

## GUEST EDITORIAL

### PLEDGE FOR THE ENVIRONMENT—25 YEARS LATER

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Every year in June, the world celebrates World Environment Day. So does Malaysia. However, in Malaysia its people also celebrate Malaysia Environment Week in October every year with environmental-related activities. The month of October was chosen possibly to coincide with World Clean-up Day, World Ozone Day and World Habitat Day.

The year 1989 was an eventful year as tropical forest was voted as Planet of the Year 1989 by Times Magazine. That was the year the Langkawi Declaration was made and signed at CHOGM (Commonwealth Heads of Government Meeting). That was also the year the historic pledge was made by Malaysia: "... that the Government of Malaysia undertakes to ensure at least 50 per cent of our land area will remain permanently under forest cover"<sup>1</sup>. This was followed by the initiative Greening the Earth at the Kuala Lumpur Declaration in April 1992—and reaffirmed in Rio at the 1992 United Nations Conference on Environment and Development (UNCED) and again at the Copenhagen 2009 COP 15 that Malaysia commits to maintain a minimum of 50% of its land area with natural forest cover. Accordingly, at COP 15 the Prime Minister also announced that Malaysia would voluntarily reduce its emissions intensity of GDP by up to 40% based on 2005 levels by 2020 but conditional upon receiving financial support and technology transfer from developed countries (Annex 1 Parties), in line with Article 4(7) of United Nations Framework Convention on Climate Change (UNFCCC). In absolute

terms, Malaysia has to reduce its greenhouse gas (GHG) emission by about 38 million tonnes in 2020 compared with a projected total emission of 376 million tonnes in that same year<sup>2</sup>. To achieve the reductions, three mitigation options were identified namely, renewal energy, energy efficient and solid waste management which would contribute about 45 million tonnes of GHG reductions by 2020 if implemented effectively and efficiently. However, these mitigation options have not factored the role of forest as carbon sink which is estimated to sequester about 240 million tonnes per year at the current level of forest cover<sup>2</sup>.

Soon after the Langkawi Declaration, Malaysia made a 'Pledge for the Environment' at the first Environment Week celebration in 1989. Since then, the pledge has been repeated during the launch of Environment Week each year in Malaysia. The 'Pledge for the Environment' is as follows:

*"We, the citizens of Malaysia declare  
That we shall continually strive  
With utmost dedication and responsibility  
To preserve and upgrade  
The quality of our environment  
By maintaining balance  
Between progress of the Nation  
And protection of our environment  
Guided by the concept of  
Sustainable development  
In line with the Langkawi Declaration  
So that the country*

<sup>1</sup>Greening of the World to a Better Living - Siri Ucapan Penting: Jabatan Perkhidmatan Penerangan Malaysia, Kementerian Penerangan Malaysia, May 1992, p 16

<sup>2</sup>Malaysia's Second National Communication (NC2) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in January 2011. Available at: [nc2.nre.gov.my](http://nc2.nre.gov.my)

*Shall always be clean, beautiful  
Loved and respected.”*

The pertaining questions to ponder are:

(1) did we strive to ‘preserve and upgrade the quality of the environment’ in the past 25 years (1989– 2013)?

Concerning CO<sub>2</sub> emissions, the five largest contributors are energy industries (26.2%), transport (16.0%), manufacturing industries and construction (11.7%), landfills (11.0%), and forest and grassland conversion (10.8%), but others such as fugitive emissions from oil and gas systems (9.9%), industrial processes (4.4%), emissions and removals from soil (2.1%), commercial energy (1.0%) and agriculture (0.8%) also contributed<sup>2</sup>. While Malaysia reported net emissions in the Initial National Communication (INC)<sup>3</sup> to UNFCCC from the year 2000 (based on the year 1994) and in the second National Communication from 2011 (based on the year 2000), Malaysia was a net sink in 2000. This meant that more carbon was stored in Malaysia (through landuse, landuse change and forestry—LULUCF) than was released. An overview of sector specific emissions and removals is outlined in Table 1<sup>2</sup>.

(2) to what extent have we ‘maintained balance between progress of the nation and protection of our environment guided by the concept of sustainable development’?

My greatest concern is our ability to keep this 1989 pledge. As much as the Government of Malaysia pledges to ensure that at least 50% of its land remains permanently under forest cover, forest area of Malaysia had been in a state of flux: from 7.86 million ha in 1966 (prior to the year when National Forestry Policy 1978 was adopted) to 6.5 million ha in 1984 (the year in which the National Forestry Act 1984 was enacted by the Parliament), increased immediately to 20.10 million ha in 1988, then fluctuated in hectareage between the years 1989 to 2010 as shown in Table 2 and Figure 1. So far the trend is not to our advantage and the process of replacing degazetted forest reserves as required by the National Forestry Act 1984 (Amendment 1993) and/or creating new forest reserves is rather slow and painful in order for us to boost up the figure beyond that of 2010. As a matter of record, the total forested area for 2011 is again reduced to approximately 18.48 million ha<sup>4</sup>.

Malaysia is categorised as a HFHD (High Forest Cover with High Rates of Deforestation)

**Table 1** Malaysia’s greenhouse gas emissions for 2000 and estimates for 2005 and 2007

Sector	Emissions/removal (million metric tonnes of CO <sub>2</sub> equivalent)		
	2000 Actual	2005	2007
Energy	147.0	204.3	217.0
Industrial Processes	14.1	15.6*	17.1*
Agriculture	6.0	6.6*	7.2*
LULUCF*	29.6	25.3	19.7
Waste	26.4	27.4	31.9
Total emissions	223.1	279.2	292.9
Total sink	-249.8	-240.5	-247
	(due to LULUCF)		
Net total (after subtracting sink)	-26.7	38.7	45.9

\*Projected at 10% annual increase; LULUCF refers to landuse, landuse change and forestry

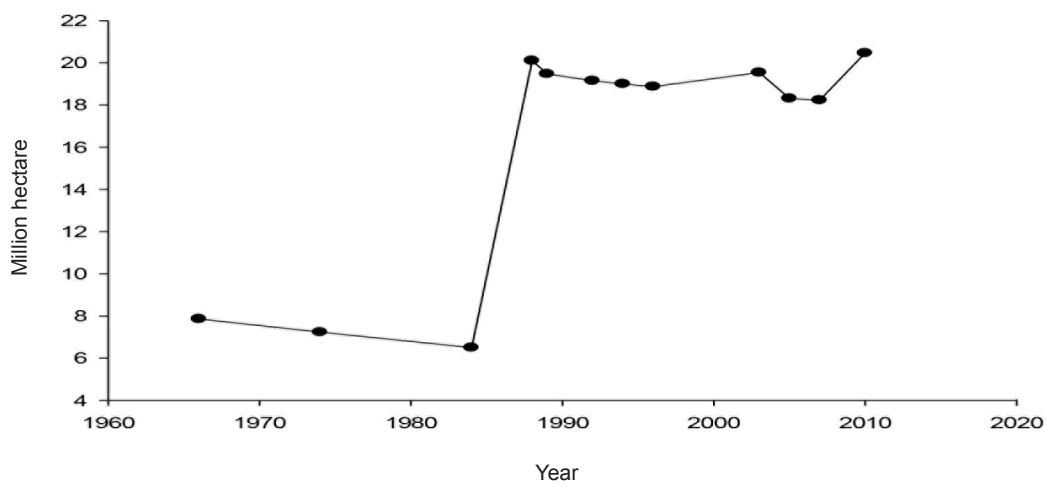
<sup>3</sup>Malaysia’s Initial National Communication (INC) to UNFCCC in 2000, Ministry of Science, Technology and the Environment (MOSTE), Kuala Lumpur, Malaysia

<sup>4</sup>Abd. Rahman AR. 2012. The state of our forest in Peninsular Malaysia. The public awareness campaign on forest conservation in Malaysia, 1 February 2012, Sunway Pyramid Shopping Centre, Selangor, Malaysia

**Table 2** The fluctuating forest areas of Malaysia before and after adoption of the National Forestry Policy (1978) and enactment of the National Forestry Act (1984)

Year	Area (mil ha)	Year	Area (mil ha)
1966	7.86 (24)	1994	19.00 (58)
1974	7.24 (22)	1996	18.87 (57)
1984	6.50 (20)	2003	19.54 (59)
1988	20.10 (61)	2005	18.31 (56)
1989	19.47 (59)	2007	18.23 (56)
1992	19.15 (58)	2010	20.46 (62)

Values in parentheses are percentages of total land area (about 33 million ha)



**Figure 1** The fluctuating forest areas of Malaysia before and after the adoption of the National Forestry Policy (1978) and the enactment of the National Forestry Act (1984)

country<sup>5</sup>. According to the UN Global Forest Resources Assessment (2010)<sup>6</sup>, the total area of planted and natural forests in Malaysia was 20.46 million ha in 2010, which is equivalent to 62% of the total Malaysian land cover. Malaysia has a negative but decreasing annual change rate of the total forest area of -0.42% from 2005 till 2010 (in comparison with -0.66% in 2000 till 2005). The area of planted forest was 1.81 million ha and increased with an annual growth rate of 2.81% from 2005 till 2010. Of the total

forest area of 18.48 million ha in 2011, about 14.61 million ha (79.1%) are permanent reserve forest comprising 11.38 million ha production forest and 3.23 million ha totally protected areas, including for conservation of biodiversity and protection of soil and water, 2.04 million ha (11%) state/alienated forest land, and 1.83 million ha (9.9%) national park/wildlife and bird sanctuaries<sup>4</sup>.

The carbon stock stored in living forest biomass totals 3.21 billion metric tonnes<sup>6</sup>. Even

<sup>5</sup>Meridian Institute . 2009. *Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment*  
<sup>6</sup>UN Global Forest Resources Assessment. 2010. Available online: <http://www.fao.org/forestry/fra/fra2010/en/>, accessed June 2013

though the figure for Malaysia is still above 50% forested for now, if unchecked, it could become lower. For example, Peninsular Malaysia now has less than 50% under natural forest; it is only because of forests in Sabah and Sarawak that make up the value.

In many developed countries, the area of forest is now increasing after long periods of decline. The change from shrinking to expanding forests has been termed as the forest transition (Grainger 1995)<sup>7</sup>. It is quite difficult to categorise Malaysia as having forest transition or otherwise due to its fluctuating forest areas as presented above. However, if one broadens the perspectives of forest transitions to include, among others, a change in emphasis from production to protection and conservation, a shift from unsustainable to sustainable forest management and even a societal transition or a cultural change for the better forest management, utilisation and conservation, then Malaysia can be considered as transiting towards a sustainable forest management.

However, there are numerous threats to forests in Malaysia and some drivers for deforestation are discussed in the literature. A growing global population, rising incomes and changing diets will continue to increase demand for food, animal feed and fuel, which are some of the drivers for deforestation<sup>8</sup>. Malaysia's natural forests are under pressure in particular from the palm oil industry. However, it is difficult to quantify whether the establishment of oil palm plantations is a direct cause of deforestation, e.g. oil palm expansion could be replacing forests previously degraded by fire or logging or for economic enterprise as timber profits can be used to offset the costs of oil palm plantation establishment<sup>9</sup>. Land might be deforested for other reasons and subsequently planted with oil palm, as estimates do not typically consider oil palm expansion, forest lost and the rate of forest conversion into unproductive land<sup>8</sup>. New oil palm plantation is part of an area earmarked by the Malaysian government for development,

including plantations and urban development, and therefore new plantations may not be counted in the estimated rate of deforestation directly from oil palm expansion. According to WWF (2012)<sup>10</sup>, the area for the oil palm plantations is capped at 5 million ha. While in Peninsular Malaysia and Sabah most of the available space is already used for plantation, the land used for oil palm plantation in Sarawak is expected to increase by 400,000 ha. The control of oil palm expansion in Malaysia contributes to stable high prices that might further be affected by the commodity markets due to an expected demand shortage in the future<sup>10</sup>.

I hope along the way, people will not use vast hectares of oil palm and rubber and other tree plantations to make up the above figure so that our green areas will stay above 50% at all times simply because natural forest perform different and distinct functions from that of oil palm and rubber, ecology and environment wise, especially from the view point of being water catchments whereby forests help to regulate and supply the water for our consumption. The 1998 water problems in Kuala Lumpur should remind us of the importance of this forest ecological function. By the year 2025, it is estimated that 50 countries and 30% of the world population will face water shortage and Malaysia must take all precautions from now to avoid from being one of the 50 countries. From the biodiversity view point, Malaysia should maintain its status as one of the 12 megadiverse countries, hence reduction of and our inability to properly conserve our natural forests may exclude from the respected 12 megadiverse countries. It will have serious consequences to the conventions that we have signed, namely, CBD, UNFCCC, CITES and RAMSAR and even to our own National Policy on Climate Change and National Policy on Biological Diversity. Based on estimations, the forest cover will shrink to 51.8% of the total land cover by 2020 (based on historical forest conversion figures) which is close to the target pledged at the Rio Earth

<sup>7</sup>Grainger A. 1995. *The forest transition: an alternative approach*. Area 27: 242–251

<sup>8</sup>Eliasch Review. 2008. *Climate Change: Financing Global Forests*, Chapter 5

<sup>9</sup>Fitzherbert E et al. 2008. *How will oil palm expansion affect biodiversity?* Cell Press, Elsevier Ltd.

<sup>10</sup>WWF. 2012. *WWF-Malaysia Strategy 2012–2020*



Summit 1992 (WWF)<sup>10</sup>. The current supply of timber/plywood is exceeded by demand which leads to higher prices. In 2009, the Malaysian Ministry of Plantations and Industrial Commodities estimated that the exports of timber products would double in 2020. In fact, currently, the largest producer of timber products is Sarawak with 8 million m<sup>3</sup>, followed by Sabah 4 million m<sup>3</sup> and Peninsular Malaysia 2 million m<sup>3</sup>.

(3) have we kept the country ‘clean, beautiful, loved and respected’?

Figure 2, which is self-explanatory, provides a snapshot view of Malaysia’s state of the environment that tells us all about ‘clean, beautiful, loved and respected’ which still persist until today.

As responsible citizen, we must have our commitments, dedication, passion and respect for our environment and nature.

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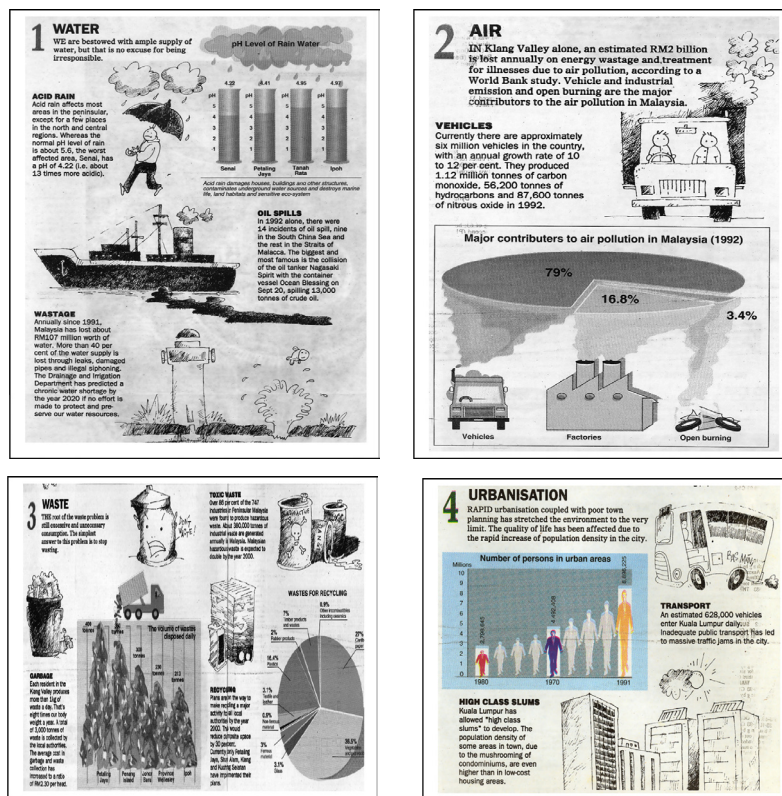


Figure 2 Snapshot view of Malaysia’s state of environment<sup>11</sup>

<sup>11</sup>Sunday Star, October 31, 1993