of their nations towards more sustainable consumption patterns, the survey, carried out by the United Nations Environment Programme (UNEP) and Consumers International (CI), shows⁴. Malaysia did not take part in the survey.

According to CI president Louise Sylvan, some of the biggest resource-consuming countries did not respond to the survey. Neither have these governments, she said, used the Guidelines to provide frameworks for achieving improvements. However, there was some encouraging news: 80% of the governments that responded believe that the guidelines are useful for policy-making and they have also initiated information campaigns on sustainable consumption in their countries.

4 Consumers International – Tracking Progress: Implementing Sustainable Consumption

Changing Consumption Patterns in Malaysia

Introduction

Consumption and the environment are closely inter-related. Any changes in consumption patterns, especially in food production and spending, are likely to have a strong implication on the health of the global environment. Household purchase decisions per se are particularly important. Goods and services bought by consumers and the way they use them have a direct impact on air and water pollution, waste generation, habitat alteration and climatic changes. Unfortunately, consumers fail to realise these effects. While unsustainable consumption and production methods in many of the industrialised countries have damaged the environment over the last few decades, the on-going unbalanced development, coupled with changing consumption patterns in developing countries, will continue to exert pressure on the ecology. Of late, this has become a major concern for environmentalists and governments.

Likewise, Malaysia's accelerated industrialisation programme since the 1990s has taken a toll on the environment to a large extent. At a glance, the forest cover in the peninsula has diminished by almost 40%, the direct result of rapid industrialisation, extensive urban growth and logging.

Meanwhile, Malaysia's economic model, shaped along the Western concept which focuses on economic growth by maximising exports for revenue, has resulted in the exploitation of the natural resources for the present, instead of preserving them for the future. This poses a challenge to the generally-accepted strategy of sustainable development. On the same note, the consumption



pattern in developing countries like Malaysia is changing, moving towards the consumption pattern of the developed nations, largely as a result of higher income, urbanisation and social and economic transformation.

Since Malaysia introduced its New Economic Policy in the 1970s to eradicate poverty and uplift the economic status of the Bumiputra races, the nation witnessed a tremendous change in the economic and social realm. The government's affirmative action plan brought successful results in the later years. The level of poverty was reduced significantly. In the 1970s, half of the households in the country were considered poor. However, by 1999 the poverty level had dipped to 7.5% and it is expected to drop to 0.5% by the year 2005.

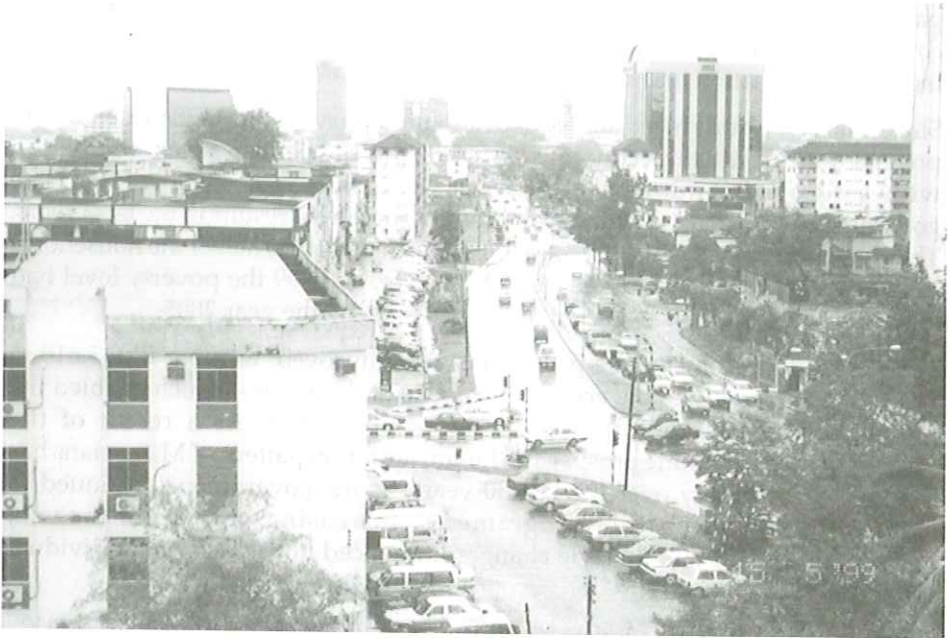
The per capita income of the people has also improved, topping RM13,618 in 2002 – thanks largely to the economic miracle of the 1990s – which enabled the government to achieve its development objectives. As a result of the unprecedented economic prosperity, the consumption pattern of Malaysians has changed dramatically over the last 30 years, as the government continued to step up its modernisation programmes. Increasing per capita income, demographic shifts and lifestyle changes influenced household and individual spending.

For example, in 1973, the average monthly consumption expenditure was RM412.⁵ This increased to RM1,161 in 1994 and rose to RM1,631 five years later, according to the Household Expenditure Survey 1998-99. In the years 1998-99, on average, urban area households spent 1.5 times higher than households in the rural areas. The average monthly consumption expenditure was RM1,943 a month in the urban areas and RM1,270 a month in the rural areas.

A strong and growing middle-income group (at least 40% of the workforce is in the middle-income category) is another contributing factor to changes in consumption pattern. Excessive demands, unsustainable lifestyles, individualised buying patterns, a preference for processed and packaged products and an increase in the ownership of household appliances placed an immense stress on the environment. Advertisements, while having a strong influence on the consumption habits among the people in the urban centres, did also have an impact on the rural population in Peninsula Malaysia, for there is no rural centre too far from a major town, while radio and television signals now penetrate every nook and corner of the country.

In 1997, Consumers International (CI) studied the spending trend among urban Malaysians. In a report titled *A Discerning Middle Class*, CI observed that demand for consumer goods increased as income improved, and this was particularly noted in car sales. A 40% hike in income between 1987 and 1991 was accompanied

5 Department of Statistics, Malaysia



by a 290% rise in car sales, mostly in the federal capital of Kuala Lumpur and its suburbs.

The changes in consumer habits were also driven by competition, technology innovations, financial flows and public and private sector policies. Over the last 30 years, the consumption pattern among local consumers was not a sustainable one, which is clearly seen from indicators like the tremendous increase in waste generation and the wastage of water and energy.

The nation forged ahead with its modernisation programmes, but at the cost of a gamut of social, economical and environmental issues and problems. In order to evaluate whether Malaysia's consumption pattern is a sustainable one and the status of the environment, the main consumption indicators like water, transport, health, energy, food and solid waste need to be analysed.

A) Water

Water is one of the most vital elements for life to exist. Of all living things on Earth, man is the only creature that not just takes water for granted, but misuses it, wastes it and deliberately does untold damage to water sources. And with people of the world where there is water aplenty, Malaysians are among the most guilty of crimes against water.

The authorities do no better. The eye is turned the other side to blatant pollution of water sources, so as not to discourage industrial development – and till today, Malaysia does not have any kind of integrated water resources management programme.

Who in an urban settlement in Malaysia today has not suffered water cuts as a result of water shortage? The forecast is that a major water crisis will hit the Klang Valley in 2007 because demand will outstrip supply. Why should this be the case, when the country's annual rainfall is 900 billion cubic metres⁶ and Malaysians use just 15 billion cubic metres of water a year?

Some 98% of the total water used in Malaysia originates from streams and rivers and of the total amount of water used in the country, 75% is for irrigation, with the rest for industrial, domestic and other uses. There are 120 major rivers in the country, and there are also 53 single purpose and 68 multipurpose dams, with another six dams under construction.

So, why all these water woes? For one, the authorities have never really taken water as an issue seriously. It took nearly 15 years to form the National Water Resources Council as the central regulatory body for water. Water is a matter under the purview of the states and no state wants to give up any of its rights to it. Therefore, the planning for and the management of a national water system cannot take place.

Despite their powers, the states have not cared for water or water resources, allowing, despite the existence of federal laws, industries to pollute rivers and other water sources and for development to take place in water catchment areas, besides unbridled logging of the forests.

As at 2001, of the 121 rivers in the country monitored by the Department of Environment, 11 were “very polluted”, 69 were slightly polluted and 41 were clean. Treating polluted river water is a very expensive matter.

The Selangor state government has been repeatedly warned about overlogging since the National Water Resources Study was completed in 1982. It was warned again in 1991, 1993 and 1995 but judging from the current situation, nothing has been done about it.⁷

The Federation of Malaysian Consumer Associations (FOMCA) in its study of the Malaysian water crisis says there are ample provisions in the laws of the country – including the Land Conservation Act, the Environmental Quality Act and the Environmental Impact Assessment Order 1987 – to protect water catchment areas indirectly. However, nothing is done because there is no will to

⁶ Malaysian Business, March 16, 2002

⁷ Ibid

act. Politicians who always have their taps running will never believe that Malaysia will face a water crisis.

According to water engineer M.N. Mohd Adnan, there are about 40 federal laws related to water and in each of the 13 Malaysian states, there are four or five laws on water specific to each state.⁸ Examining the Federal Constitution, Adnan argues that water is “generally a state matter, but not exclusively”. The federal government has specific powers for federal water supply projects, for promoting the uniformity of laws between states and over other water related matters such as hydropower generation, navigation and marine fisheries. So, why is the federal government not acting?

Well, it does, in spurts even if it cannot carry out a sustained programme. Launching a public awareness campaign titled “*Preserve Water Today for the Well-being of Future Generations*” on Jan 29, 2002, a government official said that “Malaysians who are truly patriotic will stop taking water for granted and get their families, friends and community involved in protecting water resources”.

This, said Education Ministry parliamentary secretary Datuk Dr Mahadzir Mohd Khir, is important because Malaysians generally have a negative attitude towards water.

The campaign, said Mahadzir, is the start of the government’s serious campaign for the preservation of water and water resources, together with the Malaysian Water Association, the Education Ministry and the Ministry of Science, Technology and Environment.

Various save-water campaigns are a norm during the dry periods, such as the Selangor government calling on all households in the state during the prolonged dry season in February, March and April of 2002 to cut water use by 55 litres (or two pails) a day per household.

There is also redistribution of water to low-pressure areas from high-pressure areas, resulting in water cuts to several other areas.

In March 2002, the Selangor Waterworks Department began sending to several housing estates in Kuala Lumpur daily 11 tanker loads of water as water levels in the major dams in the state dipped. The situation “is not dangerous yet”, Works Minister Datuk Seri S. Samy Vellu said, but he warned that if there is no rain in the catchment areas soon, Selangor could face the serious water crisis it did in 1998.

8 M.N. Mohd Adnan: *Paper for Dialogue on Sustainable Water Management*, Kuala Lumpur, Nov 15, 2000

Recommendations

As the Meteorological Services Department has predicted yet another dry spell from August to the end of 2002, and consumers live in fear of possible water shortages and even rationing, it is time that each and every consumer plays an active role to save and conserve water.

In some parts of Kuala Lumpur and its surrounding areas, those living in high rise condominiums and flats are forced to make do with water saving measures everyday because the water pressure is too low.

The situation becomes worse when water shortage hits such areas and people have to carry pails of water up to their homes. The spill from these pails can account for a substantial amount of water if this spilling is done by 100 or more people each day. Some of the measures that consumers can take are:

- Never let excess water from a hose or other source run down the drain while you are doing your chores.
- Ensure that your home is leak-free. Many houses have leaking pipes that have gone undetected for years! Check your water meter two hours before and two hours after a period when no tap in the house is opened. If the meter does not read the same, there is a leak somewhere.
- Replace washers if the water drips. At the rate of one drop a second, you will be wasting 2,700 gallons a year.
- Do not flush the toilet unnecessarily. Dispose of tissues, insects and other such waste in the trash. This will also prevent the blockage of your toilet.
- Take showers instead of using the bathtub, and turn off the shower while you lather.
- Turn the water off while you're shaving or brushing. A running tap when shaving uses about 20 gallons and steams up your mirror if you have hot water running.
- Close the tap when shaving or washing your face as you can try brushing your teeth first and let the basin fill for a wash or shave.
- Reset the float in your toilet tank to stop the water at a lower level.
- Operate automatic dishwashers and clothes washers only when they are fully loaded. Set the water level for the size of load you are using.
- When washing dishes by hand, fill the sink or basin with soapy water. Quickly rinse under a slow-moving stream from the faucet.

- Store drinking water in the fridge rather than letting the tap run every time you want a cool glass of water.
- Don't thaw meat or frozen food in running water. Defrost food overnight in the refrigerator, or use the defrost setting on your microwave.

Saving water outdoors

- Never over-water your lawn. A heavy downpour eliminates the need for watering for as long as two weeks.
- Always water your plants in the early morning, when temperatures and wind speed are the lowest. This reduces evaporation.
- Never water your street, driveway or sidewalk while watering your plant. Sprinklers should be aimed at the lawn and shrubs.
- Plant native and/or drought-tolerant grasses, ground covers, shrubs and trees. Once fully grown, they do not need frequent watering.
- When washing your car at home, consider parking on the grass, so that the run-off water then is not wasted.
- When you're finished watering the lawn with a hose, turn off the tap that is the source – this will prevent leakage and waste.
- Avoid the installation of ornamental water features (such as fountains) unless the water is recycled.
- Never use water to hose down dried leaves and small branches which fall on your walkway. Sweep them with a broom.

In general, Malaysians should create and constantly increase awareness of the people, especially children, about the importance of conserving water. Never argue that you waste less water than the others: A waste is waste, regardless of the amount reflected in your water bill.

Report all significant water losses, such as broken pipes, open hydrants and erratic sprinklers, to the local authorities, the Waterworks Department or the property owner.

Use water sparingly and encourage others to do the same as well. This should be done because conserving and saving water is the right thing to do. Don't be indifferent even in situations where others will be paying the bill, such as when you are staying at a relative's place or a hotel.

Doing one of these tips every day will result in saving water or using the resource more effectively. Once you are used to the tips, they will naturally become a habit. Never try to equate your water saving gestures to the ringgit sign on your utility bill as the savings may be minimal. Most importantly, people need to realise and believe that every drop is precious. Every drop of water counts and if each and every one of us puts our mind and heart to it, the difference will show and we will be better consumers.

B) Transportation

A good transportation system is a critical feature of a sustainable society. A sustainable transportation system is one that is safe, efficient and environmentally friendly. For economic reasons, we need a transportation system that is efficient and competitive. Socially, it must be safe and accessible to all segments of the population.

Malaysia's transportation network has improved vastly since the 1990s. Urban expressways have replaced single-lane roads, while major highways crisscross the Klang Valley, linking all corners of Peninsular Malaysia. In addition, the government invested billions of ringgit to build other modes of transport and infrastructures to help in the movement of people and goods. The electric commuter train, the Light Rail Transit (LRT) system and the inner-city monorail are some of the mega projects designed to ease the growing transportation problems in the sprawling capital of Kuala Lumpur and its suburbs. However, observers say that the nation's transportation system is at a crossroads today: An unsustainable system that is neither user-friendly nor environmentally safe. There are many reasons for this:

i) Air pollution

The major cause of air pollution in the country is the transportation sector. Some 10.5 million people ply the nation's roadways every day and about 1.5 million vehicles enter Kuala Lumpur during the peak hours. More than 70% of the air pollution in the federal capital is caused by motor vehicles, with carbon monoxide, volatile organic compounds, carbon dioxide and nitrogen oxide particles being the main pollutants.

Nearly 57,000 tonnes of hydrocarbon and more than one million tonnes of carbon dioxide, which is known to cause global warming, are emitted into the air every year. Motor vehicles also contribute to noise pollution, another silent health hazard, which is a growing concern among environmentalists.

According to a 1994 study conducted by the Institute of Noise and Vibration, Universiti Teknologi Malaysia, noise pollution was perceived

as the highest source of environmental pollution, followed by air and garbage. The study disclosed that extensive noise affects a person's physical, psychological and social make-up. In the long term, noise damages one's hearing, disturbs blood circulation and leads to tiredness, which can affect the efficiency of a person.

A major challenge of sustainable transportation is to control or prevent air pollution and greenhouse gas emissions. Transportation is the single largest source of greenhouse gas emission in many countries.

ii) Sea pollution

A sustainable transportation system is not only confined to land, it should also include sea transport, which adds to the deterioration of the environment if unchecked. The Straits of Malacca, for example, is the busiest shipping lane in the world, with some 200 ships passing through it daily. Sea pollution caused by oil spills, sinking ships and the dumping of solid and hazardous waste has been frequently reported in Malaysian waters. These can contaminate land, surface water and groundwater; and contaminate beaches and fishing areas.

iii) Traffic accidents

The number of vehicles on the roads has surged over the years and the national car industry, Proton, heightened this. Higher disposable income and flexible credit facilities encouraged more young Malaysians to invest in cars (this was an impossible dream a decade ago). This development created its own set of problems and besides man hours wasted in traffic jams, the number of traffic accidents also swelled.

According to the Automobile Association of Malaysia, 50% of these accidents involve those aged between 16 and 25, and the main cause was due to loss of concentration, influence of alcohol and handphone conversation while driving.

According to statistics compiled by the Road Safety Council, there were 223,116 road accidents involving 331,860 vehicles in 1999. This translates into 611 road crashes a day, or about 25 accidents an hour. At least 909 vehicles are involved in accidents everyday.

Worse still, the number of road fatalities in 1999 was 5,791 – or an average of 15 persons being killed daily.

The situation has its economic implications as well: Insurers pay out a hefty accident claim. The General Insurance Association of Malaysia

reported that in 1999, insurers paid RM1.67 billion or an average of RM4.6 million a day on motor claims. Malaysia's traffic accident fatality rate of 5.83 for every 10,000 vehicles is relatively high, compared to Japan and Singapore, where the figures stood at 2.8 and 4.3 for every 10,000 vehicles respectively. It is even lower in countries like Germany, Finland, the United States and the United Kingdom, where the fatality rates recorded were between 1.8 and 1.9 per 10,000 vehicles.

iv) **Not people-friendly**

Major cities such as Kuala Lumpur and Johor Baru still lack pedestrian facilities such as walkways and footbridges. Roads, especially in the city centres, are not safe for pedestrians, in particular the senior citizens and the disabled. The cost of public transportation is another issue. Fares must be reasonable for people in the lower income brackets as well.



Public transportation in Malaysia is ignorant of facilities for the disabled.

Observation

To solve the transportation problems, the authorities quickly build more roads, highways and infrastructures. But this is only a "quick fix", not a permanent solution, nor a sustainable approach. The increase in pollution, high accident rates, poor services from public transport providers, safety issues and the problem of traffic congestion remain the common public grievances that are yet to be addressed by the authorities.

Malaysia endorsed the 1992 Earth Summit and the Kyoto Protocol in 1997, both aimed at preserving the environment. However, national development policies do not seem to be in keeping with these international treaties. For instance, in its attempt to promote the automobile industry, the environment is neglected. More vehicles mean greater environmental pollution – which will eventually lead to health problems. Since the launch of the national car in the early 1980s, the volume of cars on Malaysian roads multiplied and the sale of automobiles hit a record 343,000 units in 2001. Nothing is done to control the influx of cars into congested urban areas or to minimise air pollution.

While the government is busy devising its modern transportation plans, which only benefit the motorists, pedestrian facilities such as footpaths and overhead

bridges are sorely lacking in many areas.

Little is being done to promote an alternative mode of transport to automobiles. A sizeable city population still prefers to use private cars, largely because of the poor or erratic public transport services. Sustainable transportation means integrating economic, social and environmental factors when decisions are made, but this appears to be lacking. Surely, this is not in tandem with the requirements of Agenda 21.

Recommendations

Move people, not cars

The focus should be on moving people and goods, not the vehicles. In a densely populated city like Kuala Lumpur, public transport is the best option because it saves time and space. Buses should be given priority, like special lanes, otherwise they too will be caught in the traffic snarls and commuters will shun public transport. A good public transport network that connects the different modes of transportation, such as the Light Rail Transit (LRT), commuter trains and buses, should be created. If there is no proper system, the people will continue to rely on private transport and this will lead to traffic chaos.

More space for pedestrians and cyclists

Town and city planners must provide more space for pedestrians and cyclists. Pedestrian crossings, walkways and footbridges are essential in busy towns. It should be safe and convenient to walk to transport stations and shopping malls. Walking and cycling are surely the healthier and more sustainable modes of moving about in the inner cities.

Limit car entry

Car restraining policies should be introduced in the major cities where traffic congestion is severe. Reducing the number of parking areas in the towns or by implementing a single occupancy vehicle policy, where the lone motorist in a private vehicle is charged a fee to enter the city during peak hours, is another option. But these measures will be only effective if there is an efficient public transport that integrates the commuter train with the LRT, monorail and the bus system.

Car pool

This is another way to reduce the number of private cars on the road during peak hours, but can only be achieved if there is strong public awareness among road users. Car-pooling was encouraged in Kuala Lumpur some

years ago, but was not popular because there was no sustained campaign in favour of it on the part of the authorities, and the idea did not get a good response from the people. Unless the authorities design strict regulations like car restraining policies, the people will not respond to such proposals.

Improve fuel quality

The quality of fuel, especially that of diesel, which contains sulphur, has to be upgraded. Sulphur contributes to the black smoke emission in diesel-powered vehicles and it is a poisonous air pollutant. Many buses and lorries still rely on diesel fuel.

Telework and teleconferencing

Besides designing a vehicle-free inner city, planners should also introduce modern communication technologies to reduce the number of people having to move from one place to another. Video or teleconferencing and telework are several creative ways that are gaining popularity in the developed countries. This will encourage the people to work from home and reduce travelling.

Conclusion

Transportation can bring many economic and social benefits and at the same time, an unplanned system can have an adverse impact on the ecology. The adverse environmental impacts from mass transportation include air and water pollution, greenhouse gas emissions and the use of land and other natural resources. Besides, it also demands the construction of infrastructure, municipal services, the maintenance of roads, disposal of wastes and the provision of energy and fuel.



Pollution of our water resources remains a matter of grave concern.

Transportation should be “people-centred” and a sustainable model. An efficient and equitable urban transport policy has to be formulated, otherwise it can have serious environmental, economic and social repercussions.

C) Waste generation

Like in many other developing countries, solid waste generation and disposal are pressing problems for the local authorities in Malaysia. The rising “consumer culture” and the changing patterns in consumer habits result in a serious impact on the environment. The volume of garbage generated has increased, side-by-side with the increased packaging of household products, pre-packed food and the growth in population. Individuals, industries and commercial outlets dispose more waste products than before.

In sprawling urban areas, the mounting level of garbage disposed is becoming a nightmare for the local authorities. Kuala Lumpur, with about 500,000 households (making a population of 1.3 million) and its commercial centres churn out about 2,500 tonnes of rubbish daily, costing taxpayers RM2.6 million a year just to clean up the mess in car parks, back lanes and drains. The amount of rubbish produced daily in the federal capital is projected to reach 3,200 tonnes a day soon. Municipal workers collect about 2.19 million tonnes of waste annually from urban localities in the peninsula alone, and almost all the 230 dumpsites in the country are 80% full.

Waste management is becoming a major concern at local and national levels. The authorities are faced with massive tasks like combating illegal dumping, burning of wastes and the scarcity of land for new landfills as the existing landfills have reached maximum capacity. Worse still, recycling campaigns are not effective. The National Recycling Policy, implemented in 1993 to extend the lifespan of landfills by reducing waste generation through recycling, has not been popular despite several re-launches of the campaign.

Observation

Domestic waste disposal is directly related to household activities that are dependent on the consumption pattern of the consumer. There is a tendency for people to spend more when income is higher and this eventually increases solid waste disposal. Ours is very much a “throwing society”,



Waste management has become a nightmare, with landfills reaching maximum capacity, and illegal dumping.

where the people do not recycle their waste but take the easy out by discarding them in garbage bins.

Household activities can have a damaging impact on the environment and be detrimental to human health as well because of the types of garbage disposed of – paints, dry cell batteries and chemicals included. The increasing volumes of garbage churned out show that awareness among consumers and producers is still very much lacking.

Awareness campaigns carried out by the Housing and Local Government Ministry and several local authorities have not been effective. There is no stringent policy on recycling or waste management. Recycling facilities or special containers to throw wastes are also limited and not close to residential areas. The political will to overcome this social predicament is still not there. Political leaders and the authorities need to inculcate the importance of sustainable consumption among the younger generation in order to protect our fragile environment.

Recommendations

Re-use Household Items

Like charity, recycling campaigns should begin at home. Creative ideas should be used to check or control the amount of waste generated. For example, egg cartons can be used as ice cube trays or starter pots for seedlings.

Magazines, newspapers and comics can be used as wrapping papers. Reducing junk mail like free samples, coupons, flyers/circulars, free magazines and catalogues that come through the postal service will also help to reduce waste.

Garbage reduction

Composting and recycling, as well as other strategies, can reduce the amount of waste ending up in the landfill. For example, using cotton table napkins, covering leftovers with a plate instead of using plastic wrappers and buying fresh food instead of packed products will cut down on the amount of things thrown away.

Block Composting

Block composting is the recycling of organic matter instead of disposing of it in the landfill. It reduces trash and provides the soil with matter that can improve its quality and subsequently, raise the yields of flowers, vegetables, and herbs in the garden. Composting can improve our environment because it turns waste into a valuable resource, saves landfill

space and recycles nutrients back into the soil.

Recycling Programme

Anyone can start a recycling programme. All one has to do is to identify a community centre or a school that does not have a recycling programme and try to implement a very basic project. Study the type of waste generated in the various operations of a building, including offices, classrooms, faculty rooms, health office, cafeteria and other sites in that community. Design and implement a recycling programme based on these findings.

Set up the appropriate bins at convenient locations. Paper and aluminum recycling bins can act as an income-producing source for extracurricular activities. Place signs above the recycling bins and around the buildings, urging the people to recycle their waste.



Waste Generation Plays or Films

Theatre, dance, music, and video clips can educate consumers. Performing plays or films or video documentaries for specific target audiences such as schoolchildren and the youth will have a positive result.

Those wishing to promote recycling can also invite journalists from the local media, such as newspapers, radio and television, to publicise these events. This form of education can focus on waste generation and even extend to any other environmental topic, such as water conservation and the choice of transportation.

The local authorities, environmentalists and schools must initiate special recycling programmes to encourage the people to reduce waste and dispose of it safely. The 3Rs – Reduce, Reuse and Recycle – should be emphasised. The key to the success of these projects is education and long-term commitment.

D) Energy

One crucial area that reflects the changing consumption pattern is the demand for energy. Household electricity consumption has continued to grow with the increasing per capita income, largely the result of the ownership of household appliances like air-conditioners, refrigerators, dishwashers, microwave ovens, washing machines and radio and television sets. The changing role of women in society is another factor that influences the rising demand for electrical appliances, says the 1998 *Malaysian Journal of Consumer and Family Economics*.

In urban settings, many women play a dual role now – as traditional housekeepers and as wage earners, to supplement the family income in order to cope with the rising cost of living. With limited time in hand, busy working women often rely on electrical gadgets to do some of their household chores such as cooking, washing and cleaning.

The same journal also revealed that the use of labour-saving machines is not the monopoly of the urban middle-income woman. Micro studies among rural Federal Land Development Authority (FELDA) settlers and among low-cost housing dwellers show a similar trend. The majority of these households has the basic electrical appliances, which enable easier and faster ways to do arduous tasks and project a certain lifestyle, for both the rural and urban women.

Rapid urbanisation has also raised the demand for electricity over the last decade. More condominiums, luxury apartments, commercial centres and hotels mushroomed during the peak of the economic growth as swelling urban populations fuelled the demand.

Since the 1997 economic crisis, there has been a steady rise in demand for electricity. The country's demand is forecast to rise by 7.8% to 1,699.8 petajoules (PJ) in 2005, from the present 1,167PJ. Per capita consumption of electricity is expected to increase by 5.8% yearly, from 50.1 gigajoules (GJ) in 2002 to 66.4GJ over the same period, clearly indicating that Malaysians will consume more energy in the near future.

Observation

If this conspicuous consumption pattern prevails, then the energy sector will find it difficult to supply electricity for the expanding population and industries in the coming years. Malaysia has since 1981 implemented a Four-Fuel Diversification Policy for the generation of electricity. The four fuels – hydro or water, gas, coal and oil – are all non-renewable energy sources. This policy was designed to reduce the country's over-dependence on oil as the primary energy source and ensure that alternative sources are reliable and secure.

Another energy policy, the National Depletion Policy, was formulated in 1980 to conserve the country's energy resources, particularly oil and gas. In this respect, the production of crude oil was limited to about 630,000 barrels a day, and the consumption of gas in the peninsula will be limited to about 2,000 million standard cubic feet a day.

The national crude oil reserves will be exhausted in the next 16 years if the current production rate continues. The country may be forced to import oil after the year 2008, when domestic petroleum consumption exceeds production.

Tenaga Nasional Bhd, the national power supplier, is spending millions of ringgit to purchase coal for its coal-fired power plants. It is expected to use 20 million tonnes of coal by 2005 and has purchased a coalmine in Indonesia for this purpose. The utility giant is expected to pay RM1 billion for coal next year and a staggering RM3 billion in 2007.

Coal is a major pollutant, compared to all other fossil fuels, because of its sulphur content, which is harmful to the environment. Sulphur is a major cause of the acid rain that kills the trees and plants that supply oxygen for all living beings.

The country has been over-dependent on depletable or conventional sources of energy, so the potential of renewable energy has not been fully exploited. It is time the government explores the opportunities of promoting renewable resources, so as to have a sustainable energy policy.

Recommendations

Biomass energy

Waste products from the oil palm industry, mainly the fibres, shells and empty fruit bunches that are generated in the mills, can be a potential renewable energy resource. This biomass can be used to generate energy and most oil palm industries are self-sufficient in the production of biomass for their needs.

As of 1998, there were 328 palm oil mills in the country, which processed about 44 million tonnes of fresh fruits. It was estimated that from the 8.5 million tonnes of empty fruit bunches generated in 1998, the potential amount of energy that could be harnessed would be equivalent to about two million tonnes of oil, or 6.5% of the total national energy supply. Additional energy from biogas generated as a byproduct of the anaerobic treatment of palm oil effluent is also a potential supplementary source of energy.

Solar energy

Malaysia should take advantage of its tropical climate and abundance of sunshine to produce solar energy, which can be used to generate electricity that can be used in hotels, offices, rural areas and the remote areas. In the urban areas, water heaters using solar energy are quite popular and the government should encourage the greater use of solar energy. The average daily solar insolation in Malaysia, of 5.5 kWh per square metre (equivalent to 15MJ/square metre) is considered good for harnessing energy from the sun. Solar energy is used to generate electricity and heat in the country, but still on a very small scale.

Wind energy

Wind turbines can be located in windy places, such as the coastal areas, or can be put to use in the agriculture sector, where there is adequate wind speed and duration to produce electricity. Wind power can also be used to pump water for irrigation purposes in the paddy fields.

Environment-friendly

These renewable sources of energy can address environmental damage caused by the emission of carbon dioxide, nitrogen dioxide, sulphur dioxide and particulates during energy generation from crude oil and petroleum, natural gas and coal. They can minimise the negative impacts of energy generation, transmission, conversion and consumption on the environment. The renewable nature of biomass, solar, wind and municipal waste ensure that these resources are available in perpetuity.

Create awareness

Policy makers should encourage the people to use renewable energy such as solar energy and use power-saving electric gadgets at home. Environmentally sound technologies should be promoted and made easily accessible to consumers. Regular nationwide campaigns have to be carried out to educate the people on how to save electricity and avoid wastage.

The Electricity and Gas Supply Board reported that five million customers waste energy ranging in cost of between RM500 million and RM1 billion annually. If households and industries use energy-efficient equipment, at least RM200 million in energy use can be saved each year.

E) Food

The expanding middle-income group, growing affluence and rising health awareness among the urban dwellers have altered the consumption pattern by influencing the taste and preferences for food. The emerging trend has led to an increase in food prices as the demand for imported foodstuff swelled during the 1990s.



The annual food import bill began to soar from RM3.5 billion in 1985 to RM7.7 billion in 1995, to more than RM10 billion in 1999 and RM13 billion in 2001.

Apart from that, urban lifestyles changed regular habits. For instance, expenditure on food at home declined from 33.3% in 1973 to 22% in 1999, but spending on food away from home (food consumed in restaurants, stalls, fast-food outlets and coffee shops) saw a sharp increase to 10.9% in 1999. The opening of more fast-food chains, restaurants and hawker centres changed the eating habits of many urban dwellers.

The urban lifestyle has also influenced food production. There is more demand for pre-packed foods, canned foodstuff, instant food and take-away. The number of food hawkers, both licensed and unlicensed, has increased in the towns and cities. In Kuala Lumpur alone, it is estimated that there are about 42,000 illegal hawkers.

Not just this, but eating out could very well mean the eating of processed food and food that has been kept frozen for long periods. With biotechnology playing a key role in the food industry today, how sure are we that the food we are eating is wholesome? Genetically modified food substances have crept into various foods and food products and today, we can never be really sure about the safety of ingredients in food.

Genetic engineering (or modification, GE or GM) refers to all technologies that artificially move genes from one organism to another, often from one species to another, to produce “new” or “novel” organisms. These techniques involve highly sophisticated manipulation of genetic material and other biologically important chemicals that change the DNA of living organisms.

Consumers should know that the random insertion of foreign genes into an organism may cause unexpected changes in the functioning of the genes in that

organism. Existing molecules may be produced in incorrect quantities, at wrong times or new molecules may be produced. GE or GM foods may themselves contain unexpected toxins or allergenic molecules that could harm the consumer's health.

Another concern about GE foods is the possible acceleration of bacterial resistance to antibiotics because of the use of antibiotic-resistant genes in the production of GE foods. Independent, long-term testing is required before we can be sure that GE foods are safe to eat.

At the moment, testing is only done by giant transnational corporations, many of them petrochemical and pharmaceutical companies, that spend billions of US dollars developing GE foods and therefore, have a vested interest in the findings that are made public. Profit is the only motivating force for these companies.



Observation

The new household food consumption pattern and changes in food production has had a direct impact on the environment and the national economy. The rise in food imports has and is causing an outflow of foreign exchange and inflation is slowly creeping into the domestic economy, which is unhealthy for the country.

It is unsafe to depend too much on imported food because of the volatile nature of the global food market, which can easily undermine the nation's food security in the event of a crisis.

New eating habits add to the mounting problem of solid waste disposal, which has become a nagging issue for the local authorities. Packaging materials, food wastes (wet) and unhygienic hawkers worsen the environmental conditions in urban sprawls.

The safety of food consumed is another serious issue, especially the GE or GM food that is imported. Examples of these are the Roundup-Ready soyabean, Star Link corn and the Brazil nut that are imported into Malaysia from the United

States. The US also exports other GE foods and seeds, such as tomatoes, canola, potatoes and corn, to its overseas markets and US corporations are resisting and undermining labelling laws for food that developing countries are trying to implement.

GE foods can pose serious health risks to consumers. The authorities should not overlook recent scares related to food such as the foot and mouth disease, mad cow disease, the Star Link corn and the bird flu. There have been cases of allergies and toxicity documented on GE food such as the Brazil nut case. There was also the problem of Star Link corn, a genetically-engineered corn meant to be for animal feed as it was declared “not fit for human consumption”. However, this GE corn was recently found in some snack food in US and Japan.

The current consumption pattern is not a sustainable one, because production methods using GE technology and eating habits are not only uneconomical, but also unhealthy. There should be a sustainable approach towards food consumption and food production.

Recommendations

There is a need to ensure that adequate safe, nutritious and high quality locally produced food at affordable prices are available in the local market at all times. Better quality fish and vegetables are exported to neighbouring countries by local businessmen because they fetch higher prices. The authorities should clamp down on these practices.

The import of food has to be reduced because in the long run, it is not economical, culturally acceptable or safe for the nation. Hence, the food production sector must be developed so that it can cater to the local needs.

Imported foods such as GE products also pose a cultural problem, for the process of genetic engineering also includes the splicing and transfer of animal genes into plant genes. Certain ethnic and religious groups have restrictions on the food consumed: for example, Muslims and Jews abhor pork and hog products while beef and its by-products are taboo to Hindus. Cheaper organic foodstuff should be made





An abandoned paddy field.

available locally, with incentives given to those who produce organic food.

The government should also move to make the labelling of GE food mandatory. This is important because many questions about ethics and the safety of GE food have been raised – questions to which no adequate answers have been provided.

Another reason to put brakes on patented GE seeds is that genetically modified crops are a threat to traditional agriculture. The customary right of farmers to save, use and exchange their seeds and other planting material has for generations been one of the cornerstones of agriculture. Traditionally, farmers have saved their best seeds for use again the next planting seasons.

Today however, transnational corporations have “stolen” good seed varieties, genetically modified them in laboratories and patented these GM seeds as their “inventions”. Today, these companies use various methods, overt and covert, to undermine the traditional farmers, especially those in the developing world, and force them to use these patented seeds.

These GM seeds are not just sold under an agreement that they be used for one planting season only, these seeds (especially those from Monsanto) today come with a built-in Terminator technology which renders seeds from the GM crop infertile for replanting.

What governments of developing nations must do is to defend the 1989 resolution

of the Food and Agriculture Organisation (FAO) on the rights of farmers. This resolution recognises that farmers have conserved and improved plant genetic resources, the majority of which come from developing countries, over the millennia.

However, the implementation of these rights over the past decade has been very slow and the farmers were given a blow when the international undertaking on plant genetic resources in food and agriculture under the FAO was revised: there were no strong provisions to protect their rights.

F) Environment

Debate on the concept of sustainable development and the issue of sustainable consumption took root as a result of the growing concern for the global environment and the resources needed for the future generations.

Household decisions to buy consumer products have had a strong impact on the main indicators used to measure sustainable consumption such as energy, water, health, waste and food.

Analysing the available data and statistics, it reveals that, to a large extent in many sectors, the concept of sustainable consumption is not practiced by consumers or even by the policy makers in Malaysia.

There is no sustainable transportation system, household consumption or energy usage and nothing is being done to restrain waste generation. Under such a situation, compounded by changing lifestyles, the lack of policies and the lack of enforcement, the environment has become a victim. More damage is being done to the ecology that is disastrous and will be extremely difficult to control or reverse when awareness sets in.

The emission of greenhouse gases in Malaysia is of serious concern. Emissions by the transportation sector are considered to be the main contributor to climatic changes.

In 1994 (the base year selected for the greenhouse inventory), Malaysia emitted 144 million tonnes of greenhouse gasses that included carbon monoxide, methane and nitrous oxide. The transport sector contributed to 67.8% of the total emissions! The net emission was 75.6 million tonnes, after 68.7 million tonnes had been soaked up by the forests and oil palm and rubber plantations.

Symptoms are already visible in the country, in the way of lengthy dry spells and brief periods of heavy showers, with little rainfall. Environmental experts predict that climatic changes will be more severe in 30 years from now. Global warming will harm the agriculture sector and even damage coral reefs. In Tanah

Rata, Cameron Highlands, it was reported that temperature has increased by 4° Celsius because of land clearing and over-construction.

G) Health

A healthy environment is vital to nurture a healthy population, and also for sustainable development. Therefore, health and environment are closely linked. With environmental degradation on the rise, an unhealthy pattern is emerging in the country. Communicable diseases, which were once eradicated, are beginning to rear their ugly heads again.

The numbers of water-borne diseases like malaria, dengue fever, cholera and diseases like cancer and tuberculosis (TB) are becoming more common. This is mainly due to high industrial growth and environmental pollution.



TB, a life threatening disease, is causing concern anew in Malaysia. Over the last three years, an average of 40 new cases were detected every day, while two patients die from the disease daily. In 1995 the number of deaths due to TB was 571 out of a total of 11,778 deaths from diseases, but in 1999 it surged to 778 deaths out of 14,908 deaths from various illnesses reported.

The rise in heart diseases, stroke, hypertension, diabetes and obesity among children is a worrying trend in the country. About 2,200 Malaysians who are diabetic suffer from end-stage kidney failure annually, which requires dialysis or transplant.

The Kuala Lumpur Hospital records nearly 1,000 stroke cases annually. The change in dietary patterns and the stressful urban environment are taking a toll on the health of the nation.

H) Advertising

Advertising has played a major role in changing the consumption pattern in the country. For example, fast food chains and the multinationals have used advertising extensively to promote their businesses. Advertising has a direct influence on the food and other products purchased in a household.

The print media, such as newspapers and magazines, are widely referred to when people purchase electrical appliances. This is followed by radio, television and billboard advertisements, which are used as sources of information by consumers. This reflects how powerful advertisements are in changing consumer habits. The government should review this situation seriously, especially advertisements concerning food products. Various studies have been made, in Malaysia and around the world, to show how advertising has influenced the consumption pattern and consumer culture. In modern industrial economies, radio and television advertising, prepared with a lot of imagination and creativity, have a powerful impact on the buying decisions of adults and children.

While the buying decision may be the result of a complex interaction of advertising, purchasing power and the discerning ability of the household, advertising does have an impact on the awareness of products and creates brand identity.

In one study done in Penang in 1986, it was found that as a crucial component of the process of selling, advertising can serve as a useful function of informing the public about the existence and characteristics of a certain product, if it is practiced fairly and responsibly. However, advertisements tend to use psychological tactics to lure the people to buy the product: they project images and brand consciousness, create new needs, exploit the insecurities of consumers, fulfill their secret needs, use famous personalities and run lotteries.

In Malaysia, about 50% of the total population live in the rural areas and of those living in the towns and cities, the bigger numbers are located in the sprawling Klang Valley, made up of Kuala Lumpur and its suburbs, Petaling Jaya, Subang Jaya, Shah Alam, Klang and Port Klang. In terms of the expenditure patterns of Malaysians, a 1996 study by the faculty of Economics and Management, Universiti Putra Malaysia, showed that about 60% of the urban households and 80% of the rural households spend most of their money on basic needs like rent, food, utilities and taxes.

The rest of the disposable income, other than what is saved, is spent on the acquisition of the goods that will contribute to a more easy or comfortable, even luxurious, life. This is where advertising to lure the consumer to spend comes in.

Advertising is a big and fast expanding industry in Malaysia. Advertising expenditure grew from RM818 million in 1990 to RM2,184 million in 1996. In 1995, of the 2,001.30 million spent on advertising, RM1,129.02 million went to newspapers, RM653.82 million to television, RM117.5 million to magazines, RM59.31 million to radio, RM20.53 million on outdoor advertising and RM40.84 million on other forms of advertising.

Plenty of advertising these days, whether on junk food, fast food, drinks or

confectionery, is targeted at children, which consumer groups deplore as “criminal”. Various studies show that advertising in general is bad for children for several reasons, among which are that those advertisements repeatedly target children and instil materialistic values in them; and cause children to crave for items (like toys) that their parents can ill-afford.

Indeed, advertising runs contrary to values or lessons that parents teach their children, and advertisements can make children feel inferior or “not part of the gang” if they are missing out on some action or toy of the season.

Recommendations

Clearly, consumers cannot expect producers of goods, their marketing arms and those who are in the business of advertising and selling these goods to use their conscience for the good of the consumer. There are codes and guidelines on advertising in the country, but they have bite only where the government thinks is necessary: for example, in the advertising of pharmaceuticals where false or dubious claims are frowned upon, and in the case of the advertising of the services of lawyers and doctors.

By and large, the advertising industry is unfettered, though there is a code, largely for decorum, on advertising in the media, principally over radio and television. The power and influence of the advertising industry can be seen just from the recent World Cup football tournament played in Japan and Korea.

It is estimated that “a few billion” in US dollars was earned from the telecast of the matches around the world and though FIFA, the world football association, did sign an undertaking, much in advance, not to give cigarette companies air-time during the telecasts, it could do nothing to prevent a major cigarette company from taking the prime spot over satellite and terrestrial TV stations in Malaysia.

What is needed in Malaysia is a code of advertising standards that are meaningful to the consumer and have the interests of consumers and the environment as the focus. Certainly the industry is not going to take the lead here, for it has shown that it does not care for self-regulation (except perhaps where issues of ethics or conflicts of interest between advertising agencies crop up), and its response to consumer organisations that have raised issues so far has been dismal. Therefore, it looks like the consumer groups will now have to pressure the government to take the lead and help come out with, perhaps a Consumers’ Charter on Advertising?

For the moment, a look at the Malaysian Advertising Code of Ethics for Radio and Television shows that the code, enforced by the Ministry of Information, is only designed to safeguard the interests of the government and to give bite to

the ministry's self-appointed role as the guardian of the people's morality.

Therefore, the emphasis in the code is to ensure that advertisements do not run contrary to government social policies, that there is no anti-social content, foul language and anti-government or "unacceptable" images.

The code also reminds advertisers that multi-cultural and multi-religious Malaysia is an Islamic country, with the obvious bans on advertising items such as pork products and alcohol, and the exposure of certain parts of the human body, including the armpits, and the projection of foreign cultures and lifestyles.

Conclusion

Unsustainable household consumption patterns, especially in the areas of water, energy, food and transport will, if unchecked, continue to have a disastrous effect on human health and the environment. Advances in technology will not be sufficient to address the problems. What is important is that household decision-making must change, for this eventually influences consumption patterns in spending.

Outside the home, both the government and industry will have to play a greater and more committed role if we are to safeguard this Earth for the future generations. Both the government and private sectors can harness the energies of non-governmental organisations in the country to educate the people, especially the children.

This can be done by creating awareness on sustainable consumption and "green consumerism" or the adopting of an environmentally sustainable lifestyle and consumption pattern. One of the best places to start such a campaign is the school, through the existing consumer and environment clubs. Many NGOs around the country, especially the consumer movement which has been among the earliest to promote "green living", have the expertise to help out in these activities. Some of these NGOs are already conducting some campaigns, such as poster competitions on consumer rights and responsibilities, annual environment camps and protect our rivers campaigns, and will be more than willing to help out.

On their part, consumers as individuals can take their own initiatives for sustainable consumption. Some of these would be to reject products and services that:

- endanger the quality of the environment or the safety of other consumers;
- cause environmental degradation during the extraction of natural resources or during their manufacture, use or disposal;

- cause unnecessary waste, either because of over-packaging or because of an unduly short "lifespan";
- utilise materials derived from threatened species or threatened environments; and,
- adversely affect other countries and communities, especially those in the developing regions.

These steps will be particularly useful, for the sake of the country and the people, because consumption patterns and development policies in Malaysia are not directed towards a sustainable pattern because of the lack of commitment on the part of decision makers and poor awareness among consumers. Such a scenario therefore makes it rather difficult for the nation to embrace sustainable development and consumption. The mindset has to change and it has to change now.

Appendix

Promotion of sustainable consumption

- Sustainable consumption includes meeting the needs of present and future generations for goods and services in ways that are economically, socially and environmentally sustainable.
- Responsibility for sustainable consumption is shared by all members and organisations of society, with informed consumers, government, business, labour organisations, and consumer and environmental organisations playing particularly important roles. Informed consumers have an essential role in promoting consumption that is environmentally, economically and socially sustainable, including through the effects of their choices on producers. Governments should promote the development and implementation of policies for sustainable consumption and the integration of those policies with other public policies.
- Government policy-making should be conducted in consultation with business, consumer and environmental organisations, and other concerned groups. Business has a responsibility for promoting sustainable consumption through the design, production and distribution of goods and services. Consumer and environmental organisations have a responsibility for promoting public participation and debate on sustainable consumption, for informing consumers, and for working with government and business towards sustainable consumption.
- Governments, in partnership with business and relevant organisations of civil society, should develop and implement strategies that promote sustainable consumption through a mix of policies that could include regulations; economic and social instruments; sectoral policies in such areas as land use, transport, energy and housing; information programmes to raise awareness of the impact of consumption patterns; removal of subsidies that promote unsustainable patterns of consumption and production; and promotion of sector-specific environmental-management best practices.
- Governments should encourage the design, development and use of products and services that are safe and energy and resource efficient, considering their full life-cycle impacts. Governments should encourage recycling programmes that encourage consumers to both recycle wastes and purchase recycled products.

- Governments should promote the development and use of national and international environmental health and safety standards for products and services; such standards should not result in disguised barriers to trade.
- Governments should encourage impartial environmental testing of products.
- Governments should safely manage environmentally harmful uses of substances and encourage the development of environmentally sound alternatives for such uses. New potentially hazardous substances should be evaluated on a scientific basis for their long-term environmental impact prior to distribution.
- Governments should promote awareness of the health-related benefits of sustainable consumption and production patterns, bearing in mind both direct effects on individual health and collective effects through environmental protection.
- Governments, in partnership with the private sector and other relevant organisations, should encourage the transformation of unsustainable consumption patterns through the development and use of new environmentally sound products and services such as information and communication technologies, that can meet consumer needs while reducing pollution and depletion of natural resources.
- Governments are encouraged to create or strengthen effective regulatory mechanisms for the protection of consumers, including aspects of sustainable consumption.
- Governments should consider a range of economic instruments, such as fiscal instruments and internalisation of environmental costs, to promote sustainable consumption, taking into account social needs, the need for disincentives for unsustainable practices and incentives for more sustainable practices, while avoiding potential negative effects for market access, in particular for developing countries.
- Governments, in cooperation with business and other relevant groups, should develop indicators, methodologies and databases for measuring progress towards sustainable consumption at all levels. This information should be publicly available.
- Governments and international agencies should take the lead in introducing sustainable practices in their own operations, in particular through their procurement policies. Government procurement, as appropriate, should encourage development and use of environmentally

sound products and services.

- Governments and other relevant organisations should promote research on consumer behaviour related to environmental damage in order to identify ways to make consumption patterns more sustainable.

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Other than sources credited in the text, the references for this publication include the following:

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10. Various news reports from the *New Straits Times*

“Living is polluting. Our very presence on the planet makes us all exploiters of its natural wealth and contributors to the vast volume of waste we collectively spew out into earth, air and sea. In essence, we have created today’s ecological crisis, not industry or government. After all, it is we who demand industry’s products and continue to condone the government’s environmentally damaging policies. This is why the notion of individual responsibility is central to the business of cleaning up the planet and developing sustainable ways of creating wealth in the future. It’s down to each and every one of us to do our bit for the future by learning to tread more lightly on the planet right now.”

Jonathon Porritt
Director, Friends of the Earth
United Kingdom (1988)

About ERA Consumer

The Education and Research Association for Consumers, Malaysia (ERA Consumer, Malaysia) is a voluntary, non-profit and non-political organisation that was founded in Ipoh, Perak in 1985. ERA Consumer is a registered membership organisation under the Malaysian Societies Act of 1966. It was set-up to undertake and promote the task of developing critical consciousness on public-related issues out of the larger socio-economic issues.

ERA Consumer is a dynamic institution that is constantly responding to and developing its services according to the needs and demands of the people. It aims to create awareness among the public on issues that are effecting their lives, through research and educational programmes by undertaking independent, authoritative, balanced research on public issues; carrying out public education projects; making policy recommendations to the government & international institutions; building solidarity and understanding among NGOs in Malaysia and society at large, and to increase South-South relations and North-South understanding. ERA Consumer's components and main programmes are consumer issues; human rights education; food, trade and economics.

The other programmes of ERA Consumer include setting up local and international networks to facilitate the exchange of ideas, information and technical know-how. ERA Consumer is a member of the regional network AsiaDhrra (Asian Partnership for Development of Human Resources in Rural Areas), a network of NGOs in 10 countries in Asia working with the poorest of the poor. In Malaysia, ERA Consumer currently anchors the Dhrra Network. ERA is also a member of the Southeast Asian Council for Food Security and Fair Trade (SEA Council), which advocates sustainable agriculture and looks at the impact of multilateral agreements on food producers in the region. Currently, ERA Consumer hosts the Secretariat of the SEA Council in Malaysia. ERA Consumer is also a member of the Asia Pacific Research Network (APRN), which is based in Philippines.

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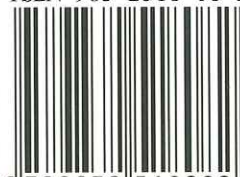
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