

# BRAIN TREE

## Current Events



### 1<sup>st</sup> to 15<sup>th</sup> May - 2018

1. Ministry of Drinking Water and Sanitation has launched the Galvanizing **Organic Bio-Agro Resources Dhan (GOBAR-DHAN)** Scheme. The scheme would focus on managing and converting cattle dung and solid waste in farms to compost, biogas and bio-CNG. It will help in keeping the village clean while increasing the income of farmers and cattle herders. . The government is also planning to create an online platform for trading cow dung and agricultural waste under the scheme.
2. **'Blue Origin'**, the US aerospace company owned by Amazon founder Jeff Bezos, has launched its suborbital New Shepard rocket and space capsule. The mission marked the company's first test flight of the year and second flight of the New Shepard 2.0 spacecraft.

New Shepard system is a fully reusable **Vertical Takeoff, Vertical Landing (VTVL)** space vehicle. The name New Shepard makes reference to the first American astronaut in space, Alan Shepard, one of the original NASA Mercury Seven astronauts. New Shepard 2.0 space capsule is designed to fly commercial payloads and up to 6 passengers on suborbital space flights for science and tourism. The capsule features giant windows to give future passengers a stunning view of their launch into space.

3. The **Gravity Recovery and Climate Experiment Follow-On (GRACE-FO)** mission, a partnership between NASA and the German Research Centre for Geosciences (GFZ), will take over where the first GRACE mission left off when it completed its 15-year mission in 2017.

The GRACE missions measure variations in gravity over Earth's surface, producing a new map of the gravity field every 30 days, track Earth's water movement to monitor changes in underground water storage, the amount of water in large lakes and rivers, soil moisture, ice sheets and glaciers, and sea level caused by the addition of water to the ocean.

4. 15<sup>th</sup> Pravasi Bharatiya Divas will be held in the city of Varanasi in January. It will be organised by the Ministry of External Affairs in association with the

*Training Tomorrow's Administrators*

1 / 11

TODAY

Uttar Pradesh government. Theme: "Role of Indian Diaspora in building a New India"

5. The draft National Digital Communications Policy 2018 has been released by the Department of Telecom (DoT). It outlined three major missions it aims to achieve by 2022:
  - A. "Connect India" which it aims to create robust digital communications.
  - B. "Propel India" under which the government aims to harness the power of emerging digital technologies such as 5G, artificial intelligence (AI), Internet Of Things (IoT), etc.
  - C. "Secure India" - to safeguard the digital sovereignty of India with a focus on ensuring individual autonomy and choice, data ownership, privacy and security.
6. **DNA profiling Bill:** The government responding to a PIL petition on the use of DNA profiling stated that it would move a Bill in the upcoming Parliament session for DNA profiling to enable authorities to maintain records of unidentified and unclaimed dead bodies or missing persons.

**DNA Profiling Bill:**

- The bill proposes to allow collection of samples from parts of human body for DNA profiling and data preservation with the approval of a regulatory body.
- It suggests that a National DNA Profiling Board and a National DNA Bank be set up in Hyderabad, with every state having a regional DNA data bank.

**DNA profiling Board:**

- Constitution of a DNA Profiling Board, a statutory body to undertake functions such as laying down procedures and standards to establish DNA laboratories and grant accreditation to such laboratories; and advising the concerned ministries/departments of the Central and state governments on issues relating to DNA laboratories.
- The Board shall also be responsible for supervising, monitoring, inspecting and assessing the laboratories. The Board will frame guidelines for training of the law enforcement and other investigating agencies dealing with DNA-related matters. Advising on all ethical and human rights issues relating to DNA testing in consonance with international guidelines will be another function of the Board. It will recommend

research and development activities in DNA testing and related issues, etc.

- DNA profiling would be undertaken exclusively for identification of a person and would not be used to extract any other information.

**National DNA Data Bank:**

- There shall be a National DNA Data Bank, and Regional DNA Data Banks for the states, to be established by the Central government.
- The DNA Data Bank would maintain records of samples found at crime scenes, or from suspects, offenders, missing persons, volunteers, etc.

The bill also makes it clear that no DNA Laboratory shall undertake DNA profiling without the prior approval of the DNA Board. If a foreign country requests DNA profiling, the DNA Bank will coordinate through CBI or a concerned department. The bill mandates that the DNA profiles or samples be kept confidential, and they should be used only for establishing identity of a person and nothing else. Government investigation agencies and judiciary, among others, can seek information from Data Banks. For unauthorized use of data, a stringent punishment is provided

7. WHO recently released global air pollution database in Geneva.

**Highlights:**

- WHO monitored 4,300 world cities for their air pollution levels in terms of PM 2.5 levels in the year 2016. The PM2.5 includes pollutants like sulfate, nitrate and black carbon, which pose the greatest risk to human health.
- 14 out of 15 most polluted cities in the world are from India and the top 14 cities are from India only.
- **Kanpur** is the **most** polluted city which came on top with PM 2.5 concentration of 173 micrograms per cubic meter followed by Faridabad, Gaya, Patna, Agra, Muzaffarpur, Srinagar, Gurgaon, Jaipur, Patiala and Jodhpur
- The national Capital climbed down from the fourth spot, where it appeared in WHO 2015 data, to the sixth spot.
- The WHO report has mentioned and praised Prime Minister Narendra Modi's Pradhan Mantri Ujjwala Yojana scheme.

8. The Union Cabinet has given its approval for extending the **Pradhan Mantri Vaya Vandan Yojana (PMVVY)**. It has called for increasing investment limit from Rs 7.5 lakhs to Rs 15 lakhs as well as extension of time limits for subscription from 4thMay 2018 to 31stMarch, 2020

PMVVY: Pension Scheme exclusively for the senior citizens aged 60 years and above. The Scheme can be purchased offline as well as online through **Life Insurance Corporation (LIC)** of India which has been given the sole privilege to operate this Scheme.

Features of the Scheme:

- Scheme provides an assured return of 8% p.a. payable monthly (equivalent to 8.30% p.a. effective) for 10 years.
- Pension is payable at the end of each period, during the policy term of 10 years, as per the frequency of monthly/ quarterly/ half-yearly/ yearly as chosen by the pensioner at the time of purchase.
- The scheme is exempted from Service Tax/ GST.
- On survival of the pensioner to the end of the policy term of 10 years, Purchase price along with final pension installment shall be payable.
- Loan upto 75% of Purchase Price shall be allowed after 3 policy years (to meet the liquidity needs). Loan interest shall be recovered from the pension installments and loan to be recovered from claim proceeds.
- The scheme also allows for premature exit for the treatment of any critical/ terminal illness of self or spouse. On such premature exit, 98% of the Purchase Price shall be refunded.
- On death of the pensioner during the policy term of 10 years, the Purchase Price shall be paid to the beneficiary.

9. The Cabinet Committee on Economic Affairs has given its approval for the Umbrella Scheme, “Green Revolution – Krishonnati Yojana” in agriculture sector beyond 12th Five Year Plan for the period from 2017-18 to 2019-20.

Umbrella scheme comprises of 11 Schemes/Missions. These schemes look to develop the agriculture and allied sector in a holistic and scientific manner to increase the income of farmers by enhancing production, productivity and better returns on produce. The Schemes that are part of the Umbrella Schemes are:

- i. **Mission for Integrated Development of Horticulture (MIDH).**

- ii. **National Food Security Mission (NFSM).**
- iii. **National Mission for Sustainable Agriculture (NMSA).**
- iv. **Sub-Mission on Agriculture Extension (SMAE).**
- v. **Sub-Mission on Seeds and Planting Material (SMSPM).**
- vi. **Sub-Mission on Agricultural Mechanisation (SMAM).**
- vii. **Sub-Mission on Plant Protection and Plant Quarantine (SMPPQ).**
- viii. **Integrated Scheme on Agriculture Census, Economics and Statistics (ISACES).**
- ix. **Integrated Scheme on Agricultural Cooperation (ISAC).**
- x. **Integrated Scheme on Agricultural Marketing (ISAM).**
- xi. **National e-Governance Plan (NeGP-A).**

10. The Cabinet Committee on Economic Affairs has approved the proposal for renaming and restructuring of **Multi-sectoral Development Programme (MsDP)** as **Pradhan Mantri Jan Vikas Karyakram (PMJKV)**. CCEA has also approved its continuation during the remaining period of the 14th Finance Commission.

**Multi-sectoral Development Programme (MsDP)** was launched in the year 2008-09 in 90 identified **Minority Concentration Districts (MCDs)** having at least 25% minority population and below national average with respect to one or both of the backwardness parameters with the objective of developing assets for socio-economic and basic amenities. It is one of the Core of the Core Schemes under National Development Agenda

11. An Indo-US study has found that global warming is leading to large-scale fish kills in the Arabian Sea by fuelling the growth of harmful bioluminescent algae called *Algae Noctiluca scintillans*. It is believed to be dangerous to ocean life because it produces ammonia. The *Noctiluca* algae are often reported to occur in patches or blooms in the Northern Arabian Sea. These striking green blooms often appear to glow at night due to a special phenomenon called bioluminescence, earning them the nickname 'sea sparkle'.
12. FDI confidence index for the year 2018 released. Index prepared by A.T. Kearney is an annual survey which tracks the impact of likely political, economic, and regulatory changes on the foreign direct investment intentions and preferences of CEOs, CFOs, and other top executives of Global 1000 companies. The report includes detailed commentary on the markets and the impact a variety of global trade issues have on their FDI attractiveness, as well as a ranking of the top 25 countries. India is ranked 11th down three ranks

*Training Tomorrow's Administrators*

5 / 11

TODAY

from last year. India remains the second highest ranked emerging market on the Index. A variety of recent reforms have made its regulatory environment more business friendly and economic growth is forecast to rebound this year. US topped the list, followed by Canada, while Germany dropped to the third place.

**13.** WHO has released draft recommendations on limiting the intake of Trans fats. The Key recommendations are;

- 1) Saturated fatty acids should not comprise more than 10% of your daily calorie intake.
- 2) Trans fatty acids should not comprise more than 1% of your daily calorie intake.
- 3) Use heart-healthy polyunsaturated fatty acids (PUFAs) as replacement.
- 4) The recommendations are applicable to both adults and children.

**Saturated fatty acids:** Saturated fatty acids are found in foods from animal sources such as butter, milk, meat, salmon, and egg yolks, and some plant-derived products such as chocolate and cocoa butter, coconut, palm and palm kernel oils.

Tran's fats: Trans are largely produced artificially but, a small amount also occur naturally. Artificial TFAs are formed when hydrogen is made to react with the oil to produce fats resembling pure ghee/butter. Major sources of artificial TFAs are the **Partially Hydrogenated Vegetable Oils (PHVO)**/Vanaspati / Margarine while the natural TFAs are present in meats and dairy products, though in small amounts.

Tran's fats are the most harmful type of fats. They pose a higher risk of heart disease than saturated fats. While saturated fats raise total cholesterol levels, TFAs not only raise total cholesterol levels but also reduce the good cholesterol (HDL). Tran's fats consumption increases the risk of developing heart disease and stroke. It is also associated with a higher risk of developing obesity, type 2 diabetes, heart disease, metabolic syndrome, insulin resistance, infertility and certain types of cancers and can also lead to compromised foetal development.

TFA containing oils can be preserved longer, they give the food the desired shape and texture and can easily substitute 'Pure ghee' and are also far less expensive.

14. The Justice Rajesh Bindal Committee which was set up by the Centre to prepare a report on the issue of inter-country parental child abduction has questioned one of the basic principles of The Hague Convention by arguing that the return of the child to his or her habitual residence may not necessarily be in the best interest of the child. The Committee recently submitted its report to the Women and Child Development Ministry. The panel has prepared a draft law to safeguard the interest of the children, as well as those of the parents, particularly mothers. The proposed legislation lays down nine exceptions under which a child will not be returned to the country of habitual residence. The important conditions under which a child's return can be refused are — best interest of the child, domestic violence or mental or physical cruelty or harassment against the parent who fled with the child, the parent claiming the return of the child was not exercising the custody rights at the time of removal, and if there is a grave risk that the child would be exposed to physical or psychological harm.
15. Brown peach aphid, an insect that attacks temperate fruit trees, has been recorded for the first time in Kashmir Valley. Aphids feed on the saps of plants, attacking plant tissues that transport food to all different plant parts. The brown peach aphid *Pterochloroides persicae* is a notorious pest of peach and almond trees in the Mediterranean regions. In India, the aphid was recorded for the first time in the 1970s from Himachal Pradesh and Punjab.
16. Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (In Sight), the first-ever mission to study the heart of Mars was launched on board Atlas 5 rocket, by NASA. The mission will use the seismic waves generated by mars quakes to develop a map of the planet's deep interior. It is expected to address one of the most fundamental issues of planetary and solar system science – understanding the processes that shaped the rocky planets of the inner solar system (including Earth) more than four billion years ago.
17. **Madhya Pradesh Gets India's First Smart Cities Control Centre:** Integrated Control and Command Centre (ICCC) is a cloud-based Universal Internet of Things (UIoT) platform developed by Hewlett Packard Enterprise (HPE). It can run multiple city command centre operations through its multi-efficiency capabilities. ICCC would integrate a multitude of citizens' services applications and sensors running across selected cities of Madhya Pradesh. It would enable the authorities to monitor the status of various smart civic amenities, such as public transport buses, dial 100 vehicles, 108 ambulance services, smart poles, smart lights, traffic management cameras, public bike sharing,

*Training Tomorrow's Administrators*

7 / 11

TODAY

solid waste management, meteorological department updates, smart maps etc. , in real-time.

18. The Government of India has Amended the Government of India (Allocation of Business) Rules, 1961 substituting “Directorate General of Anti-Dumping and Allied Duties” with “Directorate General of Trade Remedies” in Department of Commerce. The DGTR will function as an attached office of Department of Commerce. The recommendation of DGTR for imposition of Anti-dumping, countervailing & Safeguard duties would be considered by the Department of Revenue.

Currently, the Directorate General of Anti-dumping and Allied Duties (DGAD) deals with anti-dumping and CVD cases, Directorate General of Safeguards (DGS) deals with safeguard measures and DGFT deals with quantitative restriction (QR) safeguards. While The DGTR will be a professionally integrated organisation with multi-spectrum skill sets emanating from officers drawn from different services and specializations

19. The Ministry of Social Justice and Empowerment has come out with a draft Maintenance and Welfare of Parents and Senior Citizen Draft Bill, 2018, that will amend the 2007 version.

#### **Highlights**

- The Bill enhances the jail term for those found abandoning or abusing their parents, 60 years or older, to six months from the existing three months.
- The Bill expands the definition of children, which currently refers to only biological children and grandchildren, to include daughter-in-law and son-in-law and also adopted/step-children.
- It extends the definition of maintenance beyond provision of food, clothing, housing, health care to include “safety and security” of the parent.
- As per the Bill, senior citizens can also approach a Maintenance Tribunal in case their children neglect or refuse to maintain them. In such cases, the draft Bill states that the Tribunal can order the children or, in case the person is childless, the relative to pay a monthly maintenance to the senior citizen. The amount would be decided by taking into account the standard of living of the senior citizen and the financial situation of both the parties.

- The Bill proposes to make monthly maintenance amount variable as people who earn more, can afford to shell out a higher amount for the upkeep of their parents.
- The Bill also introduces a punitive measure of up to one month imprisonment in case the monthly allowance remains unpaid.
- Currently, various government and private schemes for insurance/health, housing and travel, have varied cut-off age for offering benefits meant for senior citizens. The Bill mandates the uniform age across schemes should be 60 years.
- The Bill will require the government to establish and run at least one Senior Citizen Care Home in every district in the country.
- As per the Bill, if parents transfer property to their children on the condition that they take care of them, and this clause is breached, the transfer of property will be deemed to be “made by fraud or coercion or under undue influence” and a tribunal can order it to be transferred back to the parent

20. US President Donald Trump has announced that he is pulling out of the Iran nuclear deal.

Under the Iran nuclear deal, formally called the **Joint Comprehensive Plan of Action (JCPOA)**, Tehran, in 2015 Iran signed a deal with the five permanent members of the UN Security Council: the US, UK, Russia, China, and France Plus Germany, to significantly cut its stores of centrifuges, enriched uranium and heavy-water, all key components for nuclear weapons. The deal was also enshrined in a UN Security Council resolution, incorporating it into international law.

Trump and opponents to the deal say it is flawed because it gives Iran access to billions of dollars but does not address Iran’s support for groups the U.S. considers terrorists, like Hamas and Hezbollah. They note it also doesn’t curb Iran’s development of ballistic missiles and that the deal phases out by 2030. They say Iran has lied about its nuclear program in the past.

21. The government has approved distinctive green licence plates for electric vehicles to encourage people to use electric vehicles. Such vehicles will be fitted with green licence plates bearing numbers in white fonts for private cars and yellow font for taxis. The purpose behind distinctive number plates is their easy

identification for preferential treatment in parking, free entry in congested zones besides other proposed benefits like concessional toll.

- 22.** National Technology Day was observed on May 11 2018 . The theme was : “Science and Technology for a Sustainable Future”.

On May 11, 1998, India detonated three nuclear bombs in the Indian Army’s Pokhran Test Range. Dr APJ Abdul Kalam lead the Indian team of scientists to successfully test-fire the Shakti-1 nuclear missile at Rajasthan’s Pokhran test range.

Hansa 3, India’s first indigenous aircraft was first tested on the same day in 1998 in Bangalore.

Successful test firing of Trishul, a short-range missile made in India, was also done on the same day.

- 23.** World Migratory Bird Day May 12th. 2018 theme: “Unifying Our Voices for Bird Conservation”

Efforts to conserve migratory birds both globally and regionally are internationally coordinated by the Convention on the Conservation of Migratory Species of Wild Animals (CMS, also known as the Bonn Convention) and the Agreement on the Conservation of African-Eurasian Migratory Water birds (AEWA). The two UN Environment-administered treaties have been spearheading World Migratory Bird Day since 2006.

Convention on the Conservation of Migratory Species of Wild Animals aims to conserve terrestrial, aquatic and avian migratory species throughout their range. CMS and its related Agreements on migratory birds bring together governments and other stakeholders to coordinate and further develop conservation policies, to ensure that all flyways in the world benefit from coordination mechanisms that promote cooperation at ground level among the countries involved. It is under aegis of **United Nations Environment Programme (UNEP)**.

Agreement on the Conservation of African-Eurasian Migratory Water birds (AEWA) is an intergovernmental treaty dedicated to the conservation of migratory water birds that migrate along the African-Eurasian Flyway. The Agreement covers 254 species of birds ecologically dependent on wetlands for at least part of their annual cycle.

- 24. Bangabandhu Satellite-1:** It is Bangladesh’s first communications satellite. Built by Thales Alenia Space, a Franco-Italian aerospace manufacturer, it is

*Training Tomorrow’s Administrators*

10 / 11

*TODAY*

designed to provide a wide range of broadcast and communication services throughout the country for the next 15 years. It is named after Bangladesh's "Father of the Nation"- Bangabandhu Sheikh Mujibur Rahman.

25. The Supreme Court has upheld a ruling that the Domestic Violence Act, intended to safeguard women against marital abuse, will apply even after divorce. The court observed that the act extends to all man-woman relationships, and also protects divorced women from their former husbands.
26. The Supreme Court has expressed concern about overcrowding in prisons across the country and asked all the high courts to consider the issue as it involves "violation of human rights". The Centre apprised the court that steps were being taken to encourage setting up of 'open prisons' and a model uniform rules for the administration of open correctional institutions have already been framed.

The management of 'Prisons' falls exclusively under the domain of the state government, as per the seventh schedule of the constitution. In every state, the prison administrative machinery works under the chief of prisons who is a senior ranking IPS officer.

27. Scientists at the **Indian Space Research Organisation (ISRO)** have reported progress in the development of an environment-friendly propellant to power satellites and spacecraft. The new propellant is a blend based on hydroxylammonium nitrate (HAN)

A monopropellant is a chemical propulsion fuel which does not require a separate oxidizer. It is used extensively in satellite thrusters for orbital correction and orientation control.

Presently, hydrazine rocket fuel is being used. Despite its highly toxic and carcinogenic properties and the challenges faced in its manufacturing, storage, ground handling and transportation, hydrazine has dominated the space industry as the choice of propellant for over six decades. This is due to its high performance characteristics.