



# drishti

## News Analysis (18 Oct, 2021)

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### Normalizing Saudi-Iran Relations

#### Why in News

Recently, **four meetings** took place between representatives of **Iran and Saudi Arabia in Baghdad, and one in New York**. These meetings indicate continuity in the **warming of bilateral relations** that had been frozen since 2016.

The renewed bilateral ties and normalization of relations between Saudi Arabia and Iran will pave the way for **regional stability and diplomatic ease for India as well**.



\***Syria:** Govt pro-Iran, opposition pro-Saudi. **Lebanon:** Hezbollah pro-Iran, main Sunni bloc pro-Saudi. **Yemen:** Govt-in-exile pro-Saudi, Houthi rebels pro-Iran

#### Key Points

- **Background (Saudi Arabia-Iran Conflict):**

- **Religious Factionalism:** The decades-old feud between them is **exacerbated by religious differences.**
  - They each follow one of the two main branches of Islam. **Iran** is largely **Shia Muslim**, while **Saudi Arabia** sees itself as the leading **Sunni Muslim power.**
  - Historically, **Saudi Arabia**, a monarchy and home to the birthplace of Islam, **saw itself as the leader of the Muslim world.**
  - However this was **challenged in 1979 by the Islamic revolution in Iran** which created a new type of state in the region - a kind of revolutionary theocracy - that had an explicit goal of exporting this model beyond its own borders.
- **Regional Cold War:** Saudi Arabia and Iran - two powerful neighbours - are locked in a fierce struggle for regional dominance.
  - Uprisings across the Arab world (after the **Arab Spring** in 2011) caused political instability throughout the region.
  - Iran and Saudi Arabia exploited these upheavals to expand their influence, notably in **Syria, Bahrain and Yemen**, further heightening mutual suspicions.
  - Moreover, external powers like the US and Israel have a major role in exacerbating conflict between Saudi Arabia and Iran.
- **Proxy Wars:** Iran and Saudi Arabia are **not directly fighting but they are engaged in a variety of proxy wars** (conflicts where they support rival sides and militias) around the region.

For Example, **Houthi rebels in Yemen.** These groups can acquire greater capabilities which can cause further instability in the region. Saudi Arabia accuses Iran of supporting them.
- **2016 Flash Point:** Many Iranian protesters attacked Saudi diplomatic missions in the Iran following **Saudi Arabia's execution of the Shiite Muslim cleric Sheikh Nimr al-Nimr.**

- **Reasons for Normalization of Relations:**

- **Saudi Arabia Vision 2030 Strategy:** This refers to targeted reforms within the country's economy, defense, tourism and renewable energy.

In the context of Covid-19, Saudi Arabia has realised that to attract serious investment, it can only achieve that through a de-escalation with Iran.
- **Compromise on Regional Front:** Saudi Arabia is also involved in the process of establishing Syria's power holder Bashar Assad in the Arab League (a regional organization)- a move that has been welcomed by Iran.
- **Withdrawal of US from the Region:** The arrival of the new US president (Joe Biden) administration and **withdrawal of US from Afghanistan** and now focusing more on the Indo-pacific region, could be another reason for softening of Saudi-Arabia's stance on Iran.

- **Possible Impact of Normalization of Relations:**
  - **Resolution of Israel-Palestine Conflict:** Warming of relations between Iran and Saudi Arabia may have a positive impact in dealing with **Israel and the Palestinian issue**.
  - **Stabilization of Oil Market:** Iran and Saudi Arabia share a common interest for stable oil prices given the importance of the market to their economies.  
Normalization of relations would ensure steady oil revenues for all producing countries and more predictability to economic planners in both Saudi Arabia and Iran.

## Way Forward

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- **Role of India:** Historically, India has **good diplomatic relations with both the countries**. Stabilization of relations between the two countries may impact India in a mixed way.
  - On the negative side, higher oil prices will affect the balance of trade in India.
  - On the positive side, this could provide easing of investments, connectivity projects across the region.
- **Reciprocity by Iran:** Iran still needs to make a mark in its diplomatic efforts by publicly supporting a cease-fire in Yemen.
- **Easing of US Sanctions:** Clarity on **US sanctions over Iran** is of prime importance, if Iran-Saudi Arabia relations are to get normalised.

**Source: IE**

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## Hypersonic Technology

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### Why in News

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Recently, it has been reported that **China tested a nuclear-capable hypersonic glide vehicle** that circled the globe before speeding towards its target.

- Several countries, including the **US, Russia and China**, are developing **hypersonic missiles** which travel at a speed five times that of sound.
- Though **slower than ballistic missiles**, they are harder to intercept and can be manoeuvred.

### Key Points

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- **Implications for India:**
  - Hypersonic technology developments, in the backdrop of **growing US-China rivalry** and a year-long **standoff with Indian forces in eastern Ladakh**, is certainly a threat for India's space assets along with the surface assets.
  - The offence system operating at these speeds would **mean a requirement to develop defence systems at these speeds.**
- **Hypersonic Speed and Technology:**
  - **About:**
    - Hypersonic speeds are **5 or more times the Mach or speed of sound.**
    - **Mach Number:** It describes an aircraft's speed compared with the speed of sound in air, with Mach 1 equating to the speed of sound i.e. **343 metre per second.**
  - **Types (2):**
    - **Hypersonic cruise missiles:** These are the ones that **use rocket or jet propellant** through their flight and are regarded as being just faster versions of existing cruise missiles.
    - **Hypersonic Glide Vehicle (HGV):** These missiles first go up into the atmosphere on a conventional rocket before being launched towards their target.
  - **Technology Used:** Most hypersonic vehicles primarily use the **scramjet technology**, which is a type of **Air Breathing propulsion System.**
    - This is extremely complex technology, which also needs to be able to handle high temperatures, making the hypersonic systems extremely costly.

## Ballistic Missile vs Cruise Missile

Ballistic Missile	Cruise Missile
Travel in projectile motion and trajectory depends on gravity, air resistance and Coriolis Force.	Comparatively follows a straight trajectory of motion.
Leave the earth's atmosphere and re enter it.	The flight path is within the earth's atmosphere.
Long-range missiles (300 km to 12,000 km)	Short range missiles (range upto 1000 km)
E.g. Prithvi I, Prithvi II, Agni I, Agni II and Dhanush missiles.	E.g. BrahMos missiles

## Classification of Missiles Based on Speed

Speed Range	Mach Number	Velocity in m/s
Subsonic	< 0.8	< 274
Transonic	0.8–1.2	274–412
Supersonic	1.2–5	412–1715
Hypersonic	5–10	1715–3430
High-hypersonic	10–25	3430–8507

### Development of Hypersonic Technology in India:

- **India**, too, is working on hypersonic technologies.  
As far as space assets are concerned, India has already proved its capabilities through the test of **ASAT under Mission Shakti**.
- Hypersonic technology has been developed and tested by both DRDO and ISRO.
- Recently, DRDO has successfully flight-tested the **Hypersonic Technology Demonstrator Vehicle (HSTDV)**, with a capability to travel at 6 times the speed of sound.
- Also, a **Hypersonic Wind Tunnel (HWT)** test facility of the DRDO was inaugurated in Hyderabad. It is a pressure vacuum-driven, enclosed free jet facility that simulates Mach 5 to 12.

### Air Breathing Propulsion System

- **About:** These systems **use atmospheric oxygen**, which is available up to about 50 km of earth's surface to burn the fuel stored on-board thereby making the system much lighter, more efficient and cost effective.
- **Examples** of Air Breathing Propulsion System include the Ramjet, Scramjet, Dual Mode Ramjet (DMRJ).

- **Ramjet:**
  - A ramjet is a form of air breathing jet engine that uses the vehicle's forward motion to compress incoming air for combustion without an axial compressor.
  - Fuel is injected in the combustion chamber where it mixes with the hot compressed air and ignites.
  - Ramjets **cannot produce thrust at zero airspeed**; they cannot move an aircraft from a standstill.
  - A ramjet-powered vehicle, therefore, **requires an assisted take-off**, like a rocket assist, to accelerate it to a speed where it begins to produce thrust.
  - The ramjet **works best at supersonic speeds** and as the speed enters the hypersonic range, its efficiency starts to drop.
- **Scramjet:**
  - A scramjet engine is **an improvement over the ramjet engine** as it operates at hypersonic speeds and allows supersonic combustion, which gives it its name — **supersonic combustion ramjet, or scramjet**.
  - The scramjet is composed of **three basic components**:
    - A converging inlet where incoming air is compressed,
    - A combustor where gaseous fuel is burned with atmospheric oxygen to produce heat,
    - A diverging nozzle where the heated air is accelerated to produce thrust. The exhaust gases are accelerated to hypersonic speeds using a divergent nozzle.
  - The speed at which the vehicle moves through the atmosphere causes the air to compress within the inlet. As such, **no moving parts are needed in a scramjet**, which reduces the weight and the number of failure points in the engine.
- **Dual Mode Ramjet (DMRJ):**
  - The third concept is **a mix of ramjet and scramjet**, which is called DMRJ.
  - There is a need for an engine which can operate at both supersonic and hypersonic speeds.
  - A DMRJ is an engine design where a ramjet transforms into a scramjet over Mach 4-8 range, which means, it can operate in both the subsonic and supersonic combustor mode.

Source: IE

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## **Seven New Defence Public Sector Units (DPSUs)**

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### **Why in News**

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The Prime Minister dedicated the **seven defence Public Sector Undertakings (PSUs)**, created **through the restructuring of the Ordnance Factory Board (OFB)**, to the nation.

India's goal under '**Atmanirbhar Bharat**' (self-reliant India) is to make the country, on its own, into a big military power.

## Key Points

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- **About:**
  - **Dissolution and Amalgamation:**
    - The Union government **ordered the dissolution of the four-decade-old Ordnance Factory Board (OFB) and amalgamated 41 factories under seven new state-owned companies** to manufacture defence hardware ranging from munitions to heavy weapons and vehicles.

These new companies are headquartered in five cities.
    - OFB was an umbrella body for the ordnance factories and related institutions, and was a subordinate office of the Ministry of Defence (MoD). It was a conglomerate of 41 factories, 9 training Institutes, 3 regional marketing centres and 5 regional controllers of safety.

It was headquartered at Kolkata.
    - All **employees of the erstwhile OFB** (Group A, B and C) belonging to production units will be transferred to the corporate entities on deemed deputation for a period of two years without any change in their service conditions as central government staff.
  - **Seven New Companies:**

Munitions India Limited, Armoured Vehicles Nigam Limited, Advanced Weapons and Equipment India Limited, Troop Comforts Limited, Yantra India Limited, India Optel Limited, and Gliders India Limited.
  - **Significance:**
    - The concerns have been raised regarding **high costs, inconsistent quality and delay in supply of OFB products** by the armed forces.
    - The new structure will help **overcome these various shortcomings** in the existing system of OFB and **encourage these companies to become competitive and explore new opportunities** in the market including exports.

- **Self-Reliance in Defence Sector:**

- **Corporatisation of OFB.**
- **Revised FDI Limit:** The **Foreign Direct Investment (FDI) limit** in defence manufacturing under automatic route is **raised from 49% to 74%**.
- **Defence Industrial Corridor:** The government has proposed to establish two Defence Industrial Corridors in Uttar Pradesh and Tamil Nadu each.
- **Project Management Unit (PMU):** The government is expected to begin time-bound defence procurement and faster decision making by setting up a Project Management Unit (for contract management purposes).

The **Defence Acquisition Procedure (DAP) 2020** has been unveiled.

- **Reduction in Defence Import Bill:** The government will **notify a list** of weapons/platforms banned for imports and thus such items can only be purchased from the domestic market.

Separate budget provision for domestic capital procurement.

**Source: TH**

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## **World Energy Outlook Report 2021: IEA**

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### **Why in News**

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Recently, the **International Energy Agency (IEA)** released the **World Energy Outlook (WEO) Report 2021**.

- **Published every year**, the WEO provides critical analysis and insights on trends in energy demand and supply.
- The 2021 report signaled pressure on governments **to push for greater climate action at the Conference of Parties (COP26) summit** (in Glasgow, UK).
- Earlier, IEA also released its **Net Zero Emissions (NZE) Roadmap - named 'Net Zero by 2050'**.

### **Key Points**

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- **Increase Share of Renewables:**

- **Renewable energy sources**, such as solar, wind, hydropower and bioenergy, need to **form a far bigger share** in the rebound in energy investment after the coronavirus pandemic.

World is **not investing enough to meet future energy needs**, and the uncertainties are setting the stage for a volatile period ahead.

- Demand for renewables continues to grow. However, this **clean energy progress is still far too slow to put global emissions into sustained decline towards net zero by 2050**, which the IEA believes will help limit the increase in global temperatures to 1.5 degrees Celsius.
- **Initially IEA supported continued investment in fossil fuels**. However it has gradually **moved toward a “more distinct tone** urging decision makers to mitigate **climate change”**.

- **Emission Reduction Measures:**

The extra investment might not be as difficult as it sounds. **More than 40% of the required emissions reductions would come from measures that pay for themselves**, such as:

Improving efficiency, limiting gas leakage, or installing wind or solar in places where they are now the most competitive electricity generation technologies.

- **Different Scenarios:** The IEA analyzed two possible scenarios:

- **Stated Policies Scenario (STEPS):**

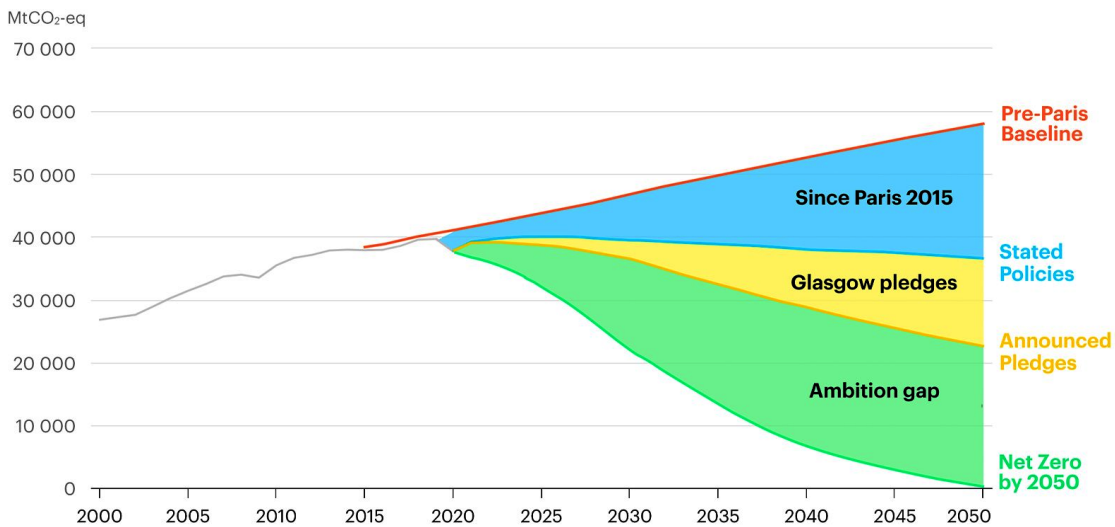
- This looks at the **measures and policies that governments have already put in place**. Despite the measures, annual worldwide emissions would still be the same as developing countries build up their infrastructure.
- Under this scenario, **temperatures in the year 2100 would be 2.6 C higher** than pre industrial levels.

- **Pledge for Net Zero:**

- This looks at **governments’ pledges to achieve net-zero emissions**, potentially doubling clean energy investment over the next decade.
- If countries manage to implement these pledges in time, the global average **temperature increase would be around 2.1 C by the year 2100** — an improvement, but still well above the 1.5 Celsius agreed under the **Paris accord**.

## Global CO<sub>2</sub> emissions by scenarios, 2000-2050

World Energy Outlook 2021



### Major Suggestions:

- **Clean Electrification:**

This requires a doubling of solar PV and wind deployment relative to the [announced pledges scenarios].
- **Low-Emission Generation:**

A major **expansion of other low-emissions generation**, including the use of nuclear power where acceptable; a huge build-out of electricity infrastructure and all forms of system flexibility, including from hydropower; a rapid phase-out of coal; and a drive to expand electricity use for transport and heating.
- **Energy Efficiency:**

A relentless **focus on energy efficiency**, together with measures to temper energy service demand through materials efficiency and behavioral change.
- **Reduction in Methane Emissions:**

A drive to **cut methane emissions from fossil fuel operations** and a big **boost to clean energy** innovation.
- **Decade of Clean Energy:**

Making the 2020s the decade of massive clean energy deployment **will require unambiguous direction from COP26.**

### India Specific Findings

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- **Population and Gross Domestic Product (GDP) 2020-2050:**
  - India will become the **most populous nation** surpassing China's population this decade, and by 2050 India crosses 1.6 billion in population whereas China's population is projected to decrease.
  - India's **GDP** will be growing faster than China on average over the next three decades [5.3% vs China's 3.6%].
- **Coal Production:**
  - In India, over 50 GW of **Financially Stressed Coal Assets (NPAs)** has created **strains** in the banking system.
  - Coal demand in India is **expected to grow by around 30% by 2030**.
  - As per their announced pledges, after China, **India is projected to be the next largest user of unabated coal**, responsible for about 15% of global use for electricity generation in 2030.
- **Air Pollution:**
  - A failure to accelerate clean energy transitions would continue to leave people exposed to air pollution globally.
  - Recently 1.67 million premature deaths in India were linked to air pollution, that's more than three deaths every minute.
- **Appreciated India's Efforts:**
  - Notable examples of developing economies mobilising capital for clean energy projects, such as **India's success in financing a rapid expansion of solar photovoltaics (pv) in pursuit of its 450 GW target for renewables by 2030**.
  - Recent survey data from the **World Health Organization** for India revised the historic clean cooking access rates.
    - This is due to faster progress than previously assumed, in large part due to the **Pradhan Mantri Ujjwala Yojana** LPG distribution scheme.
- **Recommendation:**
  - Calls for India **to mandate a default set point temperature of 24 degrees Celsius for all room air conditioners and tighter minimum performance standards** with the aim to improve efficiencies as the demand for cooling and power increases.

## Way Forward

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- The **world is facing a formidable task of transforming the energy sector within 30 years** in a cost-effective manner, even as the world economy more than doubles in size and the global population increases by 2 billion people.
- The need for the world to reach Net Zero Emissions by 2050 lies in the major interim steps that need to be taken through 2030 — to engineer **cheap and green energy from hydrogen and renewable energy while** making them accessible to all.

**Source: IE**

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# IEA Invites India to be a Full-Time Member

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## Why in News

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Recently, the **International Energy Agency (IEA)** has invited India, the **world's third-largest energy consumer**, to become its full-time member.

## Key Points

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- **Background:**
  - **India became an Associate member of IEA in March 2017** but it was in engagement with IEA long before its association with the organization.
  - Earlier in 2021, India also inked a **Strategic Partnership Agreement** with the IEA to strengthen cooperation in global energy security, stability and sustainability.
  - As a natural corollary to the India IEA strategic partnership, **IEA invited India to deepen its cooperation with IEA by becoming a full Member.**
- **Reason for Offering Membership to India:**
  - India is becoming increasingly influential in global energy trends. Its **in-depth report on India's energy policies**, which was released in January 2020, states that the **country's demand for energy is set to grow rapidly** in the coming decades, with electricity use set to increase particularly fast.
  - The **country's reliance on fuel imports makes further improving energy security** a key priority for the Indian economy.
- **IEA's Membership:**
  - The IEA is made up of **30 member countries**.
  - It also includes **eight association countries**. Four countries are **seeking accession** to full membership, **Chile, Colombia, Israel and Lithuania**.
  - A **candidate country to the IEA** must be a member country of the **Organisation for Economic Co-operation and Development (OECD)**.

- **Eligibility Criteria:** A candidate country to the IEA must have:
  - **Crude oil and/or product reserves (Strategic Oil Reserves)** equivalent to **90 days** of the previous year's net imports, to which the government has immediate access (even if it does not own them directly) and could be used to address disruptions to global oil supply.
    - India's current strategic oil reserves equal 9.5 days of its requirement.
  - A **demand restraint programme** to reduce national oil consumption by up to 10%.
  - Legislation and organisation to operate the **Coordinated Emergency Response Measures (CERM)** on a national basis.
  - Legislation and measures to ensure that **all oil companies under its jurisdiction report information upon request.**
  - Measures in place to **ensure the capability** of contributing its share of an **IEA collective action.**
    - An IEA collective action would be initiated in response to a significant global oil supply disruption.

## International Energy Agency

- **About:**
  - It is an **autonomous Intergovernmental Organisation established in 1974 in Paris, France.**
  - It mainly **focuses on its energy policies which include economic development, energy security and environmental protection.** These policies are also known as the **3 E's of IEA.**
  - **IEA Clean Coal Centre** is dedicated to providing independent information and analysis on how coal can become a cleaner source of energy, compatible with the UN Sustainable Development Goals.
- **Need:**
  - Established in the **wake of the oil crisis of 1973-1974**, to help its members respond to major disruptions in oil supply.
- **Mandate:**
  - Over time, the **mandate of the IEA has expanded** to include tracking and analyzing key global energy trends, promoting sound energy policy and encouraging multinational energy technology cooperation.
- **Mission:**
  - Ensure **reliable, affordable and clean energy** for its member countries and beyond.

- **Focus Areas:**
  - **Energy Security:** Promoting **diversity, efficiency and flexibility** within all energy sectors.
  - **Economic Development:** Ensuring the **stable supply of energy to IEA member countries** and promoting free markets to foster economic growth and eliminate energy poverty.
  - **Environmental Awareness:** Enhancing international knowledge of options for tackling **climate change**.
  - **Engagement Worldwide:** Working closely with non-member countries, especially major producers and consumers, to **find solutions to shared energy and environmental concerns**.
- **Major Reports:**
  - **World Energy Outlook Report.**
  - **World Energy Investment Report.**
  - World Energy Statistics.
  - World Energy Balances.
  - Energy Technology Perspectives.
  - **India Energy Outlook Report.**

**Source: TH**

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## **One Health Consortium**

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### **Why in News**

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Recently, the **Department of Biotechnology** has launched the **country's first One Health consortium**.

The Department of Biotechnology is an Indian government department, **under the Ministry of Science and Technology**

### **Key Points**

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- **About:**
  - This **Consortium consisting of 27 organisations** is one of the biggest one health programs launched by India in post-Covid times.
  - It **envisages carrying out surveillance** of important bacterial, viral and parasitic infections of zoonotic and transboundary pathogens in India.
  - It also **looks into the use of existing diagnostic tests** and the development of additional methodologies for the surveillance and understanding the spread of emerging diseases.

- **Significance:**

It will provide a **holistic approach** to understand the health of human, animals and wildlife to minimise the damage caused by **future pandemics**.

- **Related Government Steps:**

- **National Expert Group on 'One Health:**

A **National Expert Group on 'One Health'** as a multi-sectoral, transdisciplinary, collaborative group was set up by India in May 2019.

Recently in **April 2021**, the Group submitted its report with inclusion of **Subject Specific Health Action Plans** on identified **Climate Sensitive Diseases and 'One Health'**.

- **Malé Declaration in 2017:**

In the context of **Green and Climate Resilient Healthcare Facilities**, India became signatory to the **Malé Declaration in 2017** and agreed to **promote climate-resilient healthcare facilities** to be able to withstand any climatic event.

- **Universal Health Coverage:**

Its goal as stated in the **UN Sustainable Development Goals (SDGs no. 3)** is one of the most significant commitments to equitable quality healthcare for all.

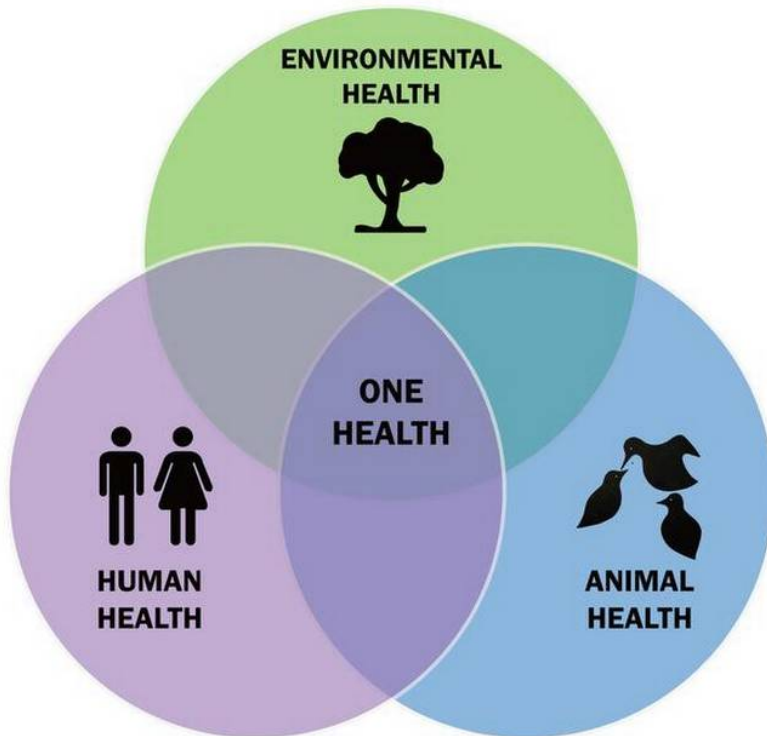
India moved a step closer towards its commitment to the SDGs, when in 2018 the country launched a **national health protection scheme, Ayushman Bharat**, to achieve UHC.

## One Health Concept

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### About:

- One Health is an **approach that recognizes that the health of people** is closely connected to the health of animals and our shared environment.
- **One Health' vision** derives its blueprint from the agreement between the **tripartite-plus alliance** comprising the **Food and Agriculture Organization of the United Nations (FAO)**, the **World Organisation for Animal Health (OIE)**.
- It's purpose is to **encourage collaborations in research and sharing of knowledge** at multiple levels across various disciplines like **human health, animal health, plants, soil, environmental and ecosystem health** in ways that improve, protect and defend the health of all species.



**Increasing Significance:** It has become more important in recent years because **many factors have changed interactions** between people, animals, plants, and our environment.

- **Human Expansion:** Human populations are growing and expanding into new geographic areas due to which close **contact with animals and their environments provides more opportunities for diseases to pass** between animals and people.
  - Of the contagious diseases affecting humans, **more than 65% are of zoonotic or animal to man origin.**
- **Environmental Disruptions:** Disruptions in environmental conditions and habitats can provide new opportunities for diseases to pass to animals.
- **International Travel & Trade:** The movement of people, animals, and animal products has increased from international travel and trade due to which diseases can spread quickly across borders and around the globe.
- **Viruses in Wildlife:** Scientists have observed that there are more than 1.7 million viruses circulating in wildlife, and many of them are likely to be zoonotic.
  - This implies that unless there is timely detection, India risks facing many more pandemics in times to come.

## Way Forward

- The **Covid-19 pandemic** showed the relevance of **'One Health' principles** in the governance of infectious diseases, especially efforts to prevent and contain **zoonotic diseases** throughout the world.



- India needs to **scale up such a model across the country** and to establish meaningful research collaborations across the world.
- There is a **need to develop best-practice guidelines for informal market** and slaughterhouse operation (e.g., inspections, disease prevalence assessments), and creating mechanisms to operationalise 'One Health' at every stage down to the village level.
- Awareness generation, and increased investments toward meeting '**One Health**' targets is the need of the hour.

**Source: PIB**

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## **Price Stabilisation Fund (PSF)**

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### **Why in News**

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Recently, the government has said that **prices of onion, tomato and potato are cheaper than last year** (i.e 2020).

Onion buffer has been maintained by the **Department of Consumer Affairs** under the **Price Stabilization Fund (PSF)** with the objective of effective market intervention to moderate prices.

### **Key Points**

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- **About PSF:**
  - **Established in 2014-15**, PSF is any fund created to absorb extreme volatility in selected commodity prices.
  - Such goods will be procured **directly from farmers or farmers' organisations** at the farm gate/mandi, and made available to consumers at a more affordable price.
  - **Losses sustained**, if any, **between the Centre and the states must be shared** in the operations.
  - The sum in the fund is **usually used for** activities aimed at bringing down/up the high/low prices say, for example, acquisition of certain goods and distribution of the same as and when appropriate so that costs remain within a range.
- **Provides Loans:**
  - The PSF scheme **provides for the advancement of interest-free loans to State Governments/Union Territories (UTs) and Central Agencies** to finance their working capital and other expenses, which they may incur in the procurement and distribution of such commodities.
  - The PSF scheme was **transferred from the Ministry of Agriculture & Farmers' Welfare to the Ministry of Consumer Affairs, Food & Public Distribution** w.e.f. 1<sup>st</sup> April, 2016.

- **Fund Management:**

It is centrally managed by a **Price Stabilisation Fund Management Committee (PSFMC)** that approves all State Government's and Central Agencies' proposals.

- **Maintaining the Corpus Fund:**

**Small Farmers Agribusiness Consortium (SFAC)**, a society promoted by the Ministry of Agriculture and Farmers' Welfare for linking agriculture to private enterprises, investment, and technology, maintains the PSF as a central corpus fund.

- **Related Scheme:**

Launched in 2018 by the **Ministry of Food Processing Industries**, **Operation Green (OG)** aims to **build value chains of Tomatoes, Onions, and Potatoes (TOP) on the lines of "Operation Flood"** (AMUL model) for milk in such a way that will ensure a higher share of consumer's rupee goes to farmers and stabilizes their prices.

While presenting the **Union budget 2021**, the government announced that **Operation Green (OG)** will be expanded beyond TOP to 22 perishable commodities.

**Source: PIB**

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## **Exercise Yudh Abhyas**

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### **Why in News**

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Recently, the **17<sup>th</sup> Indo-US Joint Military Exercise "Ex Yudh Abhyas 2021"** was held at Joint Base Elmendorf-Richardson in Alaska (US).

In February 2021, the **previous version** of the exercise was held in **Bikaner's Mahajan Field Firing Ranges** (Rajasthan).

### **Key Points**

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- **About:**

- It is the **largest running joint military training and defence cooperation** endeavor between India and the US.
- The exercise was **started in 2004 under the US Army Pacific Partnership Program**. The exercise is **hosted alternately between both countries**.
- The exercise **aims at** enhancing understanding, cooperation and interoperability between two Armies.

This will help them in undertaking joint operations at battalion level in mountainous terrain with cold climatic conditions under the ambit of the United Nations.

- **Other Exercises between India and the US:**
  - **Exercise Tiger Triumph** (Humanitarian Assistance and Disaster Relief exercise)
  - **Exercise Vajra Prahar** (Special Forces' Exercise)
  - **Cope India** (Air Force).
  - **Malabar Exercise** (Quadrilateral naval exercise of India, USA, Japan and Australia).
  - **Red Flag** (US' multilateral air exercise).

**Source: TH**

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## **Exercise MITRA SHAKTI**

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### **Why in News**

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The **8<sup>th</sup> Edition of joint military exercise** between the Indian Army and the Sri Lankan Army, **Exercise MITRA SHAKTI** was conducted in Sri Lanka.

The **7<sup>th</sup> edition** of the Mitra Shakti exercise was held in **Pune, Maharashtra in 2019**.

### **Key Points**

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- **About:**
  - It is based on **counter insurgency and counter terrorism operations** in semi urban terrain.
  - It is the **largest bilateral exercise being undertaken by the Sri Lankan Army** and it forms a major part of India and Sri Lanka's growing defence partnership.
  - The joint exercise is designed for incorporating the current dynamics of **United Nations' peacekeeping** operations through tactical exercises and practical discussions.
- **Other Exercises with Sri Lanka:**
  - Naval exercise (**SLINEX**).

**Source: PIB**

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## **Exercise Cambrian Patrol**

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### **Why in News**

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Recently, the Gorkha Rifles (Frontier Force) of the **Indian Army** has been awarded a Gold medal in the **Cambrian Patrol Exercise**, which was held in Wales (the UK).



## Key Points

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### About:

- It is an annual international military patrolling exercise and is referred to as the 'Olympics of Military Patrolling' among militaries in the world.
- It was first set up more than 40 years ago, by a group of Welsh Territorial Army soldiers who designed the training event to feature long-distance marching over the Cambrian Mountains culminating in firing.
  - The teams have to cover a 50-mile course in less than 48 hrs while performing numerous types of military exercises placed throughout the rugged Cambrian Mountains and swamplands of mid-Wales, UK.
- The aim of the exercise is to test their leadership, self-discipline, courage, physical endurance, and determination.

### Source: PIB

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