

12 Jul 2020: UPSC Exam Comprehensive News Analysis

TABLE OF CONTENTS

A. GS 1 Related

B. GS 2 Related

INTERNATIONAL RELATIONS

1. [The spectre of U.S. sanctions](#)

C. GS 3 Related

ECONOMY

1. [Das warns of higher NPAs, bank capital erosion](#)

ENVIRONMENT AND ECOLOGY

1. [Understanding forest fires and their effect on carbon emissions](#)

SCIENCE AND TECHNOLOGY

1. [Unexposed people may have COVID-19-specific memory T cells](#)

D. GS 4 Related

E. Editorials

INTERNATIONAL RELATIONS

1. [Should Kuwait's draft expat bill worry India?](#)

INTERNAL SECURITY

1. [IAF on a buying spree](#)

F. Tidbits

1. ['Govt. must prioritise healthcare spending'](#)
2. [Exhaled breath of COVID-19 patients can contain novel coronavirus, study finds](#)

G. Prelims Facts

1. [Assam keelback spotted for the first time in 129 years](#)
2. [India's tiger census of 2018 sets a Guinness world record](#)
3. [The museum of conflicts](#)
4. [Psoriasis drug gets DCGI nod for emergency use](#)

H. UPSC Prelims Practice Questions

I. UPSC Mains Practice Questions

A. GS 1 Related

Nothing here for today!!!

B. GS 2 Related

Category: INTERNATIONAL RELATIONS

1. The spectre of U.S. sanctions

Context:

- [India- US relations.](#)

Background:

CAATSA:

- The ‘**Countering America’s Adversaries Through Sanctions Act**’ (CAATSA) was passed by the U.S. Congress in 2017. CAATSA’s stated purpose was to **counter aggression by the Governments of Iran, the Russian Federation, and North Korea.**
 - The sanctions against Russia were for its interference in the 2016 U.S. elections, its military aggression against Ukraine, including the annexation of Crimea, as well as for human rights violations.
- Section 231 of the law provides for **secondary sanctions** on persons that engage in significant transactions with Russian defence and intelligence sectors.
 - In September 2018, the U.S. invoked secondary CAATSA sanctions on a Chinese military department and its head for the purchase of 10 SU-35 Russian combat aircraft in 2017 and S-400 equipment in 2018.

India- US defence relationship:

- India and the U.S. have had a **growing defence relationship** from being almost zero in U.S. arms sales to India in 2008 to \$15 billion in 2019.
- India was designated a “**Major Defence Partner**” of the U.S. in 2016 and it was granted **Strategic Trade Authorization tier 1 status** in 2018, allowing India easier access to sensitive U.S. defence technology.

CAATSA and India:

- Given the close U.S.-India relationship, there was a strong case for a CAATSA waiver for countries like India (and also Vietnam and Indonesia), which had historically bought Russian arms but were now buying more U.S. arms.
- Consequently, in the summer of 2018, the U.S. Congress passed a **CAATSA waiver for India as part of the John S. McCain National Defense Authorization Act (NDAA) for fiscal year 2019.**

- This required the President to certify that the waiver was, among other things, in the U.S.'s national security interest, the entity in question was reducing its reliance on Russian weapons and that it was cooperating with the U.S. on security matters critical to America's security interests.

Details:

- In recent times, there has been the repeated reiteration from the U.S. administration that **CAATSA waiver is not country-specific** and that India does not automatically qualify for a waiver but should satisfy the underlying requirements.
- These comments are being made in the context of India's decision to purchase **the S-400**, long-range surface-to-air missile defence shield from Russia and the Defence Acquisition Council's approval for the procurement of **MiG-29 fighter jets and Su-30 MKI jets** from Russia for the Indian Air Force (IAF).
- Recently, The U.S. had expelled Turkey from its F-35 fighter jet programme following Turkey's receipt of the first shipments of the S-400 in July 2019.

C. GS 3 Related

Category: ECONOMY

1. Das warns of higher NPAs, bank capital erosion

Context:

- Economic impact of the COVID-19 pandemic.

Concerns:

Uncertain economic outlook:

- The **RBI** governor also cautioned that the **medium-term economic outlook remains uncertain** and would depend on the COVID-19 curve.

Impact on the financial system:

- RBI Governor Shaktikanta Das has warned that the economic fallout from the COVID-19 pandemic—due to lockdown and anticipated post lockdown compression in economic growth — would likely result in **higher non-performing assets and capital erosion of banks**.
 - The redemption pressure on **NBFCs** and mutual funds are indicative of the pressure on the financial system.
- The recent noticeable trends have been that mutual funds have emerged as major investors in market instruments issued by NBFCs and there has been the increasing share of bank lending to NBFCs given the continuing crunch in market-based financing faced by the NBFCs and Housing Finance Companies. In such circumstance there is the possibility of **development of an adverse feedback loop** and hence there are associated **systemic risks** involved in the financial system

Redundancy of current frameworks:

- Unlike the earlier notion that risks to the financial system materialise only rarely, **shocks to the financial system seem to have become more frequent** as evident from the global financial crisis of 2008-09 and the ongoing pandemic.
- The minimum capital requirements for banks, which had been set based on historical loss events, were accordingly likely to be rendered less than sufficient to absorb lenders' losses in the current economic climate.

Way forward:

Short term measures:

Recapitalization plan:

- A recapitalisation plan for public sector banks and private banks is urgently needed to **ensure financial stability**.
- The banks will have to also **build buffers and raise capital** to not only ensure credit flow but also to build resilience in the financial system.

Constant monitoring:

- All lenders need to **conduct periodic “stress tests”** to gauge the impact of the pandemic on their balance sheets, asset quality and liquidity. This would enable them to take timely action to mitigate the risks.
- The potential stress points would require **constant regulatory and policy attention**.

Long term measures:

Revamping of standards:

- Recognizing the fact that meeting the minimum capital requirement is necessary, but not a sufficient condition for financial stability, it is imperative that the approach to risk management in banks should be in tune with the realisation of more frequent, varied and bigger risk events than in the past.

Resolution Corporation:

- Given the lack of a mechanism to address bank failures, there is the need for a **legislatively mandated Resolution Corporation**, which would deal with resolution and revival of stressed financial firms.

New models for resolution:

- Given that the traditional approach of merging the weak bank with a larger bank only protects the depositors' interest but adversely affects the balance sheet of the large bank, there is the **need for novel methods for resolution**. This could involve a public-private partnership model as used in the Yes Bank reconstruction plan.

Category: ENVIRONMENT AND ECOLOGY

1. Understanding forest fires and their effect on carbon emissions

Context:

- Study on forest fires in India.

Background:

Vulnerability of Indian forests:

- According to the report of the **Forest Survey of India**, over **54% of the forest cover in India is exposed to occasional fire**. During the 2003–2017 period, a total of 5,20,861 active forest fire events were detected in India.
- The States of northeast India, **Madhya Pradesh, Odisha, Chhattisgarh, Himachal Pradesh and Uttarakhand are the most fire-prone in India**.
- The sharp increase in average and maximum air temperature, decline in precipitation, **change in land-use patterns** have caused the increased episodes of forest fires in most of the Asian countries including India.

Details:

Methodology of study:

- The study used **remote sensing-based models** to measure primary productivity over an area and used **burn indices** to help demarcate the forest fire burn scars using satellite imagery.
 - The normalized burn ratio is an effective burn index commonly used to identify burnt regions in large fire zones.
- In normal conditions, healthy vegetation exhibits a very high reflectance in the near-infrared spectral region and considerably low reflectance in the shortwave infrared spectral region. These conditions get reversed in case of a forest fire incident. The **spectral differences between healthy vegetation and burnt forest areas** can be identified and highlighted by remote sensing burn indices.

Major observations:

- Previous studies using forecasting models and in-situ observations in western Himalaya have shown a sharp **increase of carbon monoxide, nitrogen oxides and ozone during high fire activity periods**. The current study noted very high to high carbon emissions in the eastern Himalayan states, western desert region and lower Himalayan region.
 - The occurrence of high fire intensity at the low altitude Himalayan hilly regions may be due to the plant species (pine trees) in the area and proximity to villages. Villages make them more susceptible to **anthropogenic activities like forest cover clearance, grazing** and so on.

Conclusion:

- The new methodology offers a promising tool for land resource managers and fire officials.
- Given the fact that identifying the forest fire hotspots and forecasting the fire location and time accurately can play an important role in mitigating the risks involved, there is the need for further studies on the **prediction of forest fires with the support of advanced machine learning models and AI-based techniques**.

Category: SCIENCE AND TECHNOLOGY

1. Unexposed people may have COVID-19-specific memory T cells

Context:

- Study on the immunity of humans to coronaviruses.

Details:

- At least five studies have shown that **people unexposed to and not infected with novel coronavirus may still exhibit T cell responses specific to nCoV-19.**
 - The studies found 20-50% of healthy people display novel coronavirus-specific memory T cells.
- A large percentage of adults are exposed to four different coronaviruses that cause the common cold. The SARS-CoV-2-specific T cell responses seen in healthy people might arise from memory T cells derived from **exposure to 'common cold' coronaviruses.**

Significance:

- Pre-existing T cell immunity to SARS-CoV-2 could influence **COVID-19 disease** severity.
 - It is possible that people with a high level of pre-existing memory CD4+ T cells that recognize novel coronavirus could mount a **faster and stronger immune response** upon exposure to the virus and thereby **limit disease severity.**
 - The existing T cells could potentially facilitate an increased and more rapid neutralizing antibody response against the virus.
- There pre-existing T cell memory might also influence vaccination outcomes.
 - Pre-existing immunity could help elicit better immune responses from the vaccines against novel coronavirus, and these responses can manifest faster.

Challenges:

- The pre-existing immunity can **reduce the immune responses** that the vaccine causes through a mechanism called the “**original antigenic sin**”.
 - Original antigenic sin, also known as the Hoskins effect, refers to the propensity of the body's immune system to preferentially utilize immunological memory based on a previous infection when a second slightly different version of that foreign entity is encountered.
- The pre-existing immunity can also lead to **antibody-mediated disease enhancement**, where antibodies present at sub-neutralising concentrations can actually augment virus infection and cause more severe disease as seen in chikungunya and dengue.

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: INTERNATIONAL RELATIONS

1. Should Kuwait's draft expat bill worry India?

Context:

- Kuwait's draft expatriate bill.

Background:

Indians in Middle East:

- **Around eight million Indians work in the GCC countries.** Around 2.1 million of them are from the state of Kerala. Other major contributors to the Indian expatriate communities in GCC countries are Uttar Pradesh, Tamil Nadu, Bihar, West Bengal, Punjab and Rajasthan.

Kuwait's draft law:

- Kuwait is pushing for a drastic reduction in the number of expatriates which is now pegged at 70% of the total population.
 - Kuwaitis are a minority in Kuwait. Of the total population of 4.3 million, Kuwaitis are 1.3 million, which is less than one third. There are more Indians than Kuwaitis in Kuwait.
 - According to the Indian Embassy in Kuwait, there are **around a million-plus Indians in Kuwait**. The Indian community in Kuwait has been growing at 5-6% per annum until the economic crisis triggered by the COVID-19 pandemic put an abrupt stop to immigration to the country. Indians are the largest expatriate community.
- The Kuwait National Assembly is discussing **several proposals to reduce the share of foreigners in the country's population**. One of the proposals under consideration is to put **country caps on the number of emigrants in the country**. According to this plan Indians should not exceed 15% of Kuwaiti citizens, while Egyptians, Bangladeshis and Filipinos among others must not each exceed 10% of Kuwaitis.

Details:

Nativism:

- In the past, high unemployment among the natives, economic crisis and demographic imbalance had triggered **movement for nationalisation of the workforce**.
- This has been a lingering concern in all GCC countries — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates — but the ongoing COVID-19 pandemic renewed the debate.
- COVID-19 exposed the huge concentration of certain populations among the expatriates, and the resulting imbalances.

Challenges to India:

- If Indians cannot exceed 15% of Kuwaitis, the cap would be around two lakh. This would require a large number of India's to return back to India. This would not only **affect the flow of foreign remittance to**

India but also **pressurize the already grim employment scenario in India** wherein the returning expatriates would be competing for the limited job opportunities available locally.

Challenges to Kuwait:

- Despite the renewed push for nationalisation of jobs and diversification of expatriates, the structure of the GCC economies makes any dramatic change unlikely.
 - About 3.27 lakh of the Indian expatriates are domestic workers (i.e. drivers, gardeners, cleaners, nannies, cooks and housemaids). A large number of Indian workers are also involved as construction workers.
 - There is a **division of labour** among the different classes of the society and that cannot be changed in a hurry. Replacement of Indian or Asian workers on a large scale is not possible, and native Arabs will not do certain categories of work.
- Around 5.23 lakh Indians are deployed in the private sector, as technicians, engineers, doctors, chartered accountants, IT experts, etc. About 28,000 Indians work for the Kuwaiti government in various jobs such as nurses, engineers in national oil companies, and a few as scientists. They have contributed to the development of Kuwait and this **scarce and valuable human resource** would be unavailable in case of the implementation of the proposals.
- Nationalisation of government jobs can be achieved to a significant extent, but the **private sector will continue to draw the majority of its workforce from abroad**. Given that the costs associated with hiring a citizen are too prohibitive for the private sector, they might consider leaving the country if it is forced to employ citizens only.

Category: INTERNAL SECURITY

1. IAF on a buying spree

Context:

- The **Defence Acquisition Council's (DAC)** approval of new procurement for the Indian Air Force (IAF).

Details:

- Recently the Defence Acquisition Council (DAC) chaired by Defence Minister approved defence deals involving procurement of 21 MiG-29 fighter jets for the Indian Air Force (IAF) along with upgradation of 59 existing MiG-29 jets in the IAF inventory and procurement of 12 Su-30MKI aircraft from Russia.
 - The 12 Su-30 MKIs, will be licence-produced by Hindustan Aeronautics Limited (HAL).
- Other deals approved by the DAC include **Pinaka rocket ammunition**, long-range land attack missile system of over 1,000 km range and **Astra Beyond Visual Range (BVR) air-to-air missiles** for the IAF.
 - The Astra Mk-1 has been integrated on the Su-30MKI jets and is being inducted into the force. The Astra Mk-II is under development by the Defence Research and Development Organisation (DRDO).

Significance:

Maintaining requisite strength:

- The new defence deals are expected to **address the long-felt need of the IAF to increase its fighter squadrons**. The IAF currently has 30 fighter squadrons against a sanctioned strength of 42 squadrons. The IAF is set to phase out its MiG-21 fighters in the next few years further reducing the strength.
 - The new MiG-29's will add to the three MiG-29 squadrons in service with the IAF which are already undergoing an upgrade.
 - The 12 Su-30 MKIs are meant to make up for the gaps in the Su-30MKI squadrons caused due to crashes over the years.

Air power:

- Air power will be **key to swiftly respond to any short escalations** and especially relevant amid the ongoing stand-off with China on the Line of Actual Control (LAC).

For more information on this refer- [CNA 24th June 2020](#).

Other significant proposals:

Domestic efforts:

- A deal for 83 **Light Combat Aircraft (LCA) Mk-1A** is expected to be signed soon. The deal has assumed even greater importance with the emphasis on indigenisation in defence. The IAF is scheduled to get 20 initial operational configuration (IOC) aircraft and 20 final operational clearance (FOC) aircraft in all and will eventually operate 123 LCA including the 83 Mk-1A aircraft.
- An **indigenous fifth-generation advanced medium combat aircraft (AMCA)** is also under development and is expected to make the first flight by 2032.

Foreign procurement:

- The IAF will start adding the first batch of the 36 **Rafale multi-role jets** contracted from France.
- There is also a tender for 114 fighter jets that has been floated to global aircraft manufacturers to be manufactured in India under technology transfer.
- The IAF is also **upgrading all aircraft in its current inventory** to make up for the shortfall. The Jaguar, Mirage-2000, MiG-29 fighters are all being upgraded and negotiations are on with Russia for a major upgrade of the Su-30MKI fleet.
- The IAF has signed several major deals which include **S-400 air defence systems** from Russia, **Apache attack helicopters** and **Chinook heavy lift helicopters** from the U.S. among others.

Challenges:

- The defence budget has been going down as a percentage of the GDP, and the novel coronavirus pandemic has put further **budgetary constraints on military modernisation**.
- The defence allocation for 2020-21 is pegged at Rs. 3.37-lakh crore excluding defence pensions which accounts for 1.5% of the GDP. There is a **steep rise in defence pensions**.

- In 2019-20, the IAF had committed liabilities, payments for deals already signed for, of over Rs. 47,000 crore which was more than its entire capital allocation. This could impede IAF's ability to modernize rapidly.

F. Tidbits

1. 'Govt. must prioritise healthcare spending'

- At the seventh economic conclave organised by State Bank of India, economists have noted that the government can turn the COVID-19 crisis into an opportunity by investing in healthcare.
- **India has historically under-invested in health** and the current increase in allocation for the health care sector even during the pandemic is not substantial either.
- There is the need to recognise that **economic recovery and health investments are interlinked**. The plan could involve building a 500-bed hospital each, in 250 districts, at a cost of Rs. 60,000 crore over the next two years.

2. Exhaled breath of COVID-19 patients can contain novel coronavirus, study finds

- The World Health Organization had acknowledged recently that **coronavirus can be airborne** in closed settings that lack good ventilation, and it can spread from one person to another in such settings on prolonged exposure.
- A study published in Nature had earlier found airborne coronavirus in a patient's breath. The study adds to the existing body of evidence that suggests **airborne transmission of the virus can play a role in virus spread**.
- The study found that COVID-19 patients exhaled coronavirus into the air at an estimated rate of 1,000-1,00,000 RNA copies/minute. This would mean that a **COVID-19 patient can exhale millions of virus particles per hour**.
- The emission rate of the virus was found to be influenced by a few factors such as disease stage, patient activity and age.
 - The study found that breath contained the virus, especially during the early stages of the disease.
- Measures such as **enhanced ventilation and the use of face masks are essential to minimise the risk of infection by airborne SARS-CoV-2**.

G. Prelims Facts

1. Assam keelback spotted for the first time in 129 years

- **The Assam keelback snake** has been sighted by a team from the Wildlife Institute of India, Dehradun, for the first time since 1869.
- Initially known as Hebuis Pealii, the Assam keelback is so far known only to inhabit Sivasagar in Upper Assam and **Poba reserved forest in Assam-Arunachal border**. As far as present knowledge goes, Assam keelback is an **endemic snake of Upper Assam**.

2. India's tiger census of 2018 sets a Guinness world record

- **India's tiger census of 2018** has set a Guinness record for being the **world's largest camera-trap wildlife survey**.
 - Camera traps are outdoor photographic devices fitted with motion sensors that start recording when an animal passes by. From these photographs, individual tigers are identified using stripe-pattern-recognition software.
- The **fourth cycle of the All India Tiger Estimation 2018** counted 2,967 tigers, which is about **75% of the global tiger population**.

Click on the link to know more about [Tiger Conservation in India](#).

3. The museum of conflicts

- **Hagia Sophia, the sixth century Byzantine structure in Istanbul**, was an Eastern Orthodox patriarchal cathedral for about 900 years, an imperial mosque for 482 years and now currently functions as a museum and a famed tourist spot.
- Hagia Sophia, a **UNESCO World Heritage site**, has been one of the most visited monuments in Turkey, and an emblem of Christian-Muslim co-existence.
- It is now being turned into a mosque by Turkish President Recep Tayyip Erdogan.

4. Psoriasis drug gets DCGI nod for emergency use

- The Drugs Controller General of India (DCGI) has cleared **Itolizumab, a drug used to treat severe chronic plaque psoriasis**, for restricted emergency use in COVID-19 care. The approval is only for emergency use in the treatment of **cytokine release syndrome (CRS)** in moderate to severe ARDS (acute respiratory distress syndrome) patients.
 - Psoriasis is a skin disorder that causes skin cells to multiply up to 10 times faster than normal. This makes the skin build up into bumpy red patches covered with white scales.
- Itolizumab is the **first novel biologic therapy** to be approved anywhere in the world for treating patients with moderate to severe COVID-19 complications.
 - Biological therapy **involves the use of living organisms, substances derived from living organisms**, or laboratory-produced versions of such substances to treat disease.

H. UPSC Prelims Practice Questions

Q1. 1. Which of the following statement/s is/are incorrect with respect to

Capital to Risk (Weighted) Assets Ratio (CRAR)?:

1. The lower the CRAR of a bank the better capitalized it is.
2. The Basel III norms stipulated a capital to risk-weighted assets of 8%.
3. In India, scheduled commercial banks are required to maintain a CRAR of 7% while Indian public sector banks are emphasized to maintain a CRAR of 6% as per RBI norms.

Options

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1,2 and 3

Answer: c

Explanation:

- Capital Adequacy Ratio (CAR) is the ratio of a bank's capital to its risk. It is arrived at by dividing the capital of the bank with aggregated risk-weighted assets for credit risk, market risk, and operational risk.
- It is also known as the Capital to Risk (Weighted) Assets Ratio (CRAR). In other words, it is the ratio of a bank's capital to its risk weighted assets and current liabilities.
- In general terms, a bank with a high CRAR/CAR is deemed safe/healthy and likely to fulfil its financial obligations. The higher the CRAR of a bank the better capitalized it is.
- CRAR is decided by central banks and bank regulators to prevent commercial banks from taking excess leverage and becoming insolvent in the process. RBI tracks CRAR of a bank to ensure that the bank can absorb a reasonable amount of loss and complies with statutory Capital requirements.
- The Basel III norms stipulated a capital to risk-weighted assets of 8%.
- In India, scheduled commercial banks are required to maintain a CAR of 9% while Indian public sector banks are emphasized to maintain a CAR of 12% as per RBI norms.

Q2. Which of the following statement/s is/are correct with respect to 'Countering America's Adversaries Through Sanctions Act' (CAATSA)?

1. CAATSA's stated purpose is to counter aggression by the Governments of Iran, the Russian Federation, and North Korea.
2. There are provisions in the law for secondary sanctions on persons that engage in significant transactions with Iran, Russia and North Korea.
3. There is a CAATSA waiver for India as part of the John S. McCain National Defense Authorization Act (NDAA) for fiscal year 2019.

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1,2 and 3

Answer: d

Explanation:

- The 'Countering America's Adversaries Through Sanctions Act' (CAATSA) was passed by the U.S. Congress in 2017. CAATSA's stated purpose was to counter aggression by the Governments of Iran, the Russian Federation, and North Korea.
- There are provisions in the law for secondary sanctions on people who engage in significant transactions with Iran, Russia and North Korea.
- Given the India-U.S. growing defence relationship, the U.S. Congress passed a CAATSA waiver for India as part of the John S. McCain National Defense Authorization Act (NDAA) for fiscal year 2019.

Q3. Which of the following statement/s is/are correct?

1. As per the recent all India Tiger Estimation survey of 2018, the number of tigers reported from India have increased as compared to the previous survey.
2. India accounts for less than 25% of wild tiger population of the world.

Options:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: a

Explanation:

- The fourth cycle of the All India Tiger Estimation 2018 counted 2,967 tigers, which is about 75% of the global tiger population.

Q4. Hagia Sophia, is located in which of the following country?

- a. Syria
- b. Turkey
- c. Iran
- d. kazakhstan

Answer: b

Explanation:

- a.

- Hagia Sophia, the sixth century Byzantine structure in Istanbul, was an Eastern Orthodox patriarchal cathedral for about 900 years, an imperial mosque for 482 years and now currently functions as a museum and a famed tourist spot.
- Hagia Sophia, a UNESCO World Heritage site, has been one of the most visited monuments in Turkey, and an emblem of Christian-Muslim co-existence.

I. UPSC Mains Practice Questions

1. Evaluate India's vulnerability to forest fire. Examine the associated challenges and suggest suitable measures to reduce the risk of forest fires. (10 marks, 150 words)
2. Given the fact that the economic fallout from the COVID-19 pandemic would most likely result in higher non-performing assets and capital erosion of banks, discuss the associated concerns and suggest both short and long term measures to help mitigate the crisis. (15 marks, 250 words)