

INTERNATIONAL RELATION

Turkey's Stand in Russia- Ukraine Crisis

Recently, Turkey urged Russia to drop its one-sided demands regarding North Atlantic Treaty Organisation (NATO) and Ukraine. It also requested Russia to take a moderate approach in its demands with the western alliance (US and other western countries).

Earlier, the US intelligence reports said the tension on the Russia-Ukraine border represents a major security crisis for the region, with the potential to snowball into a broader conflict.

Key Points

Background:

History:

- ➤ Ukraine and Russia share hundreds of years of cultural, linguistic and familial links.
- For many in Russia and in the ethnically Russian parts of Ukraine, the shared heritage of the countries is an emotional issue that has been exploited for electoral and military purposes.
- As part of the Soviet Union, Ukraine was the second-most powerful Soviet republic after Russia, and was crucial strategically, economically and culturally.

• The Conflict:

- Ever since Ukraine split from the Soviet Union, both Russia and the West have vied for greater influence in the country in order to keep the balance of power in the region in their favour.
- Also the unique geography of the Black Sea region confers several geopolitical advantages to Russia.
- ➤ The Donbass region (the Donetsk and Luhansk regions) of eastern Ukraine has been facing a pro-Russian separatist movement since 2014.
- ➤ In 2014, Russia seized Crimea from Ukraine in what was the first time a European country annexed territory from another country since World War-2 (1939 1945).
- In 2015, an open conflict was averted after the 'Minsk II' peace agreement was signed by Representatives of Russia, Ukraine, the Organisation for Security and Cooperation in Europe (OSCE) and the leaders of two pro-Russian separatist regions, under the mediation of France and Germany.
- Recently, Ukraine urged NATO to speed up his country's membership in the alliance.
- Russia declared such a move a "red line", and worried about the consequences of the US-led military alliances expanding right up to its doorstep.

Current Situation:

- Russia is seeking assurances from the US that Ukraine will not be inducted into NATO. However, the US is not prepared to give any such assurance. This has left the countries in a stand-off, with tens of thousands of Russian troops ready to invade Ukraine.
- Russia is keeping the tensions high at the Ukraine border in order to get sanctions relief and other concessions from the West.
- Any kind of military action by the US or European Union (EU) against Russia would precipitate a major crisis for the whole world, and has so far not been mooted by any of the parties involved.
- However, the US has offered to re-open talks between the NATO alliance and Russia to ease Russia's concerns. A meeting of the NATO-Russia Council has been proposed for January 2022, though Ukraine has not publicly agreed.

Turkey's Stand:

- Turkey has irritated Russia by supplying combat drones to Ukraine that Russia fears could be used by Ukraine in its conflict with separatists in two eastern regions.
- Turkey has also upset the US and NATO by acquiring an advanced missile defence system from Russia that resulted in sanctions from the United States.
- It has urged Russia and the Western defence alliance to remove their differences in direct negotiations proposed by NATO chief Jens Stoltenberg.

India's Stand:

• India did not join the Western powers' condemnation of Russia's intervention in Crimea and kept a low profile on the issue.

DAILY CURRENT AFFAIRS



In November 2020, India voted against a Ukraine-sponsored resolution in the United Nations (UN) that condemned alleged human rights violations in Crimea thereby backing old ally Russia on the issue.

North Atlantic Treaty Organisation

- It is a military alliance established by the North Atlantic Treaty (also called the Washington Treaty) of April, 1949, by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.
- A key provision of the treaty, the so-called Article 5, states that if one member of the alliance is attacked in Europe or North America, it is to be considered an attack on all members. That effectively put Western Europe under the "nuclear umbrella" of the US.
- NATO has only once invoked Article 5, in September, 2001 following the 9/11 attacks on the World Trade Centre in the US.
- As of 2019, there are 29 member states, with Montenegro becoming the latest member to join the alliance in 2017.

Organisation for Security and Co-operation in Europe

- It is the world's largest security-oriented intergovernmental organisation. Its mandate includes issues such as arms control, promotion of human rights, freedom of the press, and fair elections. Its headquarters are in Vienna.It was established in 1972, and its first conference (1973–75) was attended by all 33 countries of Europe (with the exception of Albania) and by the United States and Canada.
- All 57 participating States enjoy equal status, and decisions are taken by consensus on a politically, but not legally binding basis. India is not a participating state.
- The Open Skies Consultative Commission regularly meets at the OSCE in Vienna.It is the implementing body of the Open Skies Treaty, which in 2002 established a regime of unarmed aerial observation flights over the territory of its 33 signatories.

Way Forward

A practical solution for the situation is to revive the Minsk peace process. Therefore the West (US and Other western Countries) should push both sides to resume talks and live up to their commitments as per the Minsk agreement to restore relative peace on the border.

The US should also seek agreement from all parties to engage more directly in an OSCE-mediated process to stem the ongoing damage to European security, the deepening human and economic costs, and the threat to Ukraine's sovereignty.

ENVIRONMENT

India- US: Technology-based Energy Solutions

Recently, India and the US launched a programme titled 'Technology-based Energy Solutions: Innovations for Net Zero' to tackle climate and clean energy challenges. It constitutes a call for Ignition Grants by the United States-India Science & Technology Endowment Fund (USISTEF).

United States-India Science & Technology Endowment Fund

- The governments of the US (through the Department of State) and India (through the Department of Science & Technology) have established the US-India Science & Technology Endowment Fund (USISTEF).
- It has been established for the promotion of joint activities that would lead to innovation and entrepreneurship through the application of science and technology.
- The aim of the Fund is to support and foster joint applied R&D to generate public good through the commercialization of technology developed through sustained partnerships between U.S. and Indian researchers and entrepreneurs.
- The U.S.-India Science and Technology Endowment Fund activities are implemented and administered through the bi-national Indo-U.S. Science and Technology Forum (IUSSTF).

Key Points

About:

It is a programme to support India-US S&T (Science and Technology)-based entrepreneurial initiatives that address the development and implementation of next-generation clean and renewable energy, energy storage, and carbon sequestration.



- The new program aligns with the goals of the U.S.-India Strategic Clean Energy Partnership (SCEP) and will be administered by the bi-national Indo-U.S. Science and Technology Forum (IUSSTF).
 - 1. The SCEP was launched in accordance with the US India Climate and Clean Energy Agenda 2030 Partnership announced by both countries at the Leaders' Summit on Climate held earlier this year (2021).
 - The IUSSTF is a bilateral organisation under the Department of Science and Technology (DST), Government of India, and U.S. Department of State.
- It will identify and support 'technology showstoppers' or promising joint India-US S&T-based entrepreneurial initiatives in this area.
- Climate Change is one of the biggest challenges facing our world today, spurring the call for global collaborations to tackle this crisis.

Recent Developments in US-India Relations:

- Malabar Exercise: The Navies of the Quad (Quadrilateral Framework) Nations (India, the United States, Japan, and Australia) participated in the 25th edition of the exercise.
- India-US Agreement on ALUAV: India and the US have signed a Project Agreement (PA) to jointly develop an Air-launched Unmanned Aerial Vehicle (ALUAV) or drones that can be launched from an aircraft.
- Issues in Free Trade Agreement: The US administration has indicated that it is no longer interested in securing a bilateral Free Trade Agreement (FTA) with India.
- NISAR: NASA and ISRO are collaborating on developing an SUV (Sport Utility Vehicle)sized satellite called NISAR, which will detect movements of the planet's surface as small as 0.4 inches over areas about half the size of a tennis court.

Partnership on Climate Change with Other Nations:

- 1. US-India Strategic Clean Energy Partnership.
- for UPSC/OPSC 2. India-European Union: Paris Agreement, Coalition for Disaster Resilient Infrastructure, Conference of the Parties (COP 26).
- Glasgow Leaders' Declaration on Forests and Land Use.
- Kunming Declaration on Biodiversity.

Climate Change

- The term 'climate change' refers to change in the longer term pattern of behaviour of the atmosphere over millennia or, more recently, as a result of natural processes or human activity. Climate is distinguished from weather, which is the specific behaviour of the climate at a particular time. Weather is made up of specific events, for example, a particular storm, the rainfall over a particular period, the temperature at a particular time.
- There are, however, many possible ways by which climate may be described. These are generally associated with averages or variability in temperature, precipitation, wind and cloud.
- The climate varies spatially, for example, depending on the distance from the equator or the sea, and temporally, for example, depending on seasonal and daily variations.

Some Indian Initiatives to Fight Climate Change

- 1. National Clean Air Programme (NCAP)
- 2. Bharat Stage-VI (BS-VI) emission norms
- UJALA scheme
- 4. National Action Plan on Climate Change (NAPCC)

Way Forward

- We have to grow the innovation pipeline at an unprecedented pace and invest heavily to reduce green premiums on critical clean technologies and attract entrepreneurial talent to create new markets and industries to transition to Net Zero.
- Focus should be on the global initiatives and transformative strategies needed to advance rapidly scalable clean energy solutions, such as smarter energy use, renewable technologies, and the electrification of transportation and buildings.
- There is an urgent need for every country, city, business and financial institution to adopt concrete plans for transitioning to net-zero.
- Even more urgent is for governments to match this long-term ambition with concrete actions now, as trillions of dollars are mobilised to overcome the Covid-19 pandemic. Revitalising economies is our chance to re-engineer our future.



SCIENCE & TECHNOLOGY

New Vaccines and Drug for Covid

Recently, India has approved two Vaccines Corbevax and Covovax, one pill Molnupiravir for treating Covid-19 patients.

Key Points

Corbevax - Protein Subunit Vaccine:

• About:

- 1. It is a protein subunit vaccine, which means that instead of the whole virus, it uses fragments of it to trigger an immune response.
 - ✓ In this case, the subunit vaccine contains a harmless Spike (S) protein.
 - ✓ The S protein is a highly glycosylated and large type I transmembrane fusion protein that is made up of 1,160 to 1,400 amino acids, depending upon the type of virus.
- 2. The S protein plays a crucial role in penetrating host cells and initiating infection.
- 3. Once the immune system recognises the protein, it produces antibodies to fight a real infection when it happens.

• Efficacy:

- 1. Neutralising antibodies against Delta strain indicates a vaccine effectiveness of more than 80 % for the prevention of symptomatic infections based on published studies.
- 2. In the pivotal Phase III study conducted with an endpoint of immunogenic superiority, it demonstrated superior immune response in comparison with COVISHIELD vaccine when assessed for Neutralizing Antibody (nAb) Geometric Mean Titers (GMT) against the Ancestral-Wuhan strain and the globally dominant Delta variant.

Covavax - Recombinant Nanoparticle Vaccine:

• About:

- 1. Manufactured by Serum Institute of India (SII), is also a protein subunit vaccine, but uses Recombinant Nanoparticle Technology (RNT). It has been developed by US-based Novavax. Recombinant protein vaccine is another proven approach against Covid-19 virus. This technology teaches the body how to develop immunity against the virus using spike protein.
- 2. Harmless copies of the spike protein are grown in insect cells; the protein is then extracted and assembled into virus-like nanoparticles.
- 3. Novavax has used an immune-boosting compound (adjuvant). The same technology is used in HPV and the Hepatitis B vaccine.
- Efficacy: The vaccine has been evaluated in two Phase 3 trials: a trial in the UK that demonstrated an efficacy of 96.4% against the original virus strain, 86.3% against Alpha and 89.7% efficacy overall.

Molnupiravir - Oral Antiviral Drug:

• About: It works by introducing errors into the virus's genetic code, which prevents replication.

Efficacy:

- 1. The UK cleared molnupiravir as "safe and effective".
- 2. The US did not authorise it for use for longer than five consecutive days, or in patients younger than 18 as it may affect bone and cartilage growth.
- 3. In India, the recommendation is for treatment of adult Covid patients with oxygen level over 93%, and who have a high risk of progression of the disease, and that the drug be sold by retail only under prescription.

Types of vaccines

Inactivated vaccines:

- Inactivated vaccines use the killed version of the germ that causes a disease.
- Vaccines of this type are created by inactivating a pathogen, typically using heat or chemicals such as formaldehyde or formalin. This destroys the pathogen's ability to replicate, but keeps it "intact" so that the immune system can still recognize it. ("Inactivated" is generally used rather than "killed" to refer to viral vaccines of this type, as viruses are generally not considered to be alive.)
- They usually don't provide immunity (protection) that's as strong as live vaccines. So you may need several doses over time (booster shots) in order to get ongoing immunity against diseases. They are Used to protect: Hepatitis A, Flu (shot only), Polio (shot only), Rabies.



Live-attenuated Vaccines:

- Live vaccines use a weakened (or attenuated) form of the germ that causes a disease.
- Because these vaccines are so similar to the natural infection that they help prevent, they create a strong and long-lasting immune response.
- The limitation of this approach is that these vaccines usually cannot be given to people with weakened immune systems.
- Live vaccines are used against: Measles, Mumps, Rubella (MMR combined vaccine), Rotavirus, Smallpox among others.

Messenger (m) RNA Vaccines:

- mRNA vaccines make proteins in order to trigger an immune response. mRNA vaccines have several benefits compared to other types of vaccines, including shorter manufacturing times and, because they do not contain a live virus, no risk of causing disease in the person getting vaccinated.
- The vaccines are used to protect against: Covid-19.

Subunit, Recombinant, Polysaccharide, and Conjugate Vaccines:

- They use specific pieces of the germ like its protein, sugar, or capsid (a casing around the germ). They give a very strong immune response.
- They can also be used on people with weakened immune systems and long-term health problems.
- These vaccines are used to protect against: Hib (Haemophilus influenzae type b) disease, Hepatitis B, HPV (Human papillomavirus), Pneumococcal disease among others.

Toxoid Vaccines:

- They use a toxin (harmful product) made by the germ that causes a disease. They create immunity to the parts of the germ that cause a disease instead of the germ itself. That means the immune response is targeted to the toxin instead of the whole germ.
- Toxoid vaccines are used to protect against: Diphtheria, Tetanus.

Viral Vector Vaccines:

- Viral vector vaccines use a modified version of a different virus as a vector to deliver protection.
- Several different viruses have been used as vectors, including influenza, vesicular stomatitis virus (VSV), measles virus, and adenovirus, which causes the common cold. Adenovirus is one of the viral vectors used in some Covid-19 vaccines being studied in clinical trials.
- The vaccines are used to protect against:Covid-19

PRELIMS FACT

Sankalp Smarak: Andaman & Nicobar

Recently, a Sankalp Smarak was dedicated to the nation exactly 78 years (29th December 2021) after Netaji Subhash Chandra Bose's arrival to India. The purpose of smarak is to preserve this important event in history.

Key Points

About:

- The Smarak built in Andaman and Nicobar is a tribute to the resolve of the soldiers of the Indian National Army and their innumerable sacrifices.
- It is also a remainder of the values enshrined by Netaji himself, "Nishtha, Kartavya aur Balidan" or "Commitment, Duty and Sacrifice" that continue to underscore the ethos of the Indian Armed Forces and the resolve of the Indian Soldier.

Significance:

- It is also significant that Netaji escaped British surveillance from Kolkata on 16th Jan 1941 and stepped back on Indian soil after nearly three years, at Port Blair Aerodrome on 29th Dec 1943.
- On 30th December 1943, he hoisted the national flag for the first time on Indian soil, at Port Blair.
- Netaji's visit to the islands as the Head of the Provisional Government of Azad Hind (Known as Arzi Hukumat-e-Azad Hind) and Supreme Commander of Indian National Army marked a symbolic fulfilment of his promise that the Indian National Army would stand on Indian soil by the end of 1943.



• This historic visit also marked a declaration of Andaman and Nicobar Islands as the "first liberated territory of India".

DAILY ANSWER WRITING PRACTICE

Qns. An online system to file corruption complaints is no doubt a step in in the right direction but the failure to operationalise the Lokpal in an effective manner is a bigger worry. Critically examine. (250 words)

Ans:

Introduction

An online system that enables people to file corruption complaints with the Lokpal was inaugurated recently by the anti-graft ombudsman Chief Justice Pinaki Chandra Ghose.

The Lokpal and Lokayukta Act was enacted in 2013 and came into force in 2014. Almost six years after the Lokpal and Lokayuktas Act, 2013, was signed into law, several key provisions needed for the anti-corruption ombudsman to function have still not been operationalised.

Body

Lokpal and Lokayukta Act: Features

- The Act consists of setting up a team called Lokpal, headed by a chairperson and consisting of eight people
- This committee will have the power to investigate people who might be acquiring money through corrupt means. All categories of public servants will be covered under Lokpal, including the Prime Minister, while the armed forces will be exempted.
- The body will also have the power of confiscating property or assets acquired by corrupt means
- One of the main powers of the Lokpal is that they can protect all the public servants who act as whistle-blowers. They also have a special Whistle Blowers Protection Act established for the same reason.
- Lokpal will also be given the power to conduct trials in a special court if they feel that the trial is of extreme importance
 - 1. They can also fine people for false or inaccurate complaints
 - 2. The fines can amount up to Rs 2 lakh
- The Act also incorporates provisions for attachment and confiscation of property acquired by corrupt means, even while the prosecution is pending.
- The States will have to institute Lokayukta within one year of the commencement of the Act.

Persisting issues with Lokpal operationalisation

- Delay in the appointment of Lokpal due to the legal technicalities and lack of political will is a major issue.
- The Selection committee and the issue of Leader of Opposition is still lingering and the recent selection of Lokpal didn't have the views of the opposition party, which is against democratic principles.
- The process of constituting the Lokpal's inquiry and prosecution wings has not yet begun, and regulations for how to conduct preliminary investigations have not been made.
- The Act prohibits Lokpal inquiry if the allegations against the PM in certain circumstances.
 - 1. Thus, Lokpal do not have full authority to investigate PM.
 - 2. Also, complaints against the PM are not to be probed unless the full Lokpal bench considers the initiation of an inquiry and at least two-thirds of the members approve it.
- There is not much protection provided for whistle-blower in the Lokpal Act, 2013.
- All the cases of corruption in which high officials are involved go to the CBI. Lokpal do not have complete control. This is a major issue which dilutes the independence of Lokpal.
- Through an amendment in 2016, the government has done away with the statutory requirement of public disclosure of the assets of public servants' spouses and dependent children. The vesting of the power of prior sanction with Lokpal has been almost nullified with amendments in Prevention of Corruption Act which strengthen the requirement to seek the government's permission.
- Judiciary is totally excluded from the ambit of Lokpal. Thus, there is no chance to hold the judiciary accountable.



The establishment of Lokayukta and any appointment falls within the domain of the States, which is being delayed by the state due to lack of political will.

Conclusion

Looking at the low ranking of India in Corruption on global level, there is a need to check the corruption by strong institutions. Creation of the institution of Lokpal and Lokayuktas by forming its members to function has come up as a welcome step. But it shall function independently of any political influence so that a proper system of checks-and -balance is maintained in the federal and democratic system of India.

DAILY OUIZ

- Q1. Consider the following statements about United Nations Convention on the Law of the Sea:
 - 1. It is an international agreement that establishes a legal framework for all marine and maritime activities.
 - The Convention resulted from the second United Nations Conference on the Law of the Sea.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- **d.** Neither 1 nor 2
- Q2. Consider the following statements regarding Exclusive economic zone (EEZ).
 - 1. Exclusive economic zone (EEZ) is a sea zone prescribed by International Maritime Organization over which a state has special rights regarding the exploration and use of marine
 - 2. It stretches from the baseline out to 200 nautical miles from the coast.
 - 3. In the exclusive economic zone, the coastal State shall have the exclusive right to construct and operate artificial islands. for UPSC/OPSC

Which of the above statements is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- **d.** 1, 2 and 3
- Q3. Which of the following measures by the government will lead to reduction in inflation?
 - 1. Reducing government tax collection
 - 2. Reducing government spending
 - 3. Banning the export of essential items

Which of the above statements is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- **d.** 1. 2 and 3
- Q4. The Baltic Sea is an arm of the Atlantic Ocean, enclosed by which of the following countries?
 - 1. Denmark
 - 2. Estonia
 - 3. Finland
 - 4. Germany
 - 5. Latvia

Select the correct answer using the code below:

- a. 1, 2 and 3 only
- b. 1, 2, 3 and 4 only
- c. 2, 3 and 5 only
- d. All of the above
- Q5. Recently, which of the following nation has banned the Tablighi and Da'wah group, calling it a 'danger to society'?
 - a. India
 - b. Pakistan
 - c. France
 - d. Saudi Arabia