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Natural Gas

- Natural gas is the cleanest fossil fuels among the available fossil fuels.
- It is used for cooking in domestic households and a transportation fuel for vehicles.
- It is also used as a feedstock in the manufacture of fertilizers, plastics and other commercially important organic chemicals as well as used as a fuel for electricity generation, heating purpose in industrial and commercial units.

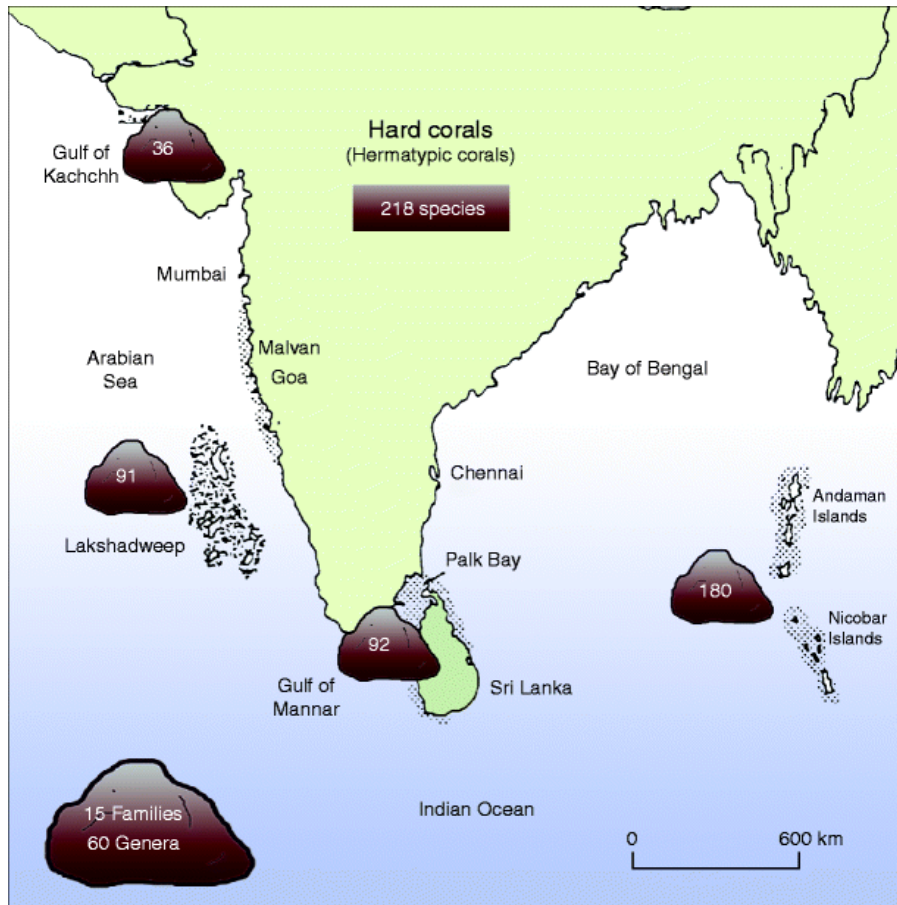
Indian Gas Exchange

- Minister of Petroleum and Natural Gas has launched Indian Gas Exchange (IGX), the first nationwide online delivery-based natural gas trading platform.
- Incorporated as a wholly owned subsidiary of the IEX - India's energy market platform.
- The platform is fully automated with web-based interface to provide seamless trading experience to the customers.
- The IGX is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs, Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
- Imported Liquefied Natural Gas (LNG) will be re-gasified and sold to buyers through the exchange, removing the requirement for buyers and sellers to find each other.
- The price of domestically produced natural gas is decided by the government. It will not be sold on the gas exchange.
- The exchange is expected to facilitate transparent price discovery in natural gas, and facilitate the growth of the share of natural gas in India's energy basket.

Coral Reefs

- A coral reef is an underwater ecosystem characterized by reef-building corals.

- Reefs are formed of colonies of coral polyps held together by calcium carbonate.
- Most coral reefs are built from stony corals, whose polyps cluster in groups.
- Coral belongs to the class Anthozoa in the animal phylum Cnidaria, which includes sea anemones and jellyfish.
- Unlike sea anemones, corals secrete hard carbonate exoskeletons that support and protect the coral.
- Most reefs grow best in warm, shallow, clear, sunny and agitated water.
- Sometimes called rainforests of the sea, shallow coral reefs form some of Earth's most diverse ecosystems.
- They are most commonly found at shallow depths in tropical waters, but deep water and cold water coral reefs exist on smaller scales in other areas.
- Coral reefs deliver ecosystem services for tourism, fisheries and shoreline protection.
- Coral reefs are fragile, partly because they are sensitive to water conditions.
- They are under threat from excess nutrients (nitrogen and phosphorus), rising temperatures, oceanic acidification, overfishing (e.g., from blast fishing, cyanide fishing, spearfishing on scuba), sunscreen use, and harmful land-use practices, including runoff and seeps (e.g., from injection wells and cesspools).
- The distribution of coral reefs in India



Recovery of Coral reefs

- The Gulf of Mannar (GoM), spread around 21 islands, suffers significant damage caused by livelihood-linked human threats and climate change.
- The islands and the reef areas collectively constitute the Gulf of Mannar Marine National Park (GMMNP).
- Corals in the GoM usually bleach in summer if the water temperature surpasses 30°C, but they recover when it drops in August.
- According to recent study Cyclones Amphan and Nisarga that unleashed destruction in eastern and western India have saved the Gulf of Mannar corals from mass bleaching as windstorms along with two low pressures have significantly lowered seawater temperature in summer.
- As the water temperature level reached 31.8° C in April, partial coral bleaching [less than 5%] was observed.
- The high temperature levels persisted till May [the highest level being 31.9° C], when widespread bleaching was witnessed.
- Average bleaching prevalence this summer is 28.20%. Shallow areas [0.5 and 2m deep] have a bleaching prevalence of 21.20%, while deep regions [2 and 6m] have only 7%.
- Thoothukudi group islands have the highest bleaching prevalence (30.80%), followed by Mandapam and Keelakarai groups.

- The brief coral bleaching event is almost over, and corals have already started recovering.
- The water temperature dropped [28.6° C] in early June, which has helped corals restore their zooxanthellae.
- It is expected that the bleached corals will completely recover by July-end without facing any mortality, provided the present climatic condition continues.
- Reduction in sewage inflow, industrial and human activities and halt in fishing during the lockdown have also assisted in improvement of reef health, resulting in enhanced fish population and faster coral recovery.

PCPNDT Act

- In April Union Ministry of Health and Family Welfare has issued a notification which put on hold the implementation of certain rules of the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex-Selection Rules) of 1996 till June 30, 2020.
- One of the suspended provisions, Rule 8, is intrinsically connected with the statute's provisions dealing with the mandatory registration of genetic counselling centres, laboratories and clinics, Non-compliance leads to penalty.
- The rules require ultrasound clinics to maintain detailed records of pregnant women who undergo foetal scans in the clinics and submit them to local health authorities.
- Sections of doctors representing ultrasound clinics have in the past complained that such record-keeping is time-consuming.
- Ultrasound clinics, like other medical services, would be considered essential and could remain open during the lockdown.
- Foetal medicine specialists point out that the suspension of rules would enable clinics to process patients faster and reduce their waiting time at clinics in line with social-distancing measures.
- Suspending the rule means clinics need not produce any records till June 30.
- This could be misused by unscrupulous sections to conduct sex determination tests freely.
- By this Central government has arbitrarily and selectively weakened a legislation aimed at curbing the pernicious activity of sex-selection and sex-determination.
- Supreme Court recently asked the government to explain its decision to suspend crucial rules of a parliamentary law against pre-natal sex determination and sex selection till June end, amid the COVID-19 national

lockdown.

Committee to oversee Ownership of Private Banks

- Reserve Bank of India (RBI) has constituted an internal working group to review the existing guidelines on ownership and corporate structure of private sector banks.
- The group will be headed by RBI executive director P.K. Mohanty.
- The bank licensing rules mandated that a private bank's promoter will need to pare holding to 40% within three years, 20% in 10 years and to 15% in 15 years.
- The rules on promoter holding have changed over the years.
- It is, therefore, felt necessary to comprehensively review the extant guidelines on ownership, governance and corporate structure in private sector banks, taking into account key developments which have a bearing on the issue.
- The group will examine the existing licensing guidelines and regulations on ownership and control of private sector banks.
- It will also suggest appropriate norms, keeping in mind the issue of excessive concentration of ownership and control.
- Besides, it will examine and review the eligibility criteria for individuals or entities to apply for a banking licence, and review the promoter shareholding norms at the initial licensing stage.
- It will also study the current regulations on holding of financial subsidiaries through a non-operative financial holding company (NOFHC) and suggest steps to migrate all banks to a uniform regulation.

SIPRI year book

- A new yearbook released by the Stockholm International Peace Research Institute (SIPRI).
 - The yearbook "assesses the current state of armaments, disarmament and international security".
 - The highlights of the yearbook are as follows
1. All nations that have nuclear weapons continue to modernize their nuclear arsenals, while India and China increased their nuclear warheads in the last one year.
 2. China is in the middle of a significant modernization of its nuclear arsenal. China's nuclear arsenal had gone up from 290 warheads in 2019 to 320 in 2020.
 3. China is developing a so-called nuclear triad for the first time, made up of

new land and sea-based missiles and nuclear-capable aircraft.

4. India's nuclear arsenal went up from 130-140 in 2019 to 150 in 2020.
5. Pakistan, too, is slowly increasing the size and diversity of the nuclear forces. It has reached 160 in 2020.
6. Both China and Pakistan continue to have larger nuclear arsenals than India.
7. Together the nine nuclear-armed states — the U.S., Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea — possessed an estimated 13,400 nuclear weapons at the start of 2020, which marked a decrease from an estimated 13,865 nuclear weapons at the beginning of 2019.
8. The decrease in the overall numbers was largely due to the dismantlement of old nuclear weapons by Russia and the U.S., which together possess over 90% of the global nuclear weapons.
9. The U.S. and Russia have reduced their nuclear arsenals under the 2010 New Strategic Arms Reduction Treaty (New START) but it will lapse in February 2021 unless both parties agree to prolong it.

New START

- New START (Strategic Arms Reduction Treaty) is a nuclear arms reduction treaty between the United States and the Russian Federation with the formal name of Measures for the Further Reduction and Limitation of Strategic Offensive Arms.
- It was signed in 2010 at Prague, and, after ratification entered into force in 2011, it is expected to last at least until 2021.
- New START replaced the Treaty of Moscow (SORT), which was to expire in December 2012.
- It follows the START I treaty, which expired in December 2009; the proposed START II treaty, which never entered into force; and the START III treaty, for which negotiations were never concluded.
- The treaty calls for halving the number of strategic nuclear missile launchers.
- A new inspection and verification regime will be established, replacing the SORT mechanism.
- It does not limit the number of operationally inactive nuclear warheads stockpiled by Russia and the United States, a number in the high thousands.
- The deadlock over the New START and the collapse of the 1987 Soviet-U.S. Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty) in 2019 suggest that the era of bilateral

nuclear arms control agreements between Russia and the U.S. might be coming to an end.

SIPRI

- Stockholm International Peace Research Institute (SIPRI) established in 1966 is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.
- Based in Stockholm the Institute provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

IAEA

- The International Atomic Energy Agency (IAEA) is an international organization that seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose, including nuclear weapons.
- The IAEA was established as an autonomous organization in 1957.
- Though established independently of the United Nations through its own international treaty, the IAEA Statute, the IAEA reports to both the United Nations General Assembly and Security Council.
- The IAEA has its headquarters in Vienna, Austria.
- The IAEA has two "Regional Safeguards Offices" which are located in Toronto, Canada, and in Tokyo, Japan.
- The IAEA serves as an intergovernmental forum for scientific and technical co-operation in the peaceful use of nuclear technology and nuclear power worldwide.
- The IAEA and its former Director General, Mohamed ElBaradei, were jointly awarded the Nobel Peace Prize 2005.
- Recently Iran has refused to allow IAEA to two sites where nuclear activity may have occurred in the past.

Source: PIB, Indian Express, the Hindu