

Prelim Bits 03-03-2022 | Daily UPSC Current Affairs

Katchatheevu Island

Recently, eight fishermen from Tamil Nadu were arrested by the Sri Lankan Navy near Katchatheevu Island for crossing the International Maritime Boundary Line (IMBL).

- Katchatheevu is an uninhabited islet in the Palk Strait that was formed due to volcanic eruption in the 14th century.
- This 285-acre land was owned by the Raja of Ramanathapuram.
- Later, it became part of the Madras Presidency after the delimitation of Gulf of Mannar and Palk Strait during British rule between the then governments of Madras and Ceylon.
- During the British rule, it was administered jointly by India and Sri Lanka.
- This island is strategically important for fishing activities.
- In 1921, both Sri Lanka and India claimed this piece of land for fishing and the dispute remained unsettled.

Reference

1. <https://www.thehindu.com/news/national/tamil-nadu/eight-fishermen-held-by-sri-lankan-navy-near-katchatheevu/article65090752.ece>
2. <https://mea.gov.in/lok-sabha.htm?dtl/32140/QUESTION+NO2538+KATCHATHEEVU+ISLAND>
3. <https://www.livemint.com/Politics/acjYPxP6XuKnITLqJ2P3QI/Katchatheevu-The-big-issue-over-a-small-island.html>

Cluster Bombs and Vacuum Bombs

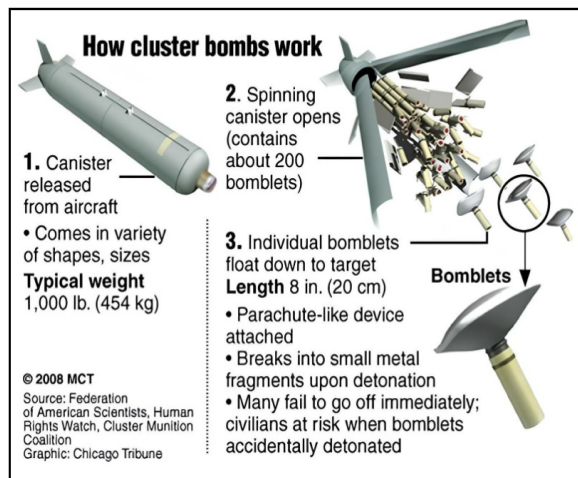
Amnesty International and Human Rights Watch, and Ukraine's ambassador to the United States accused Russia of using cluster bombs and vacuum bombs in the ongoing war.

Cluster Bombs

- According to the 2008 Convention on Cluster Munitions, a cluster munition or a cluster bomb means a "conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions".
- Cluster munitions are **non-precision weapons** that are designed
 1. To injure or kill human beings indiscriminately over a large area, and
 2. To destroy vehicles and infrastructure such as runways, railway or power transmission lines.
- They are dropped from aircraft or fired from the ground or sea, opening up in mid-air to release tens or hundreds of submunitions or **bomblets**.
- Many of these bomblets end up not exploding, but continue to lie on the ground, often partially or fully hidden and difficult to locate and remove, posing a threat to the civilian population for long after the war is ceased.
- The Convention on Cluster Munitions specifically identifies "cluster munition remnants", which include failed cluster munitions, abandoned cluster munitions, unexploded submunitions

and unexploded bomblets.

Countries that have ratified the Convention on Cluster Munitions are prohibited from using cluster bombs.

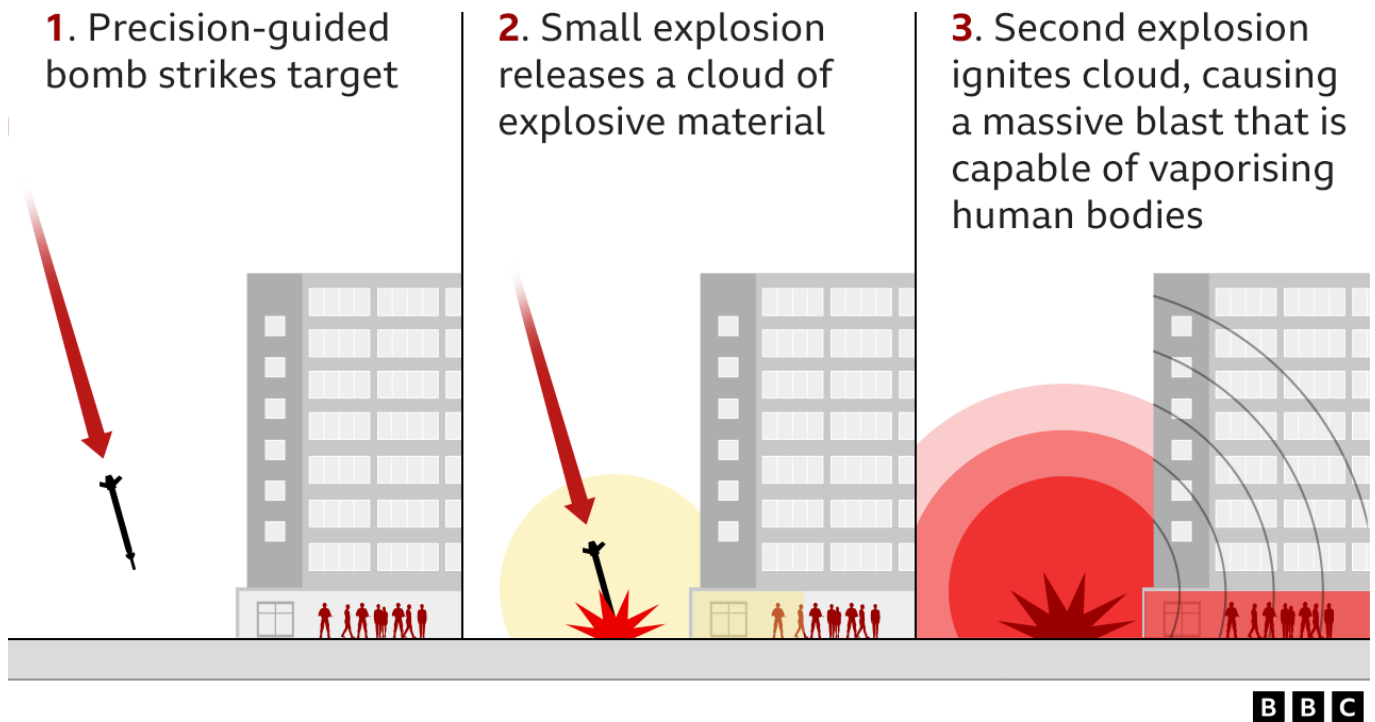


Vacuum Bombs

- Vacuum bombs are also known as aerosol bombs, fuel air explosives, or thermo-baric weapons.
- A vacuum bomb consists of a fuel container with two separate explosive charges.
- They use oxygen from the air for a large, high-temperature blast.
- They cause significantly greater devastation than a conventional bomb of comparable size.
- The weapons, which go off in two separate stages, can be fired as rockets from tank-mounted launchers or dropped from aircraft.
- **Two stages** - As they hit their target, a first explosion splits open the bomb's fuel container, releasing a cloud of fuel and metal particles that spreads over a large area.
- A second explosion then occurs, igniting the aerosol cloud into a giant ball of fire and sending out intense blast waves that can destroy even reinforced buildings or equipment and vaporise human beings.

Vacuum bombs are not prohibited by any international law or agreement, but their use against civilian populations in built-up areas, schools or hospitals, could attract action under the Hague Conventions of 1899 and 1907.

How thermobaric weapons work



Reference

1. <https://indianexpress.com/article/explained/explained-cluster-bombs-thermobaric-weapons-russia-ukraine-war-7797978/>
2. <https://www.bbc.com/news/business-60571395>
3. <http://www.stopclustermunitions.org/en-gb/cluster-bombs/what-is-a-cluster-bomb.aspx>

Ischemic Stroke

A 22-year-old student from Punjab who had suffered an ischemic stroke and was undergoing treatment for about a month died in Ukraine.

There are two types of stroke - ischemic and hemorrhagic.

A stroke is a medical emergency, and prompt treatment is crucial. Early action can reduce brain damage and other complications.

- An ischemic stroke is the more common type of stroke. It's also referred to as brain ischemia and cerebral ischemia.
- **Causes** - It is usually caused by a **blood clot** that blocks a blood vessel in the brain. This interrupts or reduces blood from flowing to the brain.
- This, in turn, will prevent brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes.
- Another cause is **stenosis**, or narrowing of the artery.
- This can happen because of atherosclerosis, a disease in which plaque builds up inside your arteries.

- Transient ischemic attacks (TIAs) also known as a ministroke, occur when the blood supply to the brain is interrupted briefly.
- Having a TIA can mean you are at risk for having a more serious stroke.
- **Symptoms** - Trouble speaking & understanding what others are saying.
- Paralysis or numbness of the face, arm or leg.
- Problems seeing in one or both eyes.
- A sudden, severe headache, which may be accompanied by vomiting, dizziness or altered consciousness.
- Trouble walking

Reference

1. <https://www.thehindu.com/todays-paper/student-from-punjab-barnala-dies-of-stroke/article65185448.ece>
2. <https://www.mayoclinic.org/diseases-conditions/stroke/symptoms-causes/syc-20350113#:~:text=An%20ischemic%20stroke%20occurs%20when,brain%20damage%20and%20other%20complications.>
3. <https://medlineplus.gov/ischemicstroke.html>
4. <https://www.healthline.com/health/stroke/cerebral-ischemia>

WHO's Pandemic Treaty

Members of the World Health Organisation (WHO) held the first round of negotiations towards the Pandemic Treaty.

- The WHA adopted a decision titled “The World Together” at its 2nd special session since it was founded in 1948.
- Under the decision, the WHO established an Intergovernmental Negotiating Body (INB) to draft and negotiate the contents of the pandemic treaty in compliance with Article 19 of the WHO Constitution.
- The need for the pandemic treaty was felt after the COVID-19 pandemic exposed the shortcomings of global health systems.
- The New pandemic treaty would signal high-level political action needed to protect the world from future health crises
- This treaty is expected to cover aspects like data sharing and genome sequencing of emerging viruses and equitable distribution of vaccines and drugs and related research throughout the world.
- Solutions to the COVID-19 pandemic have seen an inequitable distribution of vaccines so far, with poorer countries at the mercy of others to receive preventive medication.

While the EU wants the treaty to be legally binding, the U.S., Brazil and India have expressed reservations about the same. The legal nature of the treaty is yet to be defined.

Article 19 of the WHO

- Article 19 of the WHO Constitution gives the WHA the authority to adopt conventions or agreements on matters of health.
- A two-third majority is needed to adopt such conventions or agreements.
- The WHO Framework Convention on Tobacco Control was set up under Article 19 and it came

into force in 2005.

Reference

1. <https://www.thehindu.com/news/international/explained-whos-pandemic-treaty-to-prevent-future-global-health-disasters/article65144675.ece?homepage=true>
2. <https://www.who.int/news/item/30-03-2021-global-leaders-unite-in-urgent-call-for-international-pandemic-treaty>

Ghost Flights

With the decline in flights for business or pleasure due to the ongoing pandemic, airlines that are attempting to maintain market share are complaining about the 'ghost flights' they are being forced to fly.

- A European Union (EU) regulation that dates back to 1993 requires European airlines to maintain **empty or near-empty flights** just to retain their take-off and landing slots.
- This '**use it or lose it**' system was employed to ensure that airlines have access to the busiest EU airports on the basis of principles of neutrality, transparency & non-discrimination.
- This is done to avoid the slots from being handed over to other airlines that might be competitors or new market entrants.
- Usually, these airlines are required to use up to 80% of their slots to secure them.
- Owing to the pandemic, this threshold was temporarily reduced to 50% of booked flights but as soon as this winter ends in March 2022, it is set to once again increase to 64%.
- Essentially, airline operators have to prove that they have adequate market demand that justifies their holdings.
- It is a reported fact that the aviation sector accounts for a considerable amount of carbon emissions worldwide.

Reference

1. <https://www.thehindu.com/business/explained-what-are-europes-ghost-flights-and-why-are-they-a-problem/article65184785.ece?homepage=true>
2. <https://www.independent.co.uk/climate-change/infact/ghost-flights-eu-airlines-airports-climate-b1991531.html#question-0>