

## Prelim Bits 14-09-2022 & 15-09-2022 | UPSC Daily Current Affairs

### Arattupuzha Velayudha

- Arattupuzha Velayudha was born into a well-off family of merchants in Kerala's Alappuzha district.
- He challenged the domination of upper castes or 'Savarnas' and brought about changes in the lives of both men and women.
- He was known as the Morning Star of the Kerala Renaissance.
- **Arattupuzha's role in initiating social reforms** - He built two temples in the villages of Arattupuzha and Thanneermukkom.
- These temples were dedicated to the Hindu god Shiva, in which members of all castes and religions were allowed entry.
- In 1858, he led **Achippudava Samaram strike** at Kayamkulam (Alappuzha) to earn women belonging to Kerala's oppressed groups their right to wear a lower garment that extended beyond the knees.
- In 1859, this was extended into the **Ethappu Samaram strike**, the struggle for the right to wear an upper body cloth by women belonging to backward castes.
- In 1860, he led the **Mukkuthi Samaram** at Pandalam, for the rights of lower-caste women to wear 'mukkuthi' (nose-ring), and other gold ornaments.
- Apart from issues related to women, Arattupuzha also led the first-ever strike by agricultural labourers in Kerala, the **Karshaka Thozhilali Samaram**, which was successful.
- He also established the first **Kathakali Yogam** (area-based schools for the classical dance form Kathakali) for the Ezhava community in 1861.
- He was a master of Kalaripayattu, Kerala's traditional martial arts, which is also considered the oldest of its kind in India.
- Panicker was murdered by a group of upper-caste men in 1874 at the age of 49. This makes him the '**first martyr**' of the Kerala renaissance.
- **Recognition** - In 1869, he was given the title of 'Panicker' by the then-king of Travancore.
- In 2005, the Kerala government inaugurated the Arattupuzha Velayudha Panicker Research Foundation & Cultural Centre, Thiruvananthapuram.

### Nangeli

- Nangeli was an Ezhava woman who is said to have lived in the 19th century in Alappuzha, Kerala.
- Nangeli is believed to have cut off her breasts to protest the 'breast tax' imposed by the Kingdom of Travancore on women belonging to lower castes.

### Kayamkulam Kochunni

- He is a Robin Hood-like figure in 19th century Alappuzha.
- The stories about him are an integral part of Kerala's folklore.
- A shrine is dedicated to him at Kozhencherry in the Pathanamthitta district, and a small museum at Varanapalli in his native Kayamkulam.

## Reference

1. <https://indianexpress.com/article/explained/arattupuzha-velayudha-panicker-malayalam-movie-pathonpatham-noottandu-8149074/>
2. <https://www.thehindu.com/entertainment/movies/pathonpatham-noottandu-movie-review-a-package-with-some-punch-despite-its-failings/article65878843.ece>
3. <https://www.sahapedia.org/arattupuzha-velayudha-panicker-morning-star-of-the-kerala-renaissance>

## Board of Trade

*The Union Minister of Commerce & Industry chairs the first meeting of the newly reconstituted Board of Trade.*

*The Board of Trade meeting was focused on*

1. *Export target setting,*
  2. *The New Foreign Trade Policy (FTP) (2022-27), and*
  3. *The strategies and measures to be taken in order to take forward domestic manufacturing and exports.*
- The Board of Trade (BOT) been reconstituted by merging Council for Trade Development and Promotion with Board of Trade in 2019.
  - This Board advises the Government on policy measures connected with the Foreign Trade Policy in order to achieve the objectives of boosting India's trade.
  - It provides a platform to state governments and UTs for articulating state-oriented perspectives on Trade Policy to boost manufacturing and exports.
  - It also acts as a platform to Government of India for appraising State Governments and UTs about international developments affecting India's trade.
  - It is an important mechanism for deliberations on trade related issues with industry bodies, associations, export promotion councils, and state and UT governments.

*Exports have been one of the most defining features of the government's efforts to make India a developed country by 2047, a vision articulated by PM Narendra Modi, in his Independence Day address this year.*

## Reference

1. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1859045>
2. <https://www.thehindubusinessline.com/economy/govt-appoints-29-members-in-board-of-trade/article65630409.ece>
3. <https://www.moneycontrol.com/news/economy-2/piyush-goyal-to-chair-board-of-trade-meeting-today-9169091.html>

## 'Triple dip' La Nina

*The Australian Bureau of Meteorology confirmed the occurrence of the 'Triple dip' La Niña phenomenon.*

- *The La Niña weather pattern is one of the three phases of the El Niño Southern Oscillation (ENSO).*
- *La Niña is caused by large-scale cooling of the ocean surface temperatures in the central and eastern equatorial Pacific Ocean.*
- *La Niña is also the opposite of the widely-known El Niño, which only occurs when the Pacific Ocean water is higher than normal.*
- *'Triple dip' La Niña phenomenon means that the La Niña phenomenon has occurred for the third consecutive year in the Pacific Ocean.*
- *The World Meteorological Organisation (WMO) had stated that it is exceptional to have three consecutive years with a La Niña event.*
- *Its cooling influence is temporarily slowing the rise in global temperatures - but it will not halt or reverse the long-term warming trend.*
- *The WMO has stated that this phenomenon would last until at least the end of the year, and for the first time this century, span 3 consecutive northern hemisphere winters to become a 'triple dip' La Niña.*

*The India Meteorological Department states that, since the 1950s, La Niña lasting for more than two years has been recorded only on six instances.*

- **Reasons for 'Triple dip' La Niña** - The continuing La Niña may be good for India but not for some other countries.
- Under climate change conditions, one must expect more such instances.
- El Niño has been associated with rising heatwaves and extreme temperatures, such as in parts of the US, Europe and China recently.
- India's Northeast monsoon rainfall remained subdued during past La Niña events, but the 2021 monsoon is an exception in recent years.
- In 2021, the southern Indian peninsula experienced its wettest recorded winter monsoon since 1901, receiving a whopping 171% surplus of rainfall between October and December.

## Reference

1. <https://indianexpress.com/article/explained/explained-climate/triple-dip-la-nina-india-monsoon-impact-8151437/>
2. <https://www.bbc.com/weather/features/62890361>
3. <https://thehill.com/policy/equilibrium-sustainability/3638209-what-is-triple-dip-la-nina/>

## National List of Essential Medicines 2022

*The National List of Essential Medicines (NLEM) 2022 was released after revising the NLEM 2015.*

*According to the World Health Organisation (WHO), Essential Medicines are those that satisfy the priority health care needs of the population.*

- The National List of Essential Medicines (NLEM) was first formulated in 1996 by the **Ministry of Health and Family Welfare**.
- It is framed on the lines of the Essential Medicines List (EML) released by the WHO.
- The NLEM is **revised on a regular basis** considering the changing public health priorities as well as advancement in pharmaceutical knowledge.

- The NLEM was revised thrice in 2003, 2011 and 2015, before 2022.
- The primary purpose of NLEM is to promote rational use of medicines considering three important aspects - **cost, safety and efficacy**.
- It helps in optimum utilisation of healthcare resources and budget, drug procurement policies, health insurance, improving prescribing habits, medical education and training and drafting pharmaceutical policies.
- Furthermore, the NLEM promotes prescription by generic names.
- In NLEM, the medicines are **categorised based on the level of the healthcare system** as primary, secondary and tertiary.
- The list may also include drugs that are still under patent.
- For revising the NLEM 2015 to release the NLEM 2022, the NLEM independent Standing National Committee on Medicines (SNCM) was constituted by the Union Health Ministry in 2018.
- The NLEM 2022 has 384 drugs across 27 categories, after 34 new drugs were added to the list and 26 drugs from the previous list have been dropped.

*The prices of essential medicines are regulated by the National Pharmaceutical Pricing Authority.*

## The Process for Addition and Elimination

- **Adding the drugs to the list** - For inclusion in the NLEM list, the drugs have to be useful in treating diseases that are a public health problem in India.
- They have to be licensed/ approved by the Drugs Controller General of India (DCGI).
- They also must have proven efficacy, a safety profile based on scientific evidence, comparatively cost effective, and aligned with the current treatment guidelines.
- They have to be recommended under the National Health Programs of India.
- When more than one medicine is available from the same therapeutic class, a prototype that is the best-suited medicine of that class is included.
- Besides this, the price of the total treatment is considered and not the unit price of a medicine.
- Fixed dose combinations are usually not included.
- **Eliminating the drugs from the list** - A medicine is deleted from the list,
  1. If it is banned in India;
  2. If there are reports of concerns on the safety profile and
  3. If a medicine with better efficacy and is cheaper is available.
- If the disease, for which a particular medicine is recommended, is no longer a national health concern, the drug is taken off the list.
- In case of antimicrobials, if the resistance pattern has rendered an antimicrobial ineffective, it is removed from the NLEM.

## Reference

1. <https://www.thehindu.com/sci-tech/health/explained-the-lowdown-on-the-essential-medicines-list/article65890118.ece>
2. <https://pharmaceuticals.gov.in/sites/default/files/NLEM.pdf>
3. <https://indianexpress.com/article/upsc-current-affairs/upsc-key-september-14-2022-why-you-should-read-national-list-of-essential-medicine-or-crispr-technology-or-coastal-regulation-zone-for-upsc-cse-8151439/>

## Traffic Separation Scheme

*The Mediterranean Shipping Company (MSC) - world's largest container carrier - has taken the lead by re-routing its ships to keep away from colliding the blue whales.*

- Traffic Separation Scheme (TSS) is a **routeing measure** aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes.
- A TSS area is an area in the sea where navigation of ships is highly regulated.
- Each TSS is designed to create lanes in the water with ships in a specific lane all travelling in (roughly) the same direction.
- A TSS is typically created in locations with large numbers of ship movements and vessels travelling in different directions and where there might otherwise be a high risk of collisions.
- TSSs are **indicated on an admiralty chart in purple**, one that has been touched upon even by those starting out their career at sea in all probability.
- These are imaginary lines that don't have actual representation through borders on location.
- But they are complied with by all vessels out at sea as conformity to it is mandatory as per Rule 10 of the **Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs)**.

*The first Traffic Separation Scheme was established in the Dover Strait in 1967.*

### Reference

1. <https://www.thehindubusinessline.com/news/saving-the-blue-whales-from-ship-strikes/article6588608ecec>
2. <https://www.imo.org/en/OurWork/Safety/Pages/ShipsRouteing.aspx>
3. <https://www.marineinsight.com/marine-navigation/9-common-mistakes-that-can-occur-while-using-traffic-separation-scheme-on-ships/>

## Cameroon Volcanic Line

*A sudden change in the colour and smell of Lake Kuk, in north-west Cameroon, has caused panic among the locals. Fears are driven by an incident that happened 36 years ago at Lake Nyos.*

- Both Lake Kuk and Nyos are **crater lakes** located in a region of volcanic activity known as the Cameroon Volcanic Line.
- The Cameroon volcanic line consists of a **string of volcanoes** that extend from the **Atlantic Ocean into Republic of Cameroon**.
- The current period of volcanic activity started approximately 38 Ma ago and extends to the present.
- The volcanoes here cross the oceanic-continental boundary.
- The rocks of this volcanic line range in composition from picro-basalt and basalt through intermediate compositions to phonolite and rhyolite.
- Silica saturated rocks are largely confined to the continental portion of the province.
- **Incidents** - Around 36 years ago, Lake Nyos emitted lethal gases (mainly carbon dioxide) that was released from the Earth's mantle.
- This carbon dioxide gas had been accumulating at the bottom of the lake for centuries.
- Two years earlier, Lake Monoum, about 100km south-west of Lake Nyos, killed 37 people.
- There are 45 crater lakes in the Cameroon volcanic line that could contain lethal amounts of

gases.

- Other lakes around the world that pose a similar threat include Lake Kivu at the border of Rwanda and the Democratic Republic of Congo, Lake Ngozi in Tanzania and Lake Monticchio in Italy.
- **Managing dangerous lakes** - Authorities should immediately restricted access to the lakes where there is a release of gas.
- Due to the dynamic and active nature of the Cameroon Volcanic Line, there is a possibility that volcanic gases can seep into the lake at any moment.
- An onsite scientific investigation would determine with certainty the abnormal behaviour of the lakes.
- An additional step would be for a carbon dioxide detector to be installed the potentially dangerous crater lakes. This would serve as an early warning system for lethal gas releases.

## Reference

1. <https://www.downtoearth.org.in/blog/africa/cameroon-s-exploding-lakes-disaster-expert-warns-deadly-gas-release-could-cause-another-tragedy-84899>
2. [https://faculty.uml.edu/Nelson\\_Eby/Research/Cameroon/cvl.htm](https://faculty.uml.edu/Nelson_Eby/Research/Cameroon/cvl.htm)
3. <https://earthscience.stackexchange.com/questions/2895/is-the-cameroon-line-still-an-active-rift-zone>

