

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>Clock is ticking for Lynas / Lynas Isn't It Safe?</u>	New Straits Times	Klik pada tajuk berita dan Rujuk lampiran 1
2.	<u>Kapasiti air empangan di Sabah mampu bertahan untuk beberapa bulan</u>	Utusan Malaysia	Klik pada tajuk berita
3.	<u>Kimanis catat IPU sederhana, tetapi tertinggi di Sabah</u>	Utusan Malaysia	Klik pada tajuk berita
4.	<u>Menyusahkan 'abang' bomba aje...</u>	Harian Metro	Klik pada tajuk berita
5.	<u>Syarikat bungkus semula susu tepung tanpa sijil halal sah diserbu</u>	Utusan Malaysia	Klik pada tajuk berita
6.	<u>Susu tepung 'dikitar semula' guna logo halal tidak sah dirampas</u>	Kosmo!	Klik pada tajuk berita
7.	<u>Salah guna logo [METROTV]</u>	Harian Metro	Klik pada tajuk berita
8.	<u>Tebuk meter elak bacaan sebenar direkod</u>	Harian Metro	Klik pada tajuk berita
9.	<u>Lynas : Laporan EIA Pemberitahuan Kedua</u>	Utusan Malaysia	Rujuk lampiran 2
10.	<u>Move to irrigate dried-up padi fields in Kota Belud</u>	The Star	Rujuk lampiran 3
11.	<u>Steps taken to stop padi fields from drying up</u>	New Straits Times	Rujuk lampiran 4



12.	<u>Teknologi bantu memudahkan penentuan arah kiblat</u>	Utusan Malaysia	Rujuk lampiran 5
13.	<u>Worry over hot weather</u>	The Star	Rujuk lampiran 6
14.	<u>Steps to ensure water for KB farmers</u>	Daily Express	Klik pada tajuk berita

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
15.	<u>Unbearable heat</u>	The Star	Rujuk lampiran 7
16.	<u>Veggie farmers enjoying bumper crop</u>	The Star	Rujuk lampiran 8
17.	<u>Jangan pilih kasih isu alam sekitar</u>	Utusan Malaysia	Rujuk lampiran 9
18.	<u>Skills passport memudahkan pencari kerja</u>	Sinar Harian	Klik pada tajuk berita
19.	<u>Guna AI peringkat produktiviti</u>	Harian Metro	Klik pada tajuk berita
20.	<u>Kelantan farmers suffer financial loss as fish die in Malaysia heatwave</u>	Channel News Asia	Klik pada tajuk berita
21.	<u>Syed Saddiq: Skills passport to facilitate job seekers, industry</u>	Malay mail	Klik pada tajuk berita
22.	<u>Pengharaman sisa plastik import kekal</u>	Berita Harian	Klik pada tajuk berita
23.	<u>Bringing back the 'soul' to STEM</u>	The Sun	Rujuk lampiran 10
24.	<u>Accenture on S.T.E.M.</u>	The Sun	Rujuk lampiran 11



25.	<u>Moratorium bauksit: Pahang dipersalahkan?</u>	Utusan Malaysia	Rujuk lampiran 12
26.	<u>Fenomena Cuaca Panas: Berjalan Seberang Sungai</u>	Harian Metro	Rujuk lampiran 13

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
27.	<u>The last straw? Snorkellers scour Australian waters for plastic</u>	Free Malaysia Today	Klik pada tajuk berita
28.	<u>22 daripada 30 bandar paling tercemar di dunia terletak di negara Asia ini</u>	Astro Awani	Klik pada tajuk berita
29.	<u>Deklarasi Bangkok banteras bahan buangan laut</u>	Utusan Malaysia	Klik pada tajuk berita
30.	<u>The AI cameras that can spot shoplifters even before they steal</u>	Free Malaysia Today	Klik pada tajuk berita
31.	<u>Syarikat tempatan kurang terlibat tenaga boleh diperbaharui</u>	Sinar Harian	Klik pada tajuk berita
32.	<u>Gurugram bandar paling tercemar di dunia</u>	Utusan Malaysia	Klik pada tajuk berita
33.	<u>Tornado deaths likely to rise</u>	The Star	Rujuk lampiran 14
34.	<u>Cuaca panas jejas populasi ikan dunia</u>	Kosmo	Rujuk lampiran 15



LAMPIRAN 1
NEW STRAITS TIMES (NEWS/NATION): MUKA SURAT 1
TARIKH: 6 MAC 2019 (RABU)



LAMPIRAN 1 (SAMB.)
NEW STRAITS TIMES (NEWS/NATION): MUKA SURAT 8
TARIKH: 6 MAC 2019 (RABU)

RARE EARTH PROJECT

CLOCK IS TICKING FOR LYNAS

Firm facing issues exporting waste product from its plant by Sept 2

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THE clock has never stopped ticking for a rare earth project in Pahang that promised lucrative returns for the state's economy, challenged China's dominance in the industry, yet invited criticism and protest since it started operations six years ago.

The latest obstacle facing the Lynas Advanced Material Plant (LAMP) is to export stockpiles of a waste product from its processing plant by Sept 2, when its licence is due for renewal.

A recent report from the company's head office in Australia indicated that it could not meet that timeline.

In a note to shareholders, Lynas said it had appealed and had "reasonable confidence" that a resolution would be achieved.

"The company continues to work with the government to find a path forward.

"Lynas has always maintained that the current licence conditions are consistent with international best practice and ensure the safety of the Malaysian environment and people," Lynas managing director Datuk Mashal Ahmad said.

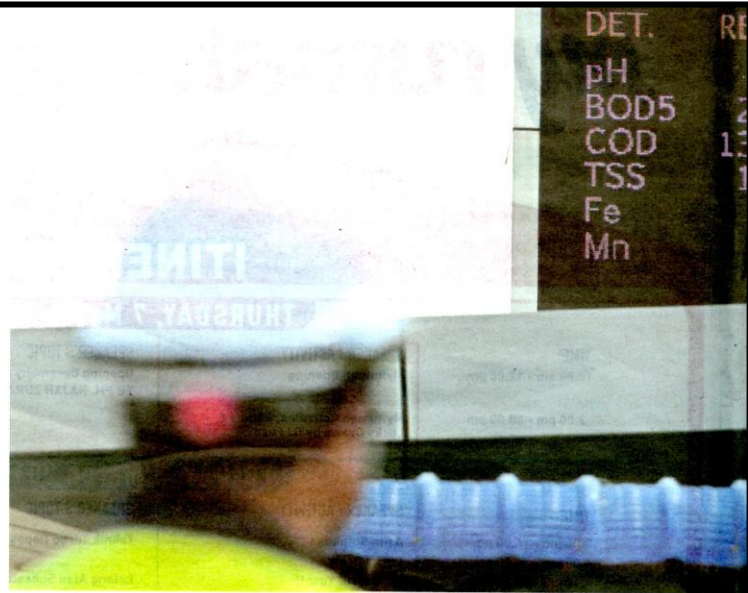
The main criticism about the Lynas project has to do with the radioactive residue produced, which can pose a threat to humans if not handled properly.

For decades, China has monopolised the rare earth processing industry, but poor regulation led to vast toxic and radioactive waste sites.

In the case of Lynas, however, safety standards have been set very high, and radiological experts, including the International Atomic Energy Agency (IAEA), have given their assurance that the project is safe.

There have also been no reports of environmental and health problems since the plant started operating in 2012.

Rare earth gets its name from the scarcity of the elements,



which also makes them more valuable. They have special properties and are used in a variety of applications and in many devices we use.

These include catalytic converters, nickel metal hydride (NiMH) batteries, energy efficient electrical motors, electronics, energy efficient fluorescent lamps and MRI machines.

The Lynas plant was envisioned to promote multiple downstream industries, like the electric vehicle and hybrid cars, electronics, renewable energy, oil and gas sector and defence applications.

A researcher with PE Research, Chang Yui Tan, said the Aus-

tralian-owned company has contributed about one per cent to Pahang's economy, both in export revenue and employment opportunities.

The global rare earth metal catalyst market, estimated at US\$4.6 billion (RM18.8 billion) in 2012, is forecast to grow to more than US\$6 billion by next year, and by 2024, it could rake in more than US\$20 billion.

The anti-Lynas protests have generally set aside data presented on the project's viability and safety, focusing instead on the perceived threat the radioactive residue poses to humans.

The Energy, Science, Technology, Environment and Climate

Change Ministry last year formed a review committee that found no fault with Lynas residue, as did several other national review committees, including the IAEA.

Lynas has installed radiation monitors, which record and show radiation levels round the clock, 24/7. People can also check the real-time monitoring of radiation levels via the company's website.

Third-party consultants, which included the Atomic Agency Licensing Board, had also monitored surrounding Lynas areas and concluded that there was no observable change in radiation levels.

The New Straits Times contact-



The entrance to the Lynas plant in Gebeng, Kuantan.

Lynas broke China's monopoly

KUALA LUMPUR: Malaysia's entry into the rare earth industry has disrupted China's decades-long monopoly and helped stabilise global prices of the much in-demand product.

Previously, China fixed the price of rare earth at US\$60 (RM245) per kg if a company brought its operations into the country, but for export, the figure balloons to US\$308 per kg, records show.

However, after the Lynas Advanced Material Plant came on stream, it has taken a 22 per cent market share in the industry.

With the monopoly ended, according to reports, the price has dropped to US\$19 per kg.

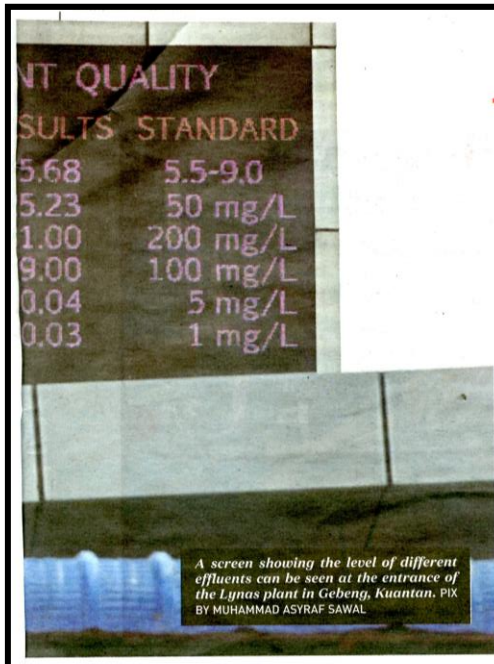
Rare earth metals are crucial to modern technology in supplying power, from satellites and MRI machines to cars and wind turbines, as well as for military use.

Industry observers said whoever had control or monopoly of rare earth could dictate to others the price of rare earth and its products, and this could potentially deprive other countries of supply and affect their industries.

One geopolitical scenario in an escalating United States-China trade war, for example, could see Beijing stopping America's supply of rare earth metals, which is essential to the production of a range of equipment and products, such as smartphones, military radar, missiles, brain scans, electric cars, refineries and computer hard drives.

Industries in Japan and the European Union, which depended on rare earth metals, could also be affected by supply disruptions, they said.

LAMPIRAN 1 (SAMB.)
 NEW STRAITS TIMES (NEWS/NATION): MUKA SURAT 9
 TARIKH: 6 MAC 2019 (RABU)



A screen showing the level of different effluents can be seen at the entrance of the Lynas plant in Gebeng, Kuantan. PIX BY MUHAMMAD ASYRAF SAWAL

ed the office of Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin for comments, but was told it was not "timely to comment on the issue".

Page 1 pic: Low radioactive residue stored in accordance with international best practice. It is capped to ensure that no airborne particles are released into the atmosphere.

Investment in R&D pays off

KUALA LUMPUR: Lynas (Malaysia) Sdn Bhd's investment in research and development (R&D) has succeeded in finding commercial applications for its residue with the discovery of "Condisoil", a flexible and multi-purpose fertiliser.

Condisoil is produced via a combination of water leach purification (WLP, a waste product from rare earth processing) and magnesium rich synthetic gypsum (MRSO).

With the help of experts from universities, ministries and agencies, including the Malaysian Agricultural Research and Development Institute (Mardi) and Sirim, Condisoil has been tested and found to be safe to use in the soil, water, plant tissue and rice grain.

The *New Straits Times* sighted documents from tests, where Condisoil was used to grow kenaf and corn in "BRIS" areas, short for "beach ridges interspersed with swales".

Condisoil's success would have a significant impact on Lynas's licensing conditions, because if the WLP residue has commercial use, there is no longer reason to export the waste out of the country, observers said.

Under Lynas's licensing agree-



Lab technicians using chemicals to check the authenticity of earth compounds at the Lynas plant in Gebeng, Kuantan.

ment, the company must find a commercial use for the waste, which must be stored in a permanent disposal facility.

If it fails to execute these two conditions, the low-level radioactive WLP residue must be taken out of the country.

On Saturday, Kuantan member of parliament Fuziah Salleh said Lynas should suspend the production of WLP residue at its rare earth refinery if it failed to dispose the stockpile by Sept 2.

According to a Bernama report, she said new waste would complicate the efforts to remove existing WLP waste from the plant in Gebeng.

"I think that they cannot continue to produce waste. "They don't have to close down. Just don't produce new residue until the existing one is removed," she said after launching the "My Best Buy" programme at Serambi Teruntum in Kuantan.

LYNAS ENVIRONMENTAL PROTECTION

<p>1 REGULATORY GOVERNANCE</p> <p>The following governance bodies monitor the environmental impact at the Lynas Advanced Minerals Plant (LAMP):</p> <p>A. Atomic Energy Licensing Board (AELB). B. Department of Environment (DoE). Monitoring at the Final Discharge Point (FDP) is conducted on a daily, weekly and monthly basis.</p>	<p>2 RADIATION MANAGEMENT</p> <p>AELB approved Radiation Protection Programme. Monitoring data are also available real-time and online. Since operations commenced in November 2012, the LAMP operation has been shown to be safe to workers, people and the environment.</p>
<p>3 EMISSIONS</p> <p>bound by Legal & Other Requirements through the Environmental Impact Assessment (EIA) approved by the DOE on Feb 15, 2008. The EIA consists of 78 special conditions, which include control and monitoring of water quality and soil, control and monitoring of air quality and noise management and control, monitoring conducted on a monthly basis by appointed and DOE accredited labs. Reporting summaries are provided to the DOE on a quarterly basis.</p>	<p>4 RECYCLING AND WASTE MANAGEMENT</p> <p>procedures have been established for the management scheduled wastes, and this generation of scheduled wastes is tracked at each plant area.</p>
<p>5 WATER MANAGEMENT</p> <p>Lynas has two process water ponds with a capacity of 6,000m³ which supply to the plant as needed at rate. All water inside the lagoon is recycled back to the Cracking and Leaching system.</p>	<p>6 RESIDUE AND TAILINGS MANAGEMENT</p> <p>The WLP residue is being safely stored in a temporary residue storage facility (RSF) within the LAMP. Occupational and health exposures monitored since 2012 have shown that risks to Lynas employees from radiation and chemicals are well within the permissible limits. Lynas undertakes continuous monitoring of the environment both within and outside the plant (up to 20km). There has been no increase in background radiation levels at 1km, 5km, 10km and 20km from the plant; and Lynas has complied with all AELB licence conditions.</p>
<p>7 MONITORING AND REPORTING</p> <p>groundwater and wastewater monitoring is undertaken in accordance with the EIA. Groundwater monitoring is conducted every month in accordance with the EIA conditions. Water quality monitoring at Sungai Batok is conducted every month. Wastewater discharge is reported to the DOE through online environmental reporting.</p>	

LAMPIRAN 2
UTUSAN MALAYSIA: MUKA SURAT 51
TARIKH: 6 MAC 2019 (RABU)



Lynas Malaysia Sdn Bhd (752289-D)
 PT 17212, Jalan Gebeng 3,
 Kawasan Perindustrian Gebeng
 26080 Kuantan, Pahang
 Tel: 09-582 5200 Faks: 09-582 5293

LAPORAN EIA
PEMBERITAHUAN KEDUA

LAPORAN PENILAIAN KESAN KEPADA ALAM SEKELING (EIA)

"PROPOSED ONSITE SECURE LANDFILL (PRESCRIBED PREMISE) FOR THE STORAGE OF NEUTRALISATION UNDERFLOW (NUF) SOLIDS AT THE EXISTING LYNAS ADVANCE MATERIALS PLANT (LAMP) SITE, LOT PT 17212, GEBENG INDUSTRIAL ESTATE (GIE), PAHANG, MALAYSIA"

Dimaklumkan bahawa Jabatan Alam Sekitar (JAS) Malaysia sedang mengkaji Laporan EIA (Jadual Kedua) untuk projek tersebut di atas. Orang ramai adalah dialu-alukan untuk memberi ulasan bertulis ke atas Laporan EIA berkenaan yang boleh didapati dan dirujuk di tempat-tempat seperti berikut :

- | | |
|---|--|
| <p>1. Jabatan Alam Sekitar Putrajaya
Level 1-4, Podium 2 & 3, Wisma Sumber Asli,
No 25, Persiaran Perdana, Precint 4
Pusat Pentadbiran Kerajaan Persekutuan,
62574 PUTRAJAYA, MALAYSIA</p> | <p>2. Jabatan Alam Sekitar Pahang
(Ibu Pejabat Kuantan)
Aras 1, Kompleks Mahkamah
Kuantan Bandar Indera Mahkota
25200 KUANTAN, PAHANG</p> |
| <p>3. Jabatan Alam Sekitar (Cawangan Gebeng)
Tingkat 1,
Bangunan Kontena Nasional,
Jalan Gebeng 2/3, Kawasan
Perindustrian Gebeng,
26080 KUANTAN, PAHANG</p> | <p>4. Majlis Perbandaran Kuantan
Jalan Tanah Putih,
25100 KUANTAN, PAHANG</p> |
| <p>5. Balai Polis
Ibu Pejabat Polis Daerah Kuantan
Polis Diraja Malaysia, Jalan Mahkota
25000 KUANTAN, PAHANG</p> | <p>6. Pejabat Penghulu
Pejabat Penghulu Mukim Sg Karang
Bandar Baru Balok
26100, KUANTAN, PAHANG</p> |
| <p>7. Pejabat Daerah Kuantan
Bangunan Pejabat dan Tanah Kuantan,
Bandar Indera Mahkota
25990 KUANTAN, PAHANG</p> | <p>8. Pejabat AELB (Kemaman)
Cawangan Zon Timur
PT 6980, Bukit Kuang Business Centre
24000, KEMAMAN, TERENGGANU</p> |
| <p>9. Perpustakaan Kuantan
Perbadanan Perpustakaan Awam
Pahang, Jalan Kemunting,
25100 KUANTAN, PAHANG</p> | <p>10. Balai Polis Beserah
26100 KUANTAN, PAHANG</p> |

Orang ramai boleh menyemak laporan tersebut bermula daripada **6hb Mac 2019** hingga **4 hb April 2019**, dan mengemukakan ulasan bertulis kepada Jabatan Alam Sekitar sebelum atau pada **19hb April 2019**. Ulasan bertulis tersebut hendaklah dikemukakan kepada:

Ketua Pengarah Jabatan Alam Sekitar,
Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim
Aras 2, Podium 3, Wisma Sumber Asli No. 25, Persiaran Perdana, Presint 4
62574 PUTRAJAYA
(u.p: Bahagian Penilaian - Urusetia Laporan EIA)
Tel: 03-8871 2000 Faks: 03-8889 1045

Orang ramai juga boleh memperoleh satu set laporan ini pada harga RM 5, 000.00 (Ringgit Malaysia Lima Ribu Sahaja) di AGV Environment Sdn. Bhd., 100-6-035, Block J, Jaya One, 72A Jalan Universiti, Petaling Jaya, 46200 Selangor (Tel: 03-7931 1455)

Orang ramai juga boleh melayari laman web Jabatan Alam Sekitar di alamat www.enviro.doe.gov.my untuk merujuk Ringkasan Eksekutif dan Laporan EIA.



LAMPIRAN 3 SINAR HARIAN (BICARA MINDA): MUKA SURAT 14 TARIKH: 6 MAC 2019 (RABU)

Move to irrigate dried-up padi fields in Kota Belud

KOTA KINABALU: Efforts are being made to irrigate padi fields that have dried up or drying up in Kota Belud, the state's main rice-producing district, following the current month-long drought.

Kota Belud Integrated Agriculture Development Area director Salmah Labulla said her agency and others, including the Drainage and Irrigation Department and Department of Agriculture and Farmers' Organisation Authority, had brought in mobile water pumps.

She said that the three main areas that were badly affected by the dry spell were Botung 1 and 2, Skim Tempasuk Selatan and Kesapang, which covers a total area of 1,148.37ha.

"It is supposed to be the season for padi farmers to start planting but work has to be postponed due to the situation.

"We are focusing on providing water sources for areas that have started planting prior to the dry spell to prevent the crops from drying out," she said yesterday.

Salmah said that for dried-out padi fields, rehabilitation would be carried out soon.

She explained that padi planting up to the harvesting took about three to four months every cycle.

"After harvesting, the fields will be left to rest before farmers prepare for the next planting season," she added.

Each hectare in Kota Belud can yield an average of 3.5 tonnes to six tonnes of padi.

Some areas can even produce up to 10 tonnes of padi per hectare under superb weather and irrigation conditions.

Bernama reported that five areas in Sabah recorded moderate Air Pollutant Index (API) readings yesterday, with the highest reading of 75 recorded in Kimanis at 11am.

According to the Department of Environment (DOE) website, apart from Kimanis, other areas with moderate API readings are Kota Kinabalu (70), Keningau (53) and Sandakan (52) while Labuan has a reading of 53.

In Tawau, the air quality was good with an API reading of 34.

LAMPIRAN 4
NEW STRAITS TIMES (NEWS/NATION): MUKA SURAT 68
TARIKH: 6 MAC 2019 (RABU)



Padi fields in Kelantan, Langkawi and Terengganu have been affected by the dry spell. FILE PIC



Dr Sirajuddin Hashim

Dept: Limit outdoor activities

KANGAR: The Perlis Health Department has advised the public, especially those who are sick and allergic to heat, to avoid exposure to the hot weather to prevent heatstroke.
Its director, Dr Sirajuddin Hashim, said those working under the hot sun should wear thin clothing, hats or caps and drink lots of water to prevent dehydration, and get more rest during breaks.
"Those suffering from lung infection, seizures, fever and asthma must take care and limit their outdoor activities."
"They must seek immediate treatment if their condition worsens," he said yesterday.
On Monday, a farmer, Alif Rezman Azhar, 21, was reported to have died of seizure at his padi field in Kampung Pida 2, Manggol Bonggor near Kodiang, Kedah, at 11.30am.
State Meteorological Department director Mohd Saharudi Saad said the Chuping Meteorological Station recorded the highest reading of 36.8°C on Feb 8 and Feb 22, while the temperature on Monday was 36.2°C. **Bernama**

HOT SPELL

STEPS TAKEN TO STOP PADI FIELDS FROM DRYING UP

Ministry monitoring water sources, conserving supply in planting areas

TASNIM LOKMAN
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CONTINGENCY plans have been put in place by the Agriculture and Agro-based Industry Ministry to prevent rice production from being affected by the extreme weather.
The country is facing a period of extreme heat, which is expect-

ed to last until early next month.
Among the steps taken by the ministry is to control water management at crop areas, water sources and conserving water at reservoirs, as well as maximising water storage.
The ministry said agencies would make sure that equipment and machinery related to water storage were despatched to affected areas.
It said if the dry spell became

worse, it would work with the Malaysian Meteorological Department to carry out cloud seeding.
"Up until Monday, padi areas that have been affected are those under the Kemubu Agricultural Development Authority (7,557ha), Seberang Perak Integrated Agricultural Development Area (4,600ha) and Kota Belud Integrated Agricultural Development Area (2,000ha).
"Locations outside these areas that have been identified include Kelantan (563ha), Langkawi (251ha) and Terengganu (50ha)," the ministry told the *New Straits Times*.

It said it was monitoring areas for other crops that could be affected.
"At present, fruits and vegetables are not affected because water used to cultivate them comes from wells and pools."
The Meteorological Department had said the country was experiencing the end of the northeastern monsoon season and would experience a transition period from next month to May.
It said the country's rainfall would reach an average level in June and July, and this would help the agricultural sector.



Datuk Peter Anthony

'Water in 6 Sabah dams may run out in a few months'

KOTA KINABALU: Although the six dams in Sabah are operating normally, their water will last just a few more months, said state Infrastructure Development Minister Datuk Peter Anthony.
He said the reduced water output due to the draught was already affecting some areas.
"Apart from the dams, water in our tanks will also last only a few months.

"The problem is occurring in villages in the interior as the source for their gravity-fed water system has dried up.
"To deal with the issue, I have asked the state Water Department to send an emergency supply of water.
"However, we do not have enough water tankers. This drought is distressing and we hope it will rain soon.

"We're thankful it rained last night (on Monday)," he said after observing how sewage water was treated at the Dah Yeh Villa pump station in Likas yesterday.
Commenting on his visit, he said three additional workers would be stationed at 11 pump stations here to ensure everything went smoothly.
"A contractor is repairing a broken pipe, which had caused a

spillage in Likas. The 3km pipe should be fixed in three months."
He said the Department of Environment and Universiti Malaysia Sabah were studying samples from the pump station.
"We are using microorganisms to treat sewage water. After results from the study are known, we will discuss what is the appropriate method for treating the sewage." **Bernama**

LAMPIRAN 5
 UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 22
 TARIKH: 6 MAC 2019 (RABU)

Teknologi bantu memudahkan penentuan arah kiblat

Oleh AQILAH MIOR KAMARULBAID
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SEMASA bercuti atau berpindah ke rumah baharu, arah kiblat antara perkara utama yang perlu dititik beratkan kerana perlu bergantung kepada kedudukan Kaabah.

Walaupun terdapat pelbagai cara mudah seperti menggunakan aplikasi telefon pintar dan kompas, namun masih terdapat keraguan dan pertikaian berkaitan arah kiblat yang sebenar.

Sekitar 2012, Jabatan Kemajuan Islam Malaysia (Jakim) dijemput untuk membuat pengukuran dan penandaan arah kiblat di surau bangunan baharu Fakulti Kejuruteraan Alam Bina (FKAB), Universiti Kebangsaan Malaysia (UKM) di Bangi, Selangor.

Pengukuran dan penandaan arah kiblat dilakukan di lapangan menerusi penggunaan Teodolit dengan kaedah pencerapan matahari.

Arah utara benar perlu terlebih dahulu disahkan sebelum penentuan arah kiblat.

Kerja-kerja pengukuran berlangsung di luar bangunan dengan titik tandaan di luar dan kemudian titik tersebut dipindahkan ke dalam surau.

Proses memindahkan titik tandaan dari luar ke dalam surau dilihat bukan sahaja rumit dan memakan masa bahkan memerlukan tenaga mahir yang ramai.

Bertitik-tolak daripada



PROSES semakan ralat InnoQibla di Pusat Falak Sheikh Tahir Pulau Pinang.

kerumitan yang timbul, kumpulan penyelidik dari FKAB yang diketuai oleh **Prof. Madya Ir. Dr. Norhana Arsad** dari Pusat Kejuruteraan Elektronik dan Komunikasi Terkehadapan (Paket) menjalin kerjasama dengan Jakim menerusi Geran Universiti Industri dalam membangunkan satu prototaip bagi memindahkan arah kiblat ke dalam bangunan menggunakan laser.

Sepanjang pembangunan tersebut, pelbagai penambahbaikan dilakukan dan

perbincangan diadakan dengan Jakim dan dibantu Jabatan Ukur dan Pemetaan Malaysia (Jupem), maka terhasilah InnoQibla.

Menurut Norhana, kesukaran dan kerumitan menanda titik tandaan dari luar bangunan sehingga ke bilik solat mencetus idea untuk beliau dan pasukannya mencipta satu alat yang membantu meringankan tugas Jakim dan Jabatan Mufti negeri dalam penandaan arah kiblat di dalam bangunan.

"Sistem yang dibangunkan bukanlah bertujuan mengatasi

ilmu falak. Peralatan Teodolite yang sememangnya mempunyai tahap ketepatan yang tinggi berperanan sebagai satu inovasi baharu bagi membantu melaksanakan tugas menanda arah kiblat dengan lebih cepat.

"Jika dilihat teknik sedia ada terdapat banyak kekangan terutama dari aspek cuaca. Sekiranya cuaca mendung atau hujan, mereka tidak dapat mengesan arah matahari untuk membuktikan arah kiblat," katanya yang ditemui baru-baru

“

Sistem yang dibangunkan bukanlah bertujuan mengatasi ilmu falak. Peralatan Teodolite yang sememangnya mempunyai tahap ketepatan yang tinggi berperanan sebagai satu inovasi baharu bagi membantu melaksanakan tugas menanda arah kiblat dengan lebih cepat.”

ini.

Norhana yang juga Penolong Dekan (Keusahawanan dan Kreativiti) FKAB memberitahu, InnoQibla menggunakan teknologi Mikroelektromekanikal (MEMS) untuk mengesan utara benar mengikut putaran bumi iaitu arah sepanjang permukaan bumi ke arah Kutub Utara.

"Malah cip yang bersaiz mikro juga membolehkan rekaan bentuk InnoQibla lebih kecil dan ringan bagi memudahkan kerja-kerja penandaan arah kiblat oleh pihak berwajib," jelasnya.

Dalam proses mencipta InnoQibla, seorang pelajar, Nur Hazliza Ariffin yang sedang melanjutkan pengajian peringkat kedoktoran (PhD) dalam kejuruteraan elektrik dan elektronik, begitu komited dalam mengkaji dan menganalisis InnoQibla.

Menurutnya, sistem yang dibangunkan terbahagi kepada

modul di luar dan di dalam bangunan.

"Modul luar bangunan merangkumi sistem Penentu Kedudukan Global (GPS) bagi mengesan lokasi dan maklumat lokasi yang dihantar ke dalam bangunan melalui medium teknologi komunikasi tanpa wayar pada gelombang frekuensi radio.

"Data lokasi koordinat dinyahkod ke dalam format yang difahami oleh pengguna dan diproses menggunakan formula untuk menjana sudut kiblat.

"Pengesan sistem MEMS yang berada di dalam bangunan akan beroperasi dan dikawal oleh mikro pengawal untuk mengukur arah utara benar yang dijadikan titik rujukan," katanya.

Tambahnya lagi, penentu ukuran sudut dijalankan dan ditentusahkan di Makmal Sudut, Institut Metrologi Kebangsaan Malaysia (NMIR) Sirim Berhad, manakala teknologi komunikasi tanpa wayar yang digunakan menerusi gelombang frekuensi juga berjaya mencapai kemampuan jarak maksimum pada 500 meter untuk menghantar data lokasi di luar bangunan sementara di dalam bangunan pula adalah dalam jarak 72 meter.

InnoQibla yang telah dipatenkan berjaya melakar kejayaan dengan merangkul pingat emas pada Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (Pecipta) 2017.

Di samping itu, InnoQibla turut tercalon untuk penilaian akhir kategori paten bagi Anugerah Harta Intelek Negara 2017 dan Tahun Pengkomersialan Malaysia (MCY) 2018. Terkini ia memenangi Anugerah Cabaran Inovasi Islam yang dianjurkan oleh Platcom Ventures Sdn Bhd, Agensi Inovasi Malaysia (AIM) di Pusat Konvensyen Kuala Lumpur (KLCC), baru-baru ini.



IR. DR. NORHANA ARSAD (kanan) dan Nur Hazliza Ariffin menunjukkan peralatan yang dibangunkan untuk membantu menentukan arah kiblat lebih tepat.



LAMPIRAN 6
THE STAR (NATION): MUKA SURAT 6
TARIKH: 6 MAC 2019 (RABU)

Worry over hot weather

Heed advisory to defer outdoor activities, principals urged

PETALING JAYA: While a weakened El Nino weather phenomenon has eased concerns over rising temperatures in the country, parents and teachers want school heads to heed the recent Education Ministry's advisory to postpone outdoor activities.

National Union of Teaching Profession (NUTP) secretary-general Harry Tan said there are concerns among teachers that there may be some headmasters and principals who will ignore the advisory.

"Some schools may not want to defer their outdoor programmes such as their sports day as invitations have already been extended to VIPs to attend.

"In such cases, the school administrators must be made aware of the consequences which may follow should a mishap occur involving those participating in the programme," he said yesterday.

El Nino is an irregular weather phenomenon that causes sea temperatures in the equatorial Pacific Ocean to rise, bringing dry weather and higher temperatures to Malaysia.

According to the Malaysian Meteorological Department (MetMalaysia), a weak El Nino is forecast to occur and continue until May.

Tan said that headmasters should not take the advisory lightly as it was meant to ensure the well-being

of teachers and students during the hot spell.

Education activist Mak Chee Kin noted the advisory did not clearly state that all outdoor curricular activities should be postponed temporarily.

"The advisory merely states that outdoor activities can be deferred if the weather gets too hot.

"This seems very vague and headmasters and principals are given the discretion on whether to cancel or postpone the outdoor activities," he said.

Mak, who is chairman of the Melaka Action Group for Parents in Education (Magpie), said parents have been left confused as they assumed through recent media

reports that headmasters must put on hold all outdoor activities.

In the ministry's circular dated Feb 26, headmasters and principals were advised to keep tabs on the weather and to postpone all outdoor activities if the weather got too hot.

On Monday, MetMalaysia deputy director-general of operations Jailan Simon said the public should not be overly concerned about the hot and dry weather as it is a normal annual phenomenon that occurs between February and mid-April.

He said the start of the inter-monsoon period next month is expected to bring more rain and cooler temperatures.



LAMPIRAN 7
THE STAR (NATION): MUKA SURAT 6
TARIKH: 6 MAC 2019 (RABU)



Unbearable heat

Laguna Sri Tujoh Fish Breeders Association chairman Mohd Saifullah Che Mat showing some of the siakap fish that died due to lack of oxygen in the hot weather and falling water levels at the mouth of Pengkalan Nangka river in Kelantan. — Bernama

LAMPIRAN 8
THE STAR (NATION): MUKA SURAT 6
TARIKH: 6 MAC 2019 (RABU)

Veggie farmers enjoying bumper crop

GEORGE TOWN: While many are trying to escape the scorching heat, farmers are enjoying a good crop, and this has brought down the prices of vegetables by 40%.

Vegetable seller Tan Sin Soon said prices for at least seven out of 10 vegetables had gone down, thanks to the dry weather and good growing conditions.

He said the vegetables that could tolerate drier conditions and higher temperatures were Chinese cabbage (bak choy), Chinese mustard leaves (kai choy), tomatoes, capsicum, big chillies and broccoli, among others.

"When it rains heavily, the water cannot be controlled and it spoils the vegetables.

"But with this kind of weather, it results in quality crop.

"With a bumper crop, the prices have gone down," he said at Chowrasta Market yesterday.

Penang Island Vegetable Wholesalers Association chairman Tan Ban Ben said the prices of certain vegetables had decreased due to the increase in yield as a result of good weather.

“

With this kind of weather, it results in quality crop.

Tan Sin Soon

”

He said farmers were not worried about the dry season as they had been using underground water to cultivate their plants.

"However, if the hot weather persists, underground water might run out, too," he said.

Ban Ben said there was a drop in prices for tomatoes and spring onions.

He said the wholesale price of RM5 per kg for tomatoes had been reduced to RM3.50 per kg.

For spring onions, he said it was priced at RM4 per kg compared to its regular price of RM7 per kg.

He, however, said the prices of imported vegetables from China

and Australia had increased.

It was the opposite in Johor Baru where prices of vegetables have skyrocketed due to the heat wave.

Larkin Market Traders Association chairman Abdullah Ideris said prices of vegetables such as red chillies, long beans, ladies fingers and mustard greens had gone up due to the hot and dry weather.

He said long beans were now sold at RM9 per kilo, up from RM6 about a week ago.

Red chillies is at RM12 per kilo from RM10 per kilo; sawi is between RM3 and RM4, an increase of 50 sen; while ladies fingers is RM10 per kilo now compared to just RM6 last week.

"We received complaints from traders and customers on the price hike of certain vegetables.

"Suppliers are also bringing in fewer vegetables as the weather is affecting production," he said.

Johor Health, Environment and Agriculture Committee chairman Dr Sahrudin Jamal said the heat wave was affecting agriculture production at many farms.

LAMPIRAN 9
UTUSAN MALAYSIA (FORUM): MUKA SURAT 19
TARIKH: 6 MAC 2019 (RABU)

Jangan pilih kasih isu alam sekitar

SAUDARA PENGARANG,

ISU alam sekitar memang tidak boleh dipisahkan dalam pembangunan sesebuah negara. Baru-baru ini, sebuah pertubuhan bukan kerajaan (NGO) menuduh Johor sangat perlahan dalam menangani isu-isu berkaitan alam sekitar.

Mereka mendakwa isu Pulau Kukup dan pembangunan di Sungai Pulai merupakan petunjuk bahawa kerajaan negeri tidak mementingkan kelestarian alam sekitar dan sanggup merobek khazanah tersebut demi pembangunan. Bagaimanapun, adakah mereka lupa tentang isu-isu di negeri lain yang sehingga kini masih tiada penyelesaian?

Perlombongan bauksit di Pahang, aktiviti menambak laut untuk membina Malaysia's Marina Bay di Pulau Pinang, pembersihan hutan di Perak untuk perladangan, pembalakan tidak terancang di Kelantan, pembinaan lebuh raya di Selangor merentasi hutan simpan serta pembinaan kondominium di kawasan yang digazetkan seperti di Taman Rimba Kiara, Kuala Lumpur.

Di mana suara mereka



SESEBUAH negara perlu memastikan keseimbangan antara alam dan pembangunan secara berterusan. - GAMBAR HIASAN

dalam menentang dan mengkritik kerajaan negeri lain yang turut cuba memajukan negeri masing-masing? Di manakah *joint statement* daripada kumpulan-kumpulan NGO mengenai projek-projek ini? Saya sebagai anak Johor cukup pelik dan jelak dengan pendekatan NGO yang ternyata mengambil pendekatan pilih kasih serta berdiam diri apabila isu sama timbul di negeri-negeri lain.

Atau adakah mereka sebenarnya digunakan oleh pihak-pihak tertentu untuk memenuhi agenda

tersendiri dan mengganggu-gugat permuafakatan rakyat Johor? Lebih penting, ini tidak bermakna segala bentuk pembangunan patut dijalankan tanpa mengambil kira kos alam sekitar.

Saya menyeru NGO supaya bersikap lebih adil dan tidak terlalu taksub menentang agenda untuk memajukan Johor. Bantahan yang membabi buta tanpa mengira manfaat hanya akan merugikan rakyat Johor kelak.

FADHLI ABD. RAHMAN

Johor

LAMPIRAN 10
 THE SUN (SPEAK UP): MUKA SURAT 10
 TARIKH: 6 MAC 2019 (RABU)

Bringing back the 'soul' to STEM

MANY years ago, Akademik Sains Malaysia organised a timely conference themed "Injecting the soul in R&D" in Kuching.

At that time, the idea of STREAM was already floated as an expansion to STEM (science, technology, engineering and mathematics), which was coined earlier from SMEI.

The latter did not pick up allegedly due to some offensive meaning in other cultures. I am appreciative of the cultural sensitivity as a reason for the change but this is exactly the issue I have with STEM at the very fundamental level.

The acronym sounds so cold and clinical that it is almost inhuman. It is devoid of the "soul" that has to be injected again.

This takes us back to the historic moment that coincided with the paradigm shift from "natural philosophy" to "modern science" leading to the period known as the Scientific Revolution.

From that point onwards the new discipline is rendered "soulless" and the struggle with the church came to a peak where the Scientific Revolution played a dominant disruptive role, culturally speaking.

Since then "science" underwent many changes again and again, each time taking on a heavier emphasis on "supporting" aspects as though to make science education more "comprehensive" in the search for solutions to pressing issues while at the

same time strengthening the economy for both emerging and developed countries by educating the workforce, scientifically speaking.

For example, at one time it was fashionably known as S&T (science and technology), which then gave way to STI (where 'I' stands for innovation) when "innovate or die" was promoted as the way to quantum leap forward. So the shift from STEM to STREAM is not unusual.

In fact there are many versions in between, ranging from STEMM (the other M is medicine) to STEAM (the A for arts) depending on varying contexts and worldviews.

Some other examples include STM (scientific, technical, and mathematics), STEMLE (science, technology, engineering, mathematics, law and economics), STREM (science, technology, robotics, engineering, and mathematics), and even THAMES (technology, hands-on, art, mathematics, engineering, science). So why not STREAM?

Before one is accused of trying to customise a borrowed idea, let us try to understand what STREAM is and how much of a difference this can make.

For starters - the RE reads as "religiosity", A is "arts" or broadly "aesthetics", and M for "management".

Each of these has played an important role to better "govern" science before it abruptly loses its "soul" in the run-up to the days of the so-called European Enlightenment, a precursor to today's secular world.



MY VIEW
"Educating young minds in the related subject areas are deemed necessary to ensure they are aware of their inter-connectedness."

With the rise in transdisciplinary knowledge in the search for new solutions to the world's grand challenges like climate change and global world, some have deemed STEM as helpless as each of the individual disciplines in offering viable long-term sustainable outcomes.

In fact, much of today's intractable global problems can be traced back directly or indirectly to the "science without soul" acting in isolation with mote room for the various knowledge-bases to counteract and balance each other.

In tandem with such phenomena, it is interesting to read that, more recently, the board on higher education and workforce of the US National Academies of Sciences, Engineering, and Medicine has come around to suggest another acronym - HACD (humanities, arts, craft and design) - as a supplement to STEM.

Not surprisingly, STEM in the 2017 World Economic Forum, had its fair share of criticism as "only a one-dimensional solution, which is inadequate for the multi-dimensional reality of economic development and growth".

In addition, reportedly, while there is a need for scientific and technological knowledge in all countries, it has been suggested that there is "not as big a shortage of STEM-related workers as previously thought."

"In addition, too much focus on STEM alone runs the risk of oversaturating certain sectors rather than

producing a well-rounded workforce."

In fact, one Michael S. Teitelbaum in a 2014 article, "The Myth of the Science and Engineering Shortage", in *The Atlantic*, criticised the efforts saying the then-current national fixation on increasing STEM participation paralleled previous US government efforts since World War II to increase the number of scientists and engineers, all of which he stated ultimately ended in "mass layoffs, hiring freezes, and funding cuts"; including one driven by the Space Race of the late 1950s and 1960s, which he wrote led to "a bust of serious magnitude in the 1970s". Succinctly, focusing on STEM alone is not enough.

Educating young minds in the related subject areas are deemed necessary to ensure they are aware of their interconnectedness.

And also to create conscientious global citizens who are capable of making responsible and sustainable decisions to lead a balanced and harmonious world.

In other words, STEM, as understood currently, is no longer adequate to deal with the complexity of the future.

Given the advent of "post-material science" as another paradigm shift ahead of us, STEM remains vulnerable unless it is streamed along.

With some four decades of experience in education, the writer believes that "another world is possible". Comments: letters@thesundaily.com

LAMPIRAN 11 THE SUN (URBANX): MUKA SURAT 15 TARIKH: 6 MAC 2019 (RABU)

Accenture on S.T.E.M.

Exposing the young to science, technology, engineering and mathematics for better future opportunities

As urban Malaysia continues to throttle towards a completely tech-dependent age, there is a growing need for the proliferation of code-savvy individuals. But before there can be a need, there must be a desire to want, which leaves us with the question: Do people want to get into the complex labyrinth of coding? This writer speaks with two individuals from Accenture Malaysia in an attempt to understand and learn.

HOURLY OF CODE

Explaining the Hour of Code that was held in Malaysia, Accenture reps shared that the children were taught the basics of coding by helping a robot discover a new planet through the Accenture Intelligent Space Exploration tutorial developed by Accenture.

Photos of animals and plants were taken and "fed" to the robot so it could differentiate one from the other. After completing each task, the children were awarded with new skills such as "differentiating between friendly and unfriendly aliens", "teaching the dog tricks", and so on. The young guests also took part in an engaging quiz that imparted and/or increased their knowledge on Artificial Intelligence (AI) in a simple and fun way.

SPARKING INTERESTS

Speaking on how he began coding at the tender age of 10, Baharuddin said, "I was figuring out how to 'break' the game system so that I could get an advantage over computer algorithms. I found the whole subject fun, as the opportunities to experiment seemed endless. I would do this for many hours at a time".

It should be noted that this was during the heyday of computers and coding, back when the two were still in a state of infancy compared to how dynamic and complex they are now, which can be daunting for the regular person to grasp. This "beginning" is somewhat true for Yap as well.

FOOD FOR THOUGHT

The age of intelligent technology calls for growth and development, which leads to needed change to keep abreast of the new and current. New skills need to be acquired; similarly, new ways of working, and most definitely, new mindsets that are open to experiment and explore beyond

Before taking on as Accenture's first female country managing director from 2014 to 2017, Yap reveals that she was interested in science, technology, engineering and mathematics (STEM). This was during a time when the field(s) were largely dominated by men.

"When I studied Computer Science back in the day, there weren't that many women in the field. Although I was good at logic, there was no one advising me to do Tech. I made the choice based on my strength," she explains in an email exchange.

FUNDAMENTALLY SPEAKING

Putting two and two together, it is apparent that coding and STEM-related learning is best started at a young age and not restricted to one gender over the other. It also has to be done according to one's own strengths and inherent desire, to want to empower oneself with the knowledge and passion to navigate both.

In the city, it is apparent that kids are now more preoccupied with gaming on mobile devices and gaming consoles. Any visit to a restaurant for instance, will net you with at least one child (usually wearing a funny-howl haircut) clutching an electronic device with a death grip, eyes fixated, mind absorbed. Common sense would dictate



generation (and those in the future) towards activities related to coding.

"I think everyone today should learn how to code. It doesn't mean that you have to be a programmer at the end of the day, but it will equip you with strong logical foundation on how we can embed strong logic in everything that we do," Baharuddin points out.

EVEN THE ODDS

On whether she sees the growing interest in STEM-related fields by the younger set skewing more towards an urban demographic - Yap agrees.

"It would seem so, because schools in rural or semi-urban areas have less access to STEM-related facilities, talks and events. This is of concern to all of us. When automation and robotics reduce the number of repetition-based jobs, we need to ensure that all the next-generation children are skilled to work with science and technology," she says.

"With the government's efforts to provide affordable and accessible telecommunications infrastructure to the whole country, children in

sub-urban and rural areas will have a better opportunity to develop their interest in STEM," Yap foresees.

Then again, as one can only hope for the latter, the priority as of now still lies in equipping the urban young with the necessary STEM knowledge, be it coding or otherwise, to face the disruptive technologies that have already found a way to weave itself into our lives on account of the Fourth Industrial Revolution.

Mark Mathen Victor



Kids Code

Websites on coding classes for kids:

- www.itrain.com.my
- www.codinglab.my
- www.codejuniors.com
- www.kidocode.com
- www.kidsgocoding.com
- www.kidclub.com.my

regular boundaries. While progress is impossible without change, and change can be scary for some, let's summon a positive attitude as per the words of Anthony Robbins, who said: "Stop being afraid of what could go wrong, and start being excited about what could go right."

LAMPIRAN 12
 UTUSAN MALAYSIA (RENCANA): MUKA SURAT 17
 TARIKH: 6 MAC 2019 (RABU)

Moratorium bauksit: Pahang dipersalahkan?

Oleh AHYA ALIMUDDIN

TIDAK adillah apabila yang membuat pengumuman 'mendahului keadaan' (*jump the gun*) bahawa tempoh moratorium bagi pengeluaran bauksit tamat pada akhir bulan ini ialah kerajaan Pusat, tetapi yang dipersalahkan setelah ia menerima kritikan hebat ialah kerajaan negeri Pahang di bawah kepimpinan Menteri Besar, Datuk Seri Wan Rosdy Wan Ismail.

Inilah yang sebenarnya berlaku selepas Menteri Air, Tanah dan Sumber Asli, Dr. A. Xavier Jayakumar mengumumkan tempoh moratorium tamat 31 Mac ini yang dengannya, kerja-kerja pengeluaran, pengangkutan dan pengeksportan bahan tersebut boleh bermula semula pada 1 April.

Ekoran itu, banyak pihak menghentamnya termasuklah parti-parti dalam Pakatan Harapan (PH) sendiri. Dan yang paling lantang ialah Timbalan Menteri di Jabatan Perdana Menteri, Fuziah Salleh yang juga Ahli Parlimen Kuantan.

Tidak cukup itu, kerajaan negeri di bawah Barisan Nasional (BN) turut menjadi sasaran ahli Parlimen ini yang semua orang tahu, survival politiknya bergantung penuh kepada isu-isu, bukan sangat kepada perkhidmatannya.

Malangnya, hentamannya terhadap kerajaan negeri berhubung isu bauksit sepertimana juga dengan

isu pengoperasian Lynas Advanced Materials Plant (LAMP) di Gebeng sebelum ini adalah jauh menyimpang daripada kebenaran.

Antara lain beliau bangkitkan tentang soal penyediaan prosedur operasi standard (SOP) yang beliau dakwa, kerajaan negeri hingga kini masih gagal merangka dan

menyediakannya untuk dijadikan panduan oleh operator-operator bauksit.

Sedangkan beliau tidak tahu dalam mesyuarat yang dipengerusikan oleh Ketua Setiausaha Kementerian Air, Tanah dan Sumber Asli pada 22 Februari lalu, memutuskan SOP berkenaan perlu diperkasakan lagi sebelum tempoh moratorium tersebut benar-benar ditarik balik.

Ini penting kerana dengan SOP inilah juga akan dijadikan sebagai dokumen pengurusan bauksit yang pemakaiannya bukan untuk di Pahang sahaja, tetapi meliputi seluruh negara.

Susulan itu, satu bengkel memperkasakan SOP tersebut berlangsung di Putrajaya selama lima hari bermula 25 Februari lalu yang diurusetikan oleh Jabatan Mineral dan Geosains.

Selepas ini pula akan dianjurkan semakan awam bagi mendapat maklum balas orang ramai khususnya di Kuantan, kemudian dikemaskinikan lagi sebelum SOP tersebut dimuktamadkan.

Lama sebelum ini lagi,

kerajaan negeri telah membantu menyediakan SOP tersebut menerusi beberapa bengkel yang dianjurkan bermula 2016.

Ahli Parlimen Kuantan itu juga membangkitkan kononnya kerajaan negeri belum lagi mengambil tindakan untuk meminda enakmen tertentu bagi mewajibkan laporan Penilaian Kesan Alam Sekitar (EIA) disediakan ke atas tapak lombong bauksit tidak mengira saiz.

Dalam hal ini, beliau benar-benar tersilap apabila menyangkakan ia di bawah bidang kuasa kerajaan negeri sedangkan itu urusan kerajaan Pusat dengan keperluan Parlimen meminda Akta Kawalan Alam Sekeliling (AKAS) 1974.

Pindaan tersebut telahpun diluluskan oleh Parlimen sejak 2015 lagi yang antara lain mewajibkan semua tapak lombong bauksit tanpa mengira saiz keluasan, perlu menyediakan laporan EIA terlebih dahulu.

Sebelum pindaan, hanya tanah lombong bauksit berkeluasan lebih 20 hektar perlu menyediakan laporan EIA.

Malah sekarang pun, laporan EIA bagi aktiviti perlombongan bauksit di Kuantan sedang disediakan oleh perunding yang dilantik oleh Perbadanan Kemajuan Negeri Pahang (PKNP).

Setelah siap kelak, laporan ini juga akan melibatkan semakan awam sepertimana SOP yang disebutkan tadi.

Oleh itulah diharapkan, maklumat-maklumat yang tepat haruslah diperoleh sebelum menuding jari menyalahkan kerajaan negeri di sebalik tindakan 'mendahului keadaan' menerusi menteri di bawah kerajaan Pusat sendiri.



WAN ROSDY WAN ISMAIL



FUZIAH SALLEH



KERJA-KERJA pengeluaran, pengangkutan dan pengeksportan bauksit boleh bermula semula pada 1 April ini. - GAMBAR HIASAN/UTUSAN

LAMPIRAN 13
HARIAN METRO (SETEMPAT): MUKA SURAT 24
TARIKH: 6 MAC 2019 (RABU)

24 setempat

06-03-2019

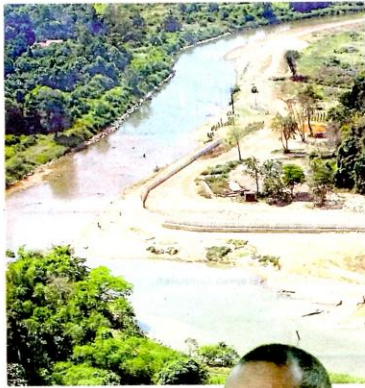


Foto: FATHIL ASRI

Siti Nor Hidayatidayu Razali
sitor@nstp.com.my



Rantau Panjang

Fenomena sungai kering yang berlaku di Sungai Golok di sini, empat tahun lalu berulang lagi tahun ini apabila penduduk di sekitar sempadan boleh menyeberangi sungai ke Golok, Thailand dengan hanya berjalan kaki tanpa menggunakan bot.

Kesempatan itu digunakan oleh penduduk yang tinggal di beberapa pangkalan termasuk di Pangkalan Pasir, Ibrahim Pencen dan Bukit Lata untuk berulang-alik ke negara jiran bagi urusan harian.

Manakala pengusaha bot juga perlu menghadkan bilangan penumpang kepada dua orang sahaja memandangkan paras air sungai yang cetek.

Tinjauan Harian Metro di sekitar Sungai Golok mendapati, sebelum ini lebar sungai kira-kira 20 meter dan sebahagiannya menjadi daratan akibat kemarau.

Mengikuti portal e-banjar, Sungai Golok berada pada paras 3.5 meter berbanding paras normal iaitu 5 meter. Penduduk, Ariffin Zakaria, 56, dari Kampung Cabang Tiga Bagus berkata, fenomena sungai kering yang berlaku pada 2015 berulang tahun ini. "Empat tahun lalu paras sungai surut berlaku April namun tahun ini agak awal apabila ia berlaku pada Mac. Saya jangka paras sungai akan kering dan membolehkan kawasan ini menjadi pesta jualan seperti sebelum ini," katanya ketika ditemui di

“Empat tahun lalu paras sungai surut berlaku April, namun tahun ini agak awal apabila ia berlaku pada Mac. Saya jangka paras sungai akan kering dan membolehkan kawasan ini menjadi pesta jualan seperti sebelum ini”
Ariffin Zakaria

Pangkalan Pasir di sini, semalam.

Peniaga, Nordin Mamat, 50, berkata, empat tahun lalu dia mengambil peluang berniaga di kawasan sungai kerana ramai pengunjung luar datang.

"Ketika itu, saya menjual air dan makanan serta mampu memperoleh pendapatan antara RM200 hingga RM300 sebulan.

"Jika paras sungai kering, saya dan penduduk di sini sekali lagi akan mengambil peluang berniaga," katanya. Menurutny, pihak Angkatan Tentera Malaysia (ATM) juga dilihat sentiasa membuat kawalan dari semasa ke semasa memandangkan orang ramai boleh menyeberangi sungai dengan hanya berjalan kaki.

FENOMENA CUACA PANAS

BERJALAN SEBERANG SUNGAI

Paras air Sungai Golok semakin cetek



PARAS air Sungai Golok di Pangkalan Che Kassim cetek berikutan cuaca panas.

LAMPIRAN 13 (SAMB.)
HARIAN METRO (SETEMPAT): MUKA SURAT 25
TARIKH: 6 MAC 2019 (RABU)



NORDIN berlatih mengherang Sungai Golok untuk ke seberang kerana paras air Sungai Golok yang cetek.

Terpaksa menoreh selang sehari



HUSIN menunjukkan hasil torehan selama dua hari di kebunnya di Kampung Lonek.

Jempol: Cuaca panas melanda seluruh negara turut dirasai penoreh getah sekitar daerah ini apabila mendapati hasil susu getah semakin berkurangan akibat fenomena berkenaan.
Penoreh, Husin Sariff, 57 berkata, sebelum ini dia mula menoreh di kebunnya di Kampung Lonek, sekitar jam 7.30 pagi, tetapi terpaksa menoreh seawal jam 6.45 pagi disebabkan cuaca panas lebih awal.

Katanya, panas melampau di seluruh negara mengakibatkan daun pokok getah luruh dan cahaya matahari boleh menembusi sehingga tanah.
"Kesan daripada ini menyebabkan hasil torehan makin berkurung. Keadaan ini dirasai sejak bulan lalu dan saya perlu ke kebun sebaik selesai solat Subuh," katanya.
Menurut Husin, jika sebelum ini hanya tiga hari

diperlukan untuk memenuhi setiap cawan dengan susu getah, tetapi kini walaupun dibiarkan selama satu minggu, ia tidak memperoleh kuantiti sama.
"Kesan kepanasan melampau juga memberi kesan kepada kulit pokok getah. Sebelum ini, saya menoreh setiap hari dan sekarang terpaksa menoreh dua hari sekali."
"Ia berlaku kerana pokok getah kekurangan hasil dan jika dilakukan setiap hari akan merosakkan kulit pokok," katanya yang mengusahakan ladang getah seluas satu hektar.
Katanya, disebabkan itu, dia hanya mampu memperoleh 15 kilogram (kg) dalam tempoh dua hari berbanding 30kg sehari sebelum ini.
"Hasil ini perlu dibahagi dua bersama pemilik kebun dan bayangkan pendapatan yang saya peroleh," katanya.
Jelasnya, keadaan dijangka lebih teruk bulan hadapan memandangkan berlaku perubahan musim bagi tanaman itu.
"Pada April, daun pokok getah mulai tumbuh dan ketika itu pengeluaran susu akan merosot."
"Dalam keadaan kian menekan, saya berharap harga getah meningkat berbanding sekarang sekitar RM2.30 sekilogram," katanya.

Bomba guna bom air



HUTAN di puncak bukit berdekatan Perkampungan Orang Asli Pos Legap, Sungai Siput, terbakar.

Jepet: Operasi memadamkan kebakaran di puncak gunung dekat Hutan Simpan Gunung Korbu, terletak berhampiran Pos Legap dan Pos Kuala Mu di Sungai

Siput dijangka selesai hari ini.
Operasi itu yang mengguna kaedah pemadaman bom air sudah dimulakan sejak pagi

semalam.
Penolong Pengarah Bahagian Operasi Labatan Bomba dan Penyelamat Malaysia (JBPM) Perak, Yunus Abu berkata, pihaknya mengambil masa untuk memadamkan kebakaran kerana perlu menggunakan helikopter.
Sebelum itu, panggilan kecemasan mengenai kebakaran terbahit diterima pada 8.24 pagi.
"Kita terpaksa menggunakan sebuah helikopter dan memadamkan kebakaran guna kaedah bom air memandangkan kebakaran berlaku di puncak gunung."
"Kita jangka operasi ini akan berlarutan hingga esok petang (hari ini) kerana lokasi kawasan

kira-kira 20 kilometer dari jalan utama," katanya ketika dihubungi di sini, semalam.
Yunus berkata, dijangka lapan hektar kawasan di puncak itu terbakar dan 30 pegawai dan anggota terbabit dalam operasi berkenaan serta dibantu agensi lain.
"Selain kekuatan pegawai dan anggota Balai Bomba dan Penyelamat (BBP) Sungai Siput, MUSTeam (Multi Skill Team) dan Pasukan Khas Operasi, Taktikal dan Penyelamat Malaysia (STORM) turut digerakkan dalam operasi ini."
"Bantuan turut diterima daripada polis, Jabatan Perhutanan Negeri dan Jabatan Kemajuan Orang Asli (JAKOA)," katanya.

LAMPIRAN 14
 THE STAR (WORLD): MUKA SURAT 25
 TARIKH: 6 MAC 2019 (RABU)

Tornado deaths likely to rise

Rescuers uncover widespread damage after back-to-back twisters

BEAUREGARD (Alabama): Rescuers uncovered widespread damage in Alabama caused by two back-to-back tornadoes that ripped across the southern state, with the death toll of 23 expected to rise further.

"It looks almost as if someone took a giant knife and scraped the ground," said Sheriff Jay Jones of Lee County, which borders Georgia.

"There are slabs where homes formerly stood, there is debris everywhere, trees are snapped."

He said some of the dead were children, including one just six years old. Such destructive devastation has not been seen for half a century in the state, according to the sheriff.

Another young victim, Taylor Thornton, died while visiting a friend in Lee County.

"She's gone to heaven. She's only eight. It feels not real," her aunt Kay Thornton told NBC affiliate WSFA 12 before bursting into tears.

"We have several people who are still unaccounted for," Jones said. "Unfortunately, we anticipate the number of fatalities may rise as the day goes on."

Others were hospitalised, some with "very serious injuries."

Search operations for those still missing had to be halted late Sunday due to hazardous conditions, but were renewed early on Monday



All that's left: A home and its contents reduced to rubble and splinters after two tornadoes in Alabama. — Reuters

with agencies from across the state and from neighboring Georgia joining the hunt.

The swath of destruction left was 400m-wide and stretched for the "several kilometres that it travelled

on the ground," according to Jones.

The powerful winds picked up a billboard from the Lee County Flea Market in Alabama and dumped it some 32km away, across the state line in Georgia,

local media reported.

More than 6,000 homes were left without power in Alabama, according to PowerOutage.us, while 16,000 suffered outages in neighbouring Georgia. — AFP

LAMPIRAN 15
KOSMO (INFINITI): MUKA SURAT 28
TARIKH: 6 MAC 2019 (RABU)

Cuaca panas jejas populasi ikan dunia



SUHU yang semakin panas menyumbang kepada penurunan lapan peratus populasi ikan dunia.

IKAN merupakan sumber protein utama bagi hampir separuh daripada populasi dunia.

Malah, lebih 56 juta individu di dunia menyumbang bakti dalam sektor perikanan.

Meskipun begitu, perubahan iklim dilihat mula mengganggu sistem jaringan kompleks pada sumber utama makanan dunia itu.

Sekumpulan saintis yang diketuai penyelidik daripada UC Santa Barbara's Bren School of Environmental Science & Management, Christopher Free telah mengkaji sama ada pemanasan air

akibat cuaca akan memberi kesan terhadap produktiviti perikanan atau sebaliknya.

Hasil kajian itu diterbitkan dalam jurnal *Science*.

Kajian itu melihat data sejarah 124 spesies ikan di 38 buah negara yang mewakili satu per tiga daripada laporan tangkapan global.

Para penyelidik membandingkan data itu untuk merekod suhu laut dan mendapati lapan peratus populasi hidupan tersebut terkesan secara signifikan daripada impak itu manakala empat peratus lagi menunjukkan impak positif.

"Jumlah peratusan yang menurun lebih tinggi daripada jumlah tangkapan hasil perikanan.

"Kami amat terperanjat melihat betapa kuatnya kesan pemanasan cuaca terhadap populasi ikan dunia," jelasnya. Laporan itu turut

menunjukkan ikan akan memberi respons terbesar terhadap peningkatan suhu laut.

Malah, ikan daripada spesies serta keluarga sama turut menunjukkan persamaan respons terhadap perubahan itu.

Impak

Hal ini kerana spesies yang berkaitan akan memiliki sifat dan kitaran hidup yang hampir sama.

Ketika meneliti kewujudan jumlah populasi ikan yang berubah dari tahun 1930 hingga 2010, penyelidik telah menemui kehilangan yang amat besar dari segi produktiviti di Laut Jepun, Laut Utara, Perairan Iberian, Kuroshio Current dan Celtic-Biscay Shelf.

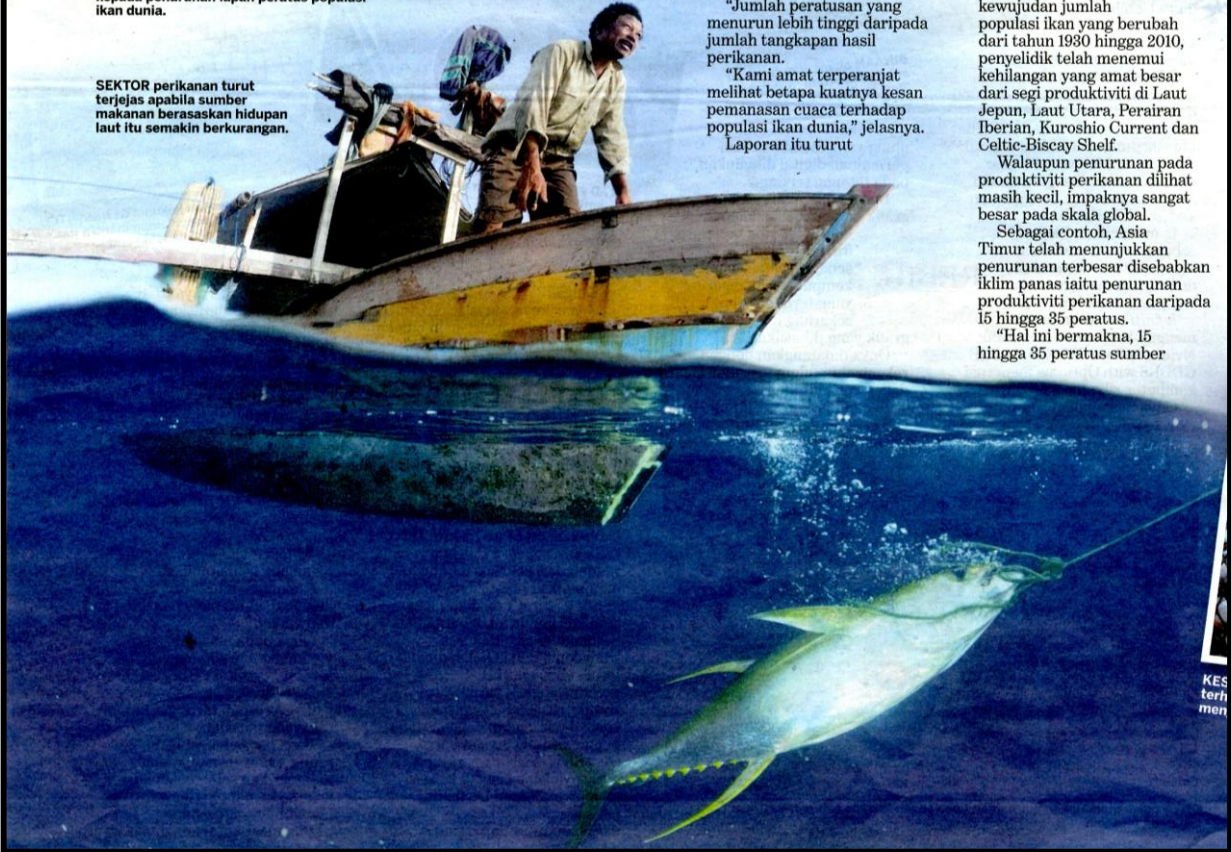
Walaupun penurunan pada produktiviti perikanan dilihat masih kecil, impaknya sangat besar pada skala global.

Sebagai contoh, Asia Timur telah menunjukkan penurunan terbesar disebabkan iklim panas iaitu penurunan produktiviti perikanan daripada 15 hingga 35 peratus.

"Hal ini bermakna, 15 hingga 35 peratus sumber

RONA alam

SEKTOR perikanan turut terjejas apabila sumber makanan berasaskan hidupan laut itu semakin berkurangan.



KES terh men



LAMPIRAN 15 (SAMB.) KOSMO (INFINITI): MUKA SURAT 29 TARIKH: 6 MAC 2019 (RABU)

JUMLAH tangkapan hasil laut semakin berkurang akibat perubahan iklim.

makanan berasaskan ikan semakin berkurangan dan pekerjaan di sektor perikanan turut mengalami nasib sama walaupun Asia Timur merupakan salah sebuah benua memiliki populasi manusia paling pantas berkembang di dunia," ujarnya lagi.
Pada hemat Free, mengurangkan impak perbezaan benua akan menjadi salah sebuah cabaran terbesar dunia pada masa depan.

PERAIRAN Iberian antara laut yang terkesan akibat pemanasan suhu air laut.

SUHU laut yang semakin panas membuatkan ikan semakin berkurangan.

SAN pemanasan cuaca hadap populasi ikan dunia ngusarken.