

**KEMENTERIAN TENAGA, SAINS, TEKNOLOGI, ALAM SEKITAR DAN PERUBAHAN IKLIM**

Bil	Berita	Media	Capaian Berita Penuh
<b>2 MEI 2019 (KHAMIS)</b>			
1.	<b><u>Electricity tariffs may stay for now</u></b>	News Straits Times	Rujuk Lampiran 1
<b>1 MEI 2019 (RABU)</b>			
2.	<b><u><a href="#">Yeo details plans for Budget 2019's RM135.2mil allocation to improve electricity in Sandakan</a></u></b>	The Star Online	Klik pada tajuk berita
3.	<b><u>Sisa plastic: Di mana kedudukan kita</u></b>	Utusan Melayu	Rujuk Lampiran 2
4.	<b><u><a href="#">Tangani darurat kemusnahan sungai negara / Tangani darurat kemusnahan sungai negara</a></u></b>	Berita Harian	Klik pada tajuk berita / Rujuk Lampiran 3



## TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
<b>2 MEI 2019 (KHAMIS)</b>			
5.	<a href="#"><u>Miti, Microsoft berkolaboratif tubuhkan pusat kecerdasan buatan bagi industri masa depan</u></a>	Sinar Harian	Klik pada tajuk berita
6.	<u>Tiada kompromi pihak terlibat lakukan pencemaran sungai</u>	Kosmo!	Rujuk Lampiran 4
7.	<u>Enhancing Education with Artificial Intelligence</u>	News Straits Times	Rujuk Lampiran 5
<b>1 MEI 2019 (RABU)</b>			
8.	<a href="#"><u>Aiskrim rumpai laut tempatan inovasi Jabatan Perikanan, Mardi</u></a>	Sinar Harian	Klik pada tajuk berita
9.	<a href="#"><u>SESB determined to become graft-free organisation</u></a>	The Borneo Post	Klik pada tajuk berita
10.	<a href="#"><u>Pencemaran ammonia sungai di Melaka: Kerajaan negeri tidak kompromi</u></a>	Astro Awani	Klik pada tajuk berita
11.	<a href="#"><u>Pencemaran ammonia, pelaku berdepan tindakan tegas</u></a>	Sinar Harian	Klik pada tajuk berita
12.	<a href="#"><u>Heret ke mahkamah</u></a>	Harian Metro	Klik pada tajuk berita
13.	<a href="#"><u>Sungai Batang Melaka tercemar</u></a>	Utusan Malaysia	Klik pada tajuk berita
14.	<a href="#"><u>Hampir 2,000 pengguna terjejas, sungai dicemari ammonia</u></a>	Kosmo!	Klik pada tajuk berita



15.	<a href="#"><u>Ministry zooms in on affordable housing, plastic waste woes</u></a>	The Sun Daily	Klik pada tajuk berita
16.	<b><u>Pindaan akta naikkan denda kilang plastic haram</u></b>	Utusan Malaysia	Rujuk Lampiran 6
17.	<b><u>Malaysia's 'Green Warrior' Dies at 82</u></b>	News Straits Times	Rujuk Lampiran 7



## ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
<b>2 MEI 2019 (KHAMIS)</b>			
18.	<a href="#"><u>Taufan Fani: Ratusan ribu penduduk India mula dipindahkan</u></a>	Astro Awani	Klik pada tajuk berita
19.	<a href="#"><u>Awan ribut di Texas kelihatan seperti piring terbang gergasi</u></a>	Kosmo!	Klik pada tajuk berita
20.	<b><u>38 korban Taufan Kenneth</u></b>	Harian Metro	Rujuk Lampiran 8
<b>1 MEI 2019 (RABU)</b>			
21.	<b><u>Disruption in Lynas supply will hurt Japanese, Western Industries</u></b>	News Straits Times	Rujuk Lampiran 9
22.	<b><u>10,000 penduduk Kanada pindah angkara banjir</u></b>	Berita Harian	Rujuk Lampiran 10
23.	<b><u>What if an asteroid was about to hit Earth</u></b>	News Straits Times	Rujuk Lampiran 11

LAMPIRAN 1  
NEWS STRAIT TIMES (NEWS/BUSINESS): MUKA SURAT 15  
TARIKH: 2 MEI 2019 (KHAMIS)

## Electricity tariffs may stay for now

**KUALA LUMPUR:** As the six-month deadline on June 30 for the Energy Commission to review changes in electricity generation costs draws nearer, some quarters are expecting reduced tariffs to match the international pricing of gas and coal.

With two-thirds of the electricity bill coming from fuel and generation costs, the lower international gas and coal prices may have triggered such expectations.

Coal and gas are the two primary types of fuel for generating electricity in Peninsular Malaysia. About 41 per cent of power plants are coal-fired and 47 per cent are natural gas plants. This implies that Malaysia is susceptible to changes in global fuel prices.

Spot coal cargo prices for exports from Australia's Newcastle terminal have fallen by more than 25 per cent, from US\$118 (RM488.52) a tonne in July last year to US\$88 currently.

Asian liquefied natural gas spot prices for May deliveries reportedly have dropped more than 60 per cent to around US\$4.65 per MMBtu this week from US\$11.81

in September last year.

Of interest here is that the tariff structure has not changed since 2014. Under the current Imbalance Cost Pass-Through (ICPT) mechanism, the commission considers changes in fuel and generation costs for the electricity tariffs, either as a rebate or surcharge, in a review every six months. And this is subject to government approval.

The current ICPT mechanism is for the period between January 1 and June 30 while the next is between July 1 and December 31.

In line with global standards, ICPT promotes a fair and transparent tariff setting.

The tariffs are determined by the commission when it evaluates the pricing structure every six months, with a six-month lag in implementation.

If the overall actual cost of fuel in the previous six months is higher than the forecast cost of electricity production, then a surcharge will be imposed on consumers in the subsequent six months. But if the actual cost is lower, then consumers can enjoy a reduction or rebate in the fol-

lowing six months.

The current average base tariff, as decided last year, is 39.45 sen per kWh. The rate is usually reviewed once every three years and so the current base tariff expires next year.

Every six months, the commission will look at the international pricing structure and compare it to the base fuel price for generating electricity to determine whether there will be a ICPT surcharge or a rebate.

From the above scenarios, a pertinent point must also be taken into account: Although prices of coal and gas have fallen, their levels are still above the forecast fuel prices that were used to arrive at the base tariff of 39.45 sen per kWh. This was due to the assumption the international market pricing for coal would average US\$75 a tonne and piped gas at RM27.20 per mmBtu from last year to next year.

Thus, it may prove difficult for the commission to reduce tariffs for the time being unless coal and gas prices slip past its yardstick base prices. **Bernama**



## LAMPIRAN 2

### UTUSAN MELAYU (FORUM): MUKA SURAT 20

#### TARIKH: 1 MEI 2019 (RABU)



SALAH satu kontena yang mengandungi barangan dagangan sisa plastik dicemari bahan buangan berjadual diperiksa sempena Operasi Penguatkuasaan Pengimportan Sisa Plastik di Westport, Pulau Indah, Selangor, baru-baru ini. - BERNAMA

## Sisa plastik: Di mana kedudukan kita?

### SAUDARA PENGARANG,

**BARU-BARU** ini, negara dikejutkan dengan kehadiran kontena yang mengandungi barang dagangan sisa plastik dari luar negara. Lebih menyedihkan, ia turut dicemari dengan bahan buangan terjadual.

Ini amat berbahaya kepada alam sekitar dan kesihatan manusia. Oleh itu, beberapa tindakan perlu diambil untuk mengurangkan lambakan sisa plastik ini.

Kerjasama semua pihak termasuk pengguna, pengusaha, penyelidik, penjual dan kerajaan amat diperlukan dalam mengurangkan lambakan sisa plastik ini.

Pertamanya, usaha daripada penjual termasuklah pasar raya dalam meminimumkan pembuangan sisa plastik seperti tidak membekalkan plastik bagi setiap pembelian.

Selain itu, pengasingan sampah perlu dilaksanakan untuk tujuan kitar semula. Sampah yang boleh diguna semula seperti sisa makanan untuk dijadikan baja juga

boleh diamal pengguna.

Selain itu, penyelidikan tentang plastik mudah diurai perlu digiatkan lagi.

Universiti tempatan banyak menjalankan kajian tentang penghasilan bahan plastik yang mudah diurai daripada ubi kayu, soya dan bahan-bahan berkanji yang memang mudah didapati.

Terdapat juga penyelidikan di mana sisa plastik ini digunakan untuk menghasilkan minyak bagi tenaga melalui *incineration*.

Selain itu, plastik juga boleh dimampat untuk dijadikan bahan asas dalam pembuatan jalan raya.

Kerajaan juga memainkan peranan dalam menguatkuasakan undang-undang. Pendidikan tentang pengurusan sisa plastik perlu digiatkan seperti yang diamalkan oleh negara-negara maju.

Usaha mengurangkan sampah tidak dapat dijalankan kiranya semua pihak tidak memberi kerjasama.

**ARBANAH MUHAMMAD**  
Universiti Teknologi Mara  
Kampus Johor

LAMPIRAN 3  
BERITA HARIAN (DARI KACA MATA): MUKA SURAT 10  
TARIKH: 1 MEI 2019 (RABU)

# Tangani darurat kemusnahan sungai negara

Dari Kaca Mata



**Prof Emeritus  
Datuk Dr Ibrahim Komoo**

Felo Penyelidik Utama Institut Alam Sekitar dan Pembangunan (LESTARI) Universiti Kebangsaan Malaysia (UKM)

Malaysia bergantung sepenuhnya kepada sumber air permukaan. Oleh kerana kita terletak di kawasan tropika lembab dengan curahan hujan tinggi, negara berasa selesa dengan sumber bekalan air.

Sama ada ia diambil daripada sungai, ditakung ke dalam tasik buatan, diproses atau dibekalkan untuk pelbagai kegunaan.

Apabila pembangunan semakin pesat dan ketika musim kemarau, negara mengalami gangguan bekalan air. Kita mula mencari sumber tambahan daripada air bawah tanah hampir permukaan.

Sumber air telaga cetek yang berhubung dengan air permukaan juga turut terjejas ketika musim kemarau.

Anak sungai mendapat bekalan dari air hujan dan mata air di kaki gunung. Sungai mengalir berasaskan graviti, anak-anak sungai bercantum menjadi sungai dan sungai besar, akhirnya mengalir hingga ke laut.

Kuasa aliran sungai bergantung luas lembangan, perbezaan tinggi antara hulu dan muara, serta panjangnya suatu sistem sungai.

Sungai ialah sistem tabii yang berupaya menjalankan beberapa fungsi asas. Ia mengalirkan air dari hulu ke lautan. Bersamanya ia menghakis permukaan bumi dan mengangkut lumpur, lodak, pasir serta kerikil.

Di kawasan landai, apabila tenaga aliran menjadi lemah, bahan angkutannya diendapkan di dasar sungai. Ketika mu-

sim tengkujuh, kuantiti air meningkat dan tenaga aliran menjadi tinggi. Sungai akan membanjiri dataran rendah dan mengendapkan bahan angkutannya.

Beginilah sungai menjalankan sistem pembersihan lembangan dan menyebarkan dataran limpahnya. Sungai yang besar dapat menjalankan fungsi dengan lebih cekap, sementara sungai kecil berfungsi secara terhad.

Bencana pencemaran bahan toksik di Sungai Kim Kim seperti 'puncak ketulan ais dalam lautan'. Banyak sungai kecil berhampiran bandar dan kawasan industri sudah tercemar oleh buangan bahan kimia dan kumbahan industri.

Sungai bersaiz sederhana seperti Sungai Klang dan Sungai Langat juga, sedang tercemar oleh bahan buangan domestik dan industri.

Jelasnya, sebahagian besar sungai bersaiz kecil dan sederhana yang mengalir melalui kawasan perbandaran sudah tercemar teruk dan ada yang nazak.

Sedihnya dari sungai seperti ini kita mengambil air mentah dan memprosesnya untuk bekalan air minuman.

Pendekatan pengurusan sungai semasa nampaknya kurang berkesan. Jabatan Perparitan dan Saliran (JPS) hanya diberi mandat memperbaiki sistem perparitan dan mengurus bencana banjir.

Jabatan Alam Sekitar (JAS) pula memantau kualiti air secara berkala atau jika ada aduan. Kedua-dua jabatan tidak berupaya atau mempunyai kuasa mengawal pencemaran.

Sungai mengalir tidak mengikut sempadan daerah atau negeri, sedangkan mandat mengurus kebanyakan agensi mengikut fungsi dan sempadan daerah.

Masalah sungai kita mengalami pencemaran dan setengahnya sudah tidak dapat menjalankan fungsinya (rosak atau mati) sudah berlaku lama.

Sistem pengurusan bersifat sektoral jelas gagal atau tidak berupaya membendung sungai terus mengalami kerosakan.

Kebergantungan tinggi kita kepada sungai sebagai sumber bekalan air mentah merumitkan keadaan. Pengajaran demi pengajaran, sama ada isu pence-

maran, bencana banjir dan gangguan bekalan air sepatutnya sudah mengajar kita bagaimana cara terbaik mengurus sistem sungai.

Sungai sebagai satu sistem tabii yang penting untuk kehidupan perlu difahami oleh semua pihak.

## Agensi bersepadu mampu tangani pencemaran sungai

Di kebanyakan negara, mereka memberikan perhatian serius dengan mewujudkan agensi Pihak Berkuasa Pengurusan Sungai Bersepadu untuk setiap sungai utama. Ia ternyata amat berkesan apabila sungai yang dahulunya sudah tercemar berjaya dipulihkan.

Namun kita masih belum serius, masih bertarik tali antara satu sama lain serta masih mengharap nasib, satu hari nanti sungai akan pulih seperti dahulu kala.

Malaysia memerlukan perubahan set minda untuk mengurus sungai. Kita perlu wujudkan Pihak Berkuasa Pengurusan Sungai bukan hanya untuk mengawal pencemaran atau untuk mengurus bekalan air, tetapi untuk mengurus pembangunan di lembangan sungai secara bersepadu.

Badan ini perlu menjaga kepentingan semua pihak dan diberikan kuasa mengatasi kuasa majlis daerah, pihak pemilik tanah serta agensi pelaksana pembangunan.

Dengan menggunakan konsep 'pengurusan bersama', badan ini boleh bertindak sebagai pasukan perancang, pemantau dan agensi penguat kuasa.

Pencemaran sungai dan kerosakan fungsi sungai sudah sampai tahap kritikal. Jika tidak dibendung dan diurus secara bersepadu, negara bakal berhadapan dengan darurat kemusnahan sungai.

Akibatnya kita akan kehilangan sumber bekalan air bersih, bencana banjir dan kemarau bertambah kerap serta kehilangan sumber kehidupan penting seperti tanah yang subur dan sumber keselamatan makanan.



LAMPIRAN 4  
KOSMO! (NEGARA): MUKA SURAT 6  
TARIKH: 2 MEI 2019 (KHAMIS)

## Tiada kompromi pihak terlibat lakukan pencemaran sungai

JASIN - Kerajaan negeri Melaka tidak akan berkompromi dengan pihak terlibat yang melakukan pencemaran sungai dan tindakan tegas akan diambil termasuk menghentikan operasi industri, aktiviti pertanian atau perikanan.

Ketua Menteri, Adly Zahari berkata, satu jawatankuasa khas ditubuhkan bagi memantau risiko pencemaran daripada industri atau kilang, perikanan, pertanian mahupun penternakan selain mengenal pasti pihak yang melakukan pencemaran berulang, sehingga memberi kesan kepada masyarakat setempat.

"Kebiasaannya, kerajaan negeri melalui jabatan terlibat mengambil beberapa langkah

awal terhadap pihak yang melakukan pencemaran sungai, termasuk notis peringatan supaya tidak berulang.

"Sekiranya ia tidak diendahkan, tindakan tegas akan diambil mengikut peraturan atau undang-undang sedia ada termasuk menghentikan operasi mereka.



ADLY

berkenaan merupakan salah satu daripada sumber bekalan air memandangkan Melaka masih mendapatkan bekalan air dari Johor," katanya kepada pemberita selepas Program Amanah Peduli Rakyat: Di Am-

bang Ramadan di sini semalam.

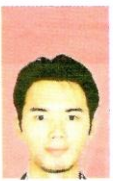
Kelmarin, media melaporkan pencemaran Sungai Batang Melaka berlaku ekoran pelepasan air dari kolam ternakan oleh dua pengusaha ikan keli di kawasan Hutan Percha dan turut menyebabkan pencemaran di Loji Rawatan Air Gadek yang dikesan pada 28 April lalu serta mengakibatkan kira-kira 18,076 pengguna di daerah Alor Gajah terjejas.

Mengulas lanjut, Adly berkata, kerajaan negeri telah mengenal pasti aktiviti ternakan ikan keli mampu memberikan risiko pencemaran kepada sistem saluran sekiranya tidak ditangani dengan baik.

Justeru, pengusaha disaran bertukar kepada penternakan ikan air tawar lain bagi mengelak tindakan tegas diambil jika terlibat dalam pencemaran sungai. - Bernama



LAMPIRAN 5  
NEWS STRAITS TIMES (OPINION): MUKA SURAT 58  
TARIKH: 2 MEI 2019 (KHAMIS)



DR SHAHINO MAH ABDULLAH

'ADAPTIVE LEARNING'

# ENHANCING EDUCATION WITH ARTIFICIAL INTELLIGENCE

It offers the opportunity to meet the different learning needs of individuals

**T**HE ability of artificial intelligence (AI) to analyse human behaviour across different age groups must be utilised to identify the needs of a person in his or her learning process.

For decades, we have practised a conventional learning process that relies much on a standardised education system that mostly grades learners on the basis of age.

Such a measure had been adopted on the grounds that the cognitive development of a normal person could be identified and differentiated based on chronological age, especially during their early years.

However, even within the same age group, each person has different levels of cognitive development and learning capacity, and thus may have different needs in learning.

Today, artificial intelligence offers such an opportunity, which is known as "adaptive learning".

Adaptive learning provides more than just tailored learning resources to learners. It uses algorithm to process the interaction between the learner, the educator and the computer.

This tailored-learning process requires the learner to be collaborative rather than a passive information receiver. At the same time, it allows the educator to monitor the progress of the learner through continuous formative assessment since every interaction is tracked in real-time.

An effective adaptive learning system retains the key component of the learning process, namely the presence of the educator. A real teacher during the class hour is indeed relevant, and in fact, integral to the learning process. A teacher with sufficient knowledge and experience can properly guide the student towards a better understanding and prevent him from making mistakes.

Long before the conventional education system and adaptive learning technology, a person-



Besides the support of the adaptive learning system, our country also needs the people themselves to be adaptive learners so that they will thrive in challenging environments. FILE PIC



alised learning system has been a practice in traditional Islamic pedagogy. In general, a personalised learning system assumes each learner to be unique and therefore has different needs.

The teacher will always be a source of reference, and provides the learners with the knowledge they need. In a traditional setting, the learners should master a certain level of knowledge in order to move forward in their curriculum.

Islamic pedagogy also emphasises knowledge to be put to practice. For example, in learning the Quran, the learner is said to have truly attained knowledge when he puts his learning into practice. Normally, this begins by teaching others when the learners engage in a study circle or collaborative learning with their peers.

Study circles enhance learners' understanding through discussion and exchange of knowledge as it creates an active engage-

ment between the learners and the teacher. Such an active learning atmosphere in the Islamic education tradition can also be found in the current adaptive learning environment but with the additional help of technology which facilitates teachers in monitoring development and provides the student with tailored materials that suit their needs.

The question should not be whether adaptive learning is better than traditional and conventional education systems. For decades, traditional and conventional learning systems have been providing people with necessary education and skills. It is the success of these systems which has given us the advancements that we have in today's world.

And now, as technology advances in the age of Industrial Revolution 4.0, adaptive learning tools are widely available and can be utilised as a complementary or supportive component of our current education system to help teachers in their teaching and students in their learning so that it will be more interactive, interesting and efficient.

Besides the support of the adaptive learning system, our

country also needs the people themselves to be adaptive learners. They should be taught and trained to be more adaptive to changes in their surroundings that encompass all aspects of their lives.

Adaptive learners equipped with survival skills and a flexible mindset could lead others, especially when they are in leadership positions.

According to the Centre for Asia Leadership, every person, especially a leader, should be capable of changing his mindset to take the right 'adaptive action' in line with the demands of industry 4.0. Hence, we need to be adaptable and to keep pace since our time is one of accelerated change.

The Quran (al-Ra'd 13:11) tells us that God will not change the predicament of certain people unless they take matters into their own hands and change it themselves. Therefore, we should keep learning, be adaptable, and improve ourselves in order to gain and take advantage of the opportunities available to us.

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**6** Adaptive learners equipped with survival skills and a flexible mindset could lead others, especially when they are in leadership positions.

## LAMPIRAN 6 UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 8 TARIKH: 1 MEI 2019 (RABU)

### Pindaan akta naikkan denda kilang plastik haram

SEPAANG 30 April - Kementerian Perumahan dan Kerajaan Tempatan akan meminda Akta Kerajaan Tempatan 1976 (Akta 171) bagi mengenakan denda yang lebih tinggi kepada pengusaha kilang-kilang plastik haram iaitu sehingga RM500,000 berbanding hanya RM300 ketika ini.

Menterinya, Zuraida Kamaruddin berkata, pindaan tersebut yang dijangka dilaksanakan tahun ini, akan memastikan kilang-kilang haram berkenaan ditutup terus.

"Kilang-kilang haram ini kita akan tutup tetapi ada kekangan sedikit. Apabila kerajaan hendak saman, pengusaha kilang ini hanya boleh dikompaun sehingga RM300.

"Jadi kalau dikompaun sampai beberapa kali pun mereka

tidak kisah. Sebab itu kita hendak tukar Akta 171 itu yang mana kita akan meletakkan denda

yang lebih tinggi sehingga RM500,000," katanya dalam sidang akhbar sempena setahun pentadbiran PH di Lapangan Terbang Antarabangsa Kuala Lumpur (KLIA), di sini baru-baru ini.

Dalam isu berlainan, Zuraida menambah, pihaknya akan berusaha mencari model pilihan raya pihak berkuasa tempatan (PBT) sesuai untuk Malaysia termasuk sistem perwakilan berkadar (proportional representation) dan sistem penyertaan rakyat berka-

dar (people proportional participation).

Beliau berpendapat, Malaysia boleh menghasilkan modelnya yang tersendiri dalam soal pilihan raya PBT dengan menggabungkan semua sistem yang sesuai dengan akta PBT sedia ada.

Ditanya berhubung kenyataan Tun Dr. Mahathir Mohamad sebelum ini yang menegaskan bahawa pilihan

raya PBT tidak akan diadakan kerana berkemungkinan boleh mewujudkan konflik berasaskan perkauman, Zuraida berkata, beliau telah bertemu dengan Perdana Menteri untuk mem-

beri penjelasan.

"Saya telah berjumpa dengan beliau dan menerangkan serta memberi penjelasan tentang pelbagai sistem yang sedia wujud. Saya katakan, ada tempoh tiga tahun untuk mengkaji model dan berkempen kepada rakyat tentang pilihan raya tersebut.

"Selepas itu, kita akan membentangkan kertas ke Kabinet sebab itulah kita beri masa tiga tahun. Semasa itu, negara akan lebih stabil. Kabinet akan menentukan sama ada teruskan atau tidak pindaan undang-undang ini. Kita juga boleh menangguhkan pilihan raya ini atau buat fasa demi fasa," katanya.

Sementara itu, beliau memberitahu, kementerian berca-

dang untuk mewujudkan Suruhanjaya Perjawatan Bomba ke arah mentransformasi agensi berkenaan secara keseluruhan agar lebih bebas dalam merekrut anggota baharu dan melaksanakan pertukaran tugas antara anggotanya.

Mengulas mengenai elau kritikal bomba, Zuraida berkata, perkara itu sedang diusahakannya dan berharap ia dapat diselesaikan dalam tahun ini.

"Ini antara perkara yang belum dapat saya realisasikan untuk mereka dalam tempoh setahun ini. Seperti yang saya katakan sebelum ini, akan ada mesyuarat mengenainya yang akan dipengerusikan Dr. Mahathir di bawah perjawatan dan perkara yang berkaitan dengannya," katanya.



ZURAIDA  
KAMARUDDIN



LAMPIRAN 7  
NEWS STRAITS TIMES (NEWS): MUKA SURAT 12  
TARIKH: 1 MEI 2019 (RABU)

TAN SRI DR AHMAD MUSTAFFA BABJEE

# MALAYSIA'S 'GREEN WARRIOR' DIES AT 82

Ex-Veterinary Services Dept D-G was a life-long learning advocate

ADIB POVERA  
KUALA LUMPUR  
news@nst.com.my

**T**HE late Tan Sri Dr Ahmad Mustafa Babjee who died yesterday at 82, was an advocate of life-long learning.

The former Veterinary Services Department director-general's credentials included a Masters of Science in Environment Biology from Universiti Sains Malaysia (USM), a PhD in virology from the University of Queensland, Australia, as well as two honorary doctorates from Universiti Putra Malaysia (UPM) and the University of Queensland.

At the age of 69, 13 years ago, Mustafa earned his seventh degree — Masters of Science in Environment Biology — from USM. "I am a believer in life-long learning, from womb to tomb," he had said.

Mustafa was dubbed Malaysia's green warrior.

He was a prominent figure on nature conservation, and played an instrumental role in the preservation of Malaysia's rare and special biodiversity species.

He catapulted Malaysia into becoming one of the top 12 mega biodiversity nations in 2009.

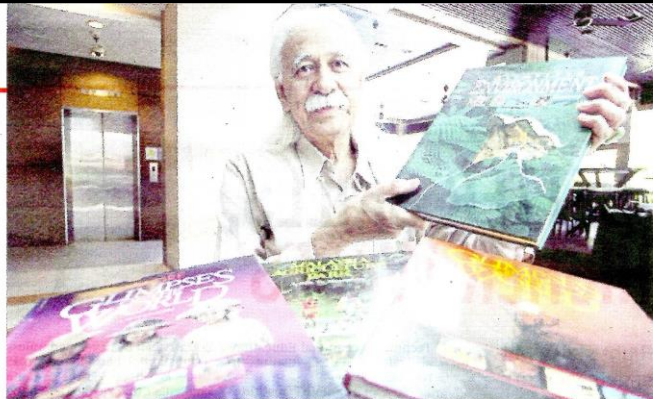


Tan Sri Dr Ahmad Mustafa Babjee signing the pledge book after donating RM1,000 to the Tun Abdul Razak Foundation at the office of the 'New Straits Times' in 1976.

Malaysia secured the prestigious spot as it was endowed with 15,000 species of flowering plants, 1,500 species of terrestrial vertebrates and 150,000 species of invertebrates at the time.

In one of the many books that he authored, Mustafa was candid on how he had started to develop an interest in the environment.

In the preface of his book on



A 2011 picture of the late Tan Sri Dr Ahmad Mustafa Babjee with the book, 'Glimpses of the Environment', which he authored. FILE PIX

environment conservation titled *Glimpses of the Environment*, he said the Japanese occupation had had a profound impact on his life during his growing-up years in Sungai Petani, Kedah.

Our immediate environment provided our daily needs for food.

"All my life, I have been curious about nature.

"I can sit and watch nature at work for hours."

The nature world, Mustafa said, was more than merely a source of food and material, as the country galvanised almost all of its machinery towards becoming a developed nation.

In one of his interviews with this newspaper, he had highlighted the importance of Malaysia having sustainable development to prevent its vast species of flora and fauna from being wiped out.

"I believe development and conservation can co-exist.

"We can create economic activities not only through expansion and growth, but also through the improvement of life's quality.

"For example, in Kuala Lumpur, we can infuse green technology in existing buildings and utilise technology to improve the living standard of residents of low-cost flats."

His contributions to the poultry industry earned him the Lifetime Achievement Award during the Malaysian Livestock Industry Awards in April last year.

Mustafa also did a PhD on the patterns of habitat of the Indian whistling duck, also known as lesser-whistling teal, at the Janda Baik pond in Pahang.

It is a medium-sized waterfowl species, native to Southeast Asia. It is different from other duck species and has longer legs and an erect goose-like posture.

After retiring from government service, Mustafa made significant impact on the corporate world.

Among the positions he held were as UEM Malaysia chairman, Comsa Farms Bhd director, AMB Exhibitions Sdn Bhd president and Asia Internet Holdings Sdn Bhd executive director.

## 'Nation lost a great writer, scientist and researcher'

**KUALA LUMPUR:** The late veterinary services doyen, Tan Sri Dr Ahmad Mustafa Babjee, was described by close friends as a professional, considerate and fair-minded person.

Economist Tan Sri Ramon Navaratnam described Mustafa as a great man who was always keen to improve and develop his (veterinary services) department.

"He was always professional, considerate and fair-minded," said Ramon, now Sunway Group's group corporate adviser.

He said although they sometimes differed in their views, he

found Mustafa fully dedicated to serve the best interests of the agricultural community and economy.

"His high commitment to serve the poor endeared him dearly to us all.

"But most importantly, Mustafa was a gentleman and a true Malaysian who had high integrity and won our respect."

Mustafa, who was identified by his trademark long grey hair and moustache, had been wheelchair-bound for quite some time due to a nerve disease, said one of his relatives, who declined to be named.

One of the last and most recent public appearances by Mustafa was at the "5th Tan Sri B.C. Sekhar Memorial Lecture 2019" at the Royal Selangor Club in Dataran Merdeka two weeks ago.

At the event, officiated by Primary Industries Minister Teresa Kok, he was acknowledged as a senior scientist by the Malaysian

Scientists Association.

Academician Tan Sri Dr Salleh Mohd Nor remembers Mustafa as a true gentleman, with his honest and frank views on issues.

"During his career as Veterinary Services Department director-general, I remember him cross-breeding *lembu* and *sedang* to produce *Selembu*.

"The nation has lost a great professional, and a true friend."

Former Zoo Negara veterinary head and assistant director Associate Professor Datuk Dr S. Vellayan said he had known Mustafa since 1978.

"During his term as Veterinary Services Department director-general, he brought numerous changes.

"He established diagnostic laboratories in all the states.

"He was well respected and well known by veterinarians throughout the world," said Dr Vellayan, who is now with the Universiti Teknologi Mara's Pharmacy Faculty.

He said Mustafa was responsible in merging the Malaysian Veterinary Association

and the Association of Veterinary Surgeons Malaysia into one united body, known as the Veterinary Association Malaysia.

"Recently, I raised a question on the poisoning of Borneo Elephants in Sabah's oil palm plantations and he gave me some interesting insights.

"We have lost a great scientist, writer and researcher. He had a great passion and love for nature and wildlife too." **By Adrian David**

	SUBUH	STURUK	ZUHUR	ASAR	MAGRIB	ISYAK
Melaka	5:44	7:03	1:11	4:29	7:16	8:27
Penang	5:47	7:05	1:18	4:35	7:26	8:38
K. Lumpur	5:45	7:03	1:13	4:31	7:20	8:31
Johor Baru	5:38	6:57	1:05	4:23	7:09	8:20
Kuantan	5:40	6:59	1:08	4:25	7:13	8:25
Ipoh	5:46	7:02	1:16	4:33	7:23	8:35





LAMPIRAN 8  
HARIAN METRO (GLOBAL): MUKA SURAT 33  
TARIKH: 2 MEI 2019 (KHAMIS)



38 korban  
Taufan Kenneth

**ORANG** ramai membantu seorang pemandu menolak kereta dalam banjir akibat Taufan Kenneth di Metuge, utara Mozambique yang membunuh 38 orang, semalam. - Epa



LAMPIRAN 9  
NEWS STRAITS TIMES (LETTERS): MUKA SURAT 58  
TARIKH: 1 MEI 2019 (RABU)

## NEODYMIUM-IRON-BORON

## Disruption in Lynas supply will hurt Japanese, Western industries

**SOME** 50 per cent of electricity generated is used for power rotary and traction electric motors. Rare earth magnets made of neodymium-iron-boron (NdFeB) provide the lightest weight, lowest volume and overall most energy-efficient electric motors for almost all applications.

China controls 85 per cent of NdFeB production via its near-monopoly control of 80 per cent neodymium-praseodymium (NdPr) rare earth mining, and the supply chain it has built to process rare earth oxides into products.

The only international competitor is the Japanese NdFeB industry that is dominated by a handful of players, but they provide 45 per cent of the world supply.

The Japanese NdFeB industry is around 80 per cent dependent on production from the Lynas Advanced Materials Plant (LAMP) in Kuantan for NdPr oxide and Nd oxide supplies.

Any disruption to that supply would damage the Japanese and Western NdFeB supplies, perhaps fatally.

This production chemical pro-

cessing plant, which produces around 25,000 tonnes of rare earth oxides annually, is one of the most complex chemical plants in the world.

LAMP holds ISO certification for the safety and quality of its operations.

From its outset a decade ago, the Japanese government and its rare earth agency has provided funding for Lynas LAMP.

NdFeB production has been recognised as a key enabler for many of the 10 high-technology industry segments which China seeks to dominate internation-

ally by 2025, especially energy-saving and new energy vehicles, power equipment, advanced railway equipment, and numerical control tools and robotics.

The Lynas LAMP NdPr supply to the Japanese NdFeB magnet industry is the only alternate supply chain of any consequence currently in operation. Its technological complexity and proprietary intellectual property will take a minimum of five years to replicate.

**ROBERT V. RICHARDSON**  
Bowling, Australia

LAMPIRAN 10  
BERITA HARIAN (DUNIA): MUKA SURAT 73  
TARIKH: 1 MEI 2019 (RABU)

## 10,000 penduduk Kanada pindah angkara banjir

**Montreal:** Lebih 10,000 penduduk terpaksa di timur Kanada terpaksa dipindahkan dalam tempoh beberapa hari lalu, susulan banjir kilat yang melanda kawasan berkenaan.

Menurut pihak berkuasa, banjir yang disifatkan terburuk sejak 2017, dijangka mengambil masa selama beberapa minggu untuk surut.

Pada masa sama, operasi menyelamatkan haiwan peliharaan juga giat dijalankan di kediaman yang ditinggalkan selepas penghuninya berpindah.

Sebahagian besar penduduk yang terpaksa berpindah adalah dari bandar Sainte-Marthe-sur-le-Lac di barat Montreal, iaitu membabitkan lebih 6,000 penduduk.

“Keadaan banjir adalah terkawal, memandangkan air sudah mulai surut dan kami berharap dapat mengawal keadaan di kawasan terbabit,” kata Menteri Keselamatan Awam Quebec, Genevieve Guilbault kepada wartawan.

Katanya, pihak berkuasa turut membina penghadang baharu menggunakan batu kerikil bagi mengawal aliran banjir. **AFP**



LAMPIRAN 11  
NEWS STRAITS TIMES (WORLD): MUKA SURAT 62  
TARIKH: 1 MEI 2019 (RABU)

EMERGENCY EXERCISE

# What if an asteroid was about to hit Earth?

**COLLEGE PARK:** Here's a hypothetical: a telescope detects an asteroid between 100m and 300m in diameter racing through our solar system at 14kps, 57 million kilometres from Earth.

Astronomers estimate a one per cent risk the space rock will collide with our planet on April 27, 2027. What should we do?

It's this potentially catastrophic scenario that 300 astronomers, scientists, engineers and emergency experts are applying their collective minds to this week in a suburb here, the fourth such international effort since 2013.

"We have to make sure people understand this is not about Hollywood," said Nasa administrator Jim Bridenstine as he opened the International Planetary Defence Conference at the University of Maryland's campus here.

Countries represented include China, France, Germany, Italy, Russia and the United States.

The idea that Earth might one day have to defend itself against an asteroid used to elicit what experts called a "giggle factor".

But a meteor that blew up in the atmosphere over Russia on Feb 15, 2013, helped put an end to the sneers.

On that morning, a 20m asteroid appeared out of nowhere over the southern Urals, exploding 23km above Chelyabinsk town

with such force that it shattered the windows of thousands of buildings. A thousand people were injured by the shards.

But "the positive aspect of Chelyabinsk is that it made the public aware, it made the political decision-makers aware", Detlef Koschny, co-manager of the Planetary Defence Office of the European Space Agency (ESA), said.

Only those asteroids whose orbit around our Sun brought them within 50 million kilometres of our planet — defined as "near Earth" — were of interest.

Astronomers were finding new ones each day: more than 700 this year, for a total of 20,001, said Lindley Johnson of Nasa's Planetary Defence Coordination Office.

The majority were very small, but 942 were more than 1km across, estimated astronomer Alan Harris.

The scientist told an audience that some large ones are probably still out there: "A fair fraction of the biggest ones are hiding... basically parked behind the Sun."

They were found mainly by two US telescopes, one in Arizona and the other in Hawaii.

ESA had built a telescope for this purpose in Spain and was planning others in Chile and Sicily.

Many astronomers demanded

a space telescope because terrestrial telescopes were unable to detect objects on the other side of the Sun.

This week's exercise sought to simulate a global response to a catastrophic meteorite. The first step was aiming telescopes at the threat to precisely calculate its speed and trajectory.

Then it boiled down to two choices: try to deflect the object or evacuate.

If it is less than 50m, the consensus was to evacuate the threatened region. According to Koschny, it is possible to predict the country it would strike two weeks ahead. Days away from impact, it could be narrowed down to within hundreds of kilometres.

What about bigger objects? Trying to nuke them to smithereens like in the movie *Armageddon* would be bad idea because it could just create smaller but still dangerous pieces.

The plan, instead, was to launch a device towards the asteroid to divert its trajectory — like a cosmic bumper car.

One issue that remained was politics, said Romana Kofler, of the United Nations Office for Outer Space Affairs.

"Who would be the decision-making authority?" she asked. "The consensus was to leave this aspect out." **AFP**