

23 May 2021: UPSC Exam Comprehensive News Analysis

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A. GS 1 Related

Category: GEOGRAPHY

1. Yaas may become a very severe cyclonic storm: IMD

Context:

- **Cyclone Yaas** developing in the Bay of Bengal

Background:

- Given India's location in the North Indian Ocean, it continues to remain vulnerable to tropical cyclones both on the east and west coast.
- The **North Indian Ocean cyclone season** occurs between April and November, with peaks in **late April to May and October to November**.
- The current pre monsoon cyclonic season of April-May had the **cyclone Tauktae** make landfall on the western coast of India.

For more information on this refer to:

[UPSC Comprehensive News Analysis of 19th May 2021](#)

Details:

- A **low pressure area** has formed over the east-central Bay of Bengal and the adjoining north Andaman Sea.
- As per the India Meteorological Department (IMD), this low pressure area is very likely to concentrate into a **depression** and further intensify into a **cyclonic storm** and **very severe cyclonic storm** in the days to come.
- The cyclone is very likely to move north-north-westwards and make **landfall on the Odisha and West Bengal coasts**.

For related information refer to:

[UPSC Comprehensive News Analysis of 20th May 2021](#)

Measures being taken:

- Odisha and West Bengal are reviewing the **disaster management preparedness for the impending Yaas cyclone** and taking the following measures to mitigate the impact.
 - Fishermen have been advised to return from the seas
 - Early evacuation from coastal & riverine areas to rescue shelters including cyclone & flood shelters are being undertaken
 - Deployment of State and National Disaster Response Force is taking place
 - Stocking and preparing for the relief and rehabilitation operations is being ensured
 - 24x7 control rooms have been set up for assistance to the citizens

Category: SOCIAL ISSUES

1. Call for action to protect Odisha tribes

Context:

- More than **100 tribals among 10 out of 13 Particularly Vulnerable Tribal Groups (PVTGs) in the state of Odisha have been affected** by COVID-19.

For related information refer to:

[UPSC Comprehensive News Analysis of 15th May 2021](#)

Details:

- Amid the concerns over rising COVID-19 positive cases among PVTGs, activists and writers have urged the Odisha government to take immediate steps to prevent loss of lives among the PVTGs like the Dongria Kondh and Bonda due to COVID-19.

Challenges:

- There is a **heightened sense of hesitancy among the tribal** to use allopathic medicines. The tribals have been reluctant to even undergo the RT-PCR tests.
- The measures announced to contain the spread of COVID-19 like **home quarantine would not work among the tribals** as privacy and isolation hardly exist within the tribal culture.

Recommendations:

- **Door to door surveys** must be undertaken by a team of trained local volunteers for regular monitoring of symptoms, and reporting of any suspected cases.
- The government should set up **quarantine centres** exclusively for tribals within 2 km of their settlements.
- **Health kits** consisting of three layered masks, necessary medicines and vitamins must be distributed among the tribal communities.
- The government must ensure **upgradation of all primary health centres** located in tribal areas and also ensure adequate provisioning of manpower, medical equipment, medicines and other infrastructure in these PHCs.
- The vulnerable tribals must be provided with a **special livelihood relief package** as compensation for their agriculture and minor forest produce (MFP) which have come to a standstill.

B. GS 2 Related

Category: INTERNATIONAL RELATIONS

1. Treading the middle path

- This article discusses the U.S.'s move to lift sanctions on the **Nord Stream 2 pipeline**.

This issue has been previously covered in the following article:

[UPSC Comprehensive News Analysis of 20th May 2021](#)

C. GS 3 Related

Category: AGRICULTURE

1. Weather fluctuations may trigger pest attack on sugarcane crops in U.P.

Context:

- Concerns of **pest attack on sugarcane crop** in Uttar Pradesh.

Background:

- Uttar Pradesh has the maximum area under sugarcane cultivation.** However, the **highest sugar recovery can be obtained in Maharashtra.**
- Uttar Pradesh is India's largest producer of sugarcane, accounting for 51 per cent of the total cultivated area, 50 per cent of the crop and 38 percent of sugar production

Details:

- The frequent fluctuations in weather conditions in recent times have raised the risk of pest attacks for the sugarcane crop in Uttar Pradesh.
 - The **excess moisture in the atmosphere and day-to-day fluctuations in the weather** has aided the spurt in the population of various pests such as **pyrilla, grasshopper, fall armyworm and black bug.** These pests mainly infest the sugarcane crop.
 - These insects by feeding on the leaves of sugarcane plants **impacts sugarcane growth and decreases yield and sugar content.**
- The state government has issued an advisory to make relevant arrangements for prevention of insects and pests attacks and has also advised field inspections to gauge the extent of the threat.
- The department officials have been asked to destroy the affected plants and not to use them as cane seeds for sowing.
 - Black bug is mostly found in the **ratoon plant.**
 - Ratoon is a new shoot or sprout springing from the base of a crop plant, especially sugar cane, after cropping.

Category: ENVIRONMENT AND ECOLOGY

1. How whiteflies came, saw and conquered India's crops

Context:

- Concerns over the spread of the whiteflies in India.

Details:

- The invasive whitefly is now distributed throughout India except Jammu & Kashmir.
 - Most of the **whitefly species are native to the Caribbean islands or Central America.**

Concerns:

Rising number of invasive species:

- The increasing import of plants and **increasing globalization and movement of people** has aided the spread of exotic varieties and their subsequent growth into invasive species.

Damage to crops:

- Whitefly **reduce the yield and also damage crops.**
- These invasive whiteflies have been found to have expanded their host range on valuable plants species like coconut, banana, mango, sapota, guava, cashew, oil palm, and important medicinal plants.

Nature of whiteflies:

- A recent study has noted that the host range of all of the invasive whiteflies has been increasing due to their **polyphagous nature (ability to feed on various kinds of food) and prolific breeding.**

Ineffectiveness of available insecticides:

- Whiteflies have been **difficult to control by using available synthetic insecticides.**

Recommendations:

Continuous monitoring:

- The administration should ensure continuous monitoring of the occurrence of invasive species, their host plants and geographical expansion is needed.

Phytosanitary regulations:

- Given the threat of invasive species, the state should ensure stricter phytosanitary measures at relevant places to reduce the chances of incoming exotic species.

Awareness among the citizens:

- The state should also work towards increasing the awareness among the general populace about the threat posed by exotic species. This will help **reduce the chances of general populace indulging in illegal or unintentional import of exotic species.**

Use of biological control methods:

- Given the fact that whiteflies are difficult to control by using synthetic insecticides, **naturally occurring insect predators, parasitoids and entomopathogenic fungi** (fungi that can kill insets) could be used as novel biological control of the invasive whiteflies.
 - Entomopathogenic fungi specific to whiteflies are isolated, purified, grown in the lab or mass-produced can be applied into the whitefly infested field in combination with the release of lab-reared potential predators and parasitoids.
- Biological control based methods are **not just environmentally friendly but also economically feasible.**

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: ECONOMY

1. A jobs crisis in the second wave of COVID-19

Background:

- The **second wave of COVID-19 pandemic** and the localised lockdowns across several States, have resulted in restrictions on movement of people and goods and thus has led to **restrained economic activity in India**.

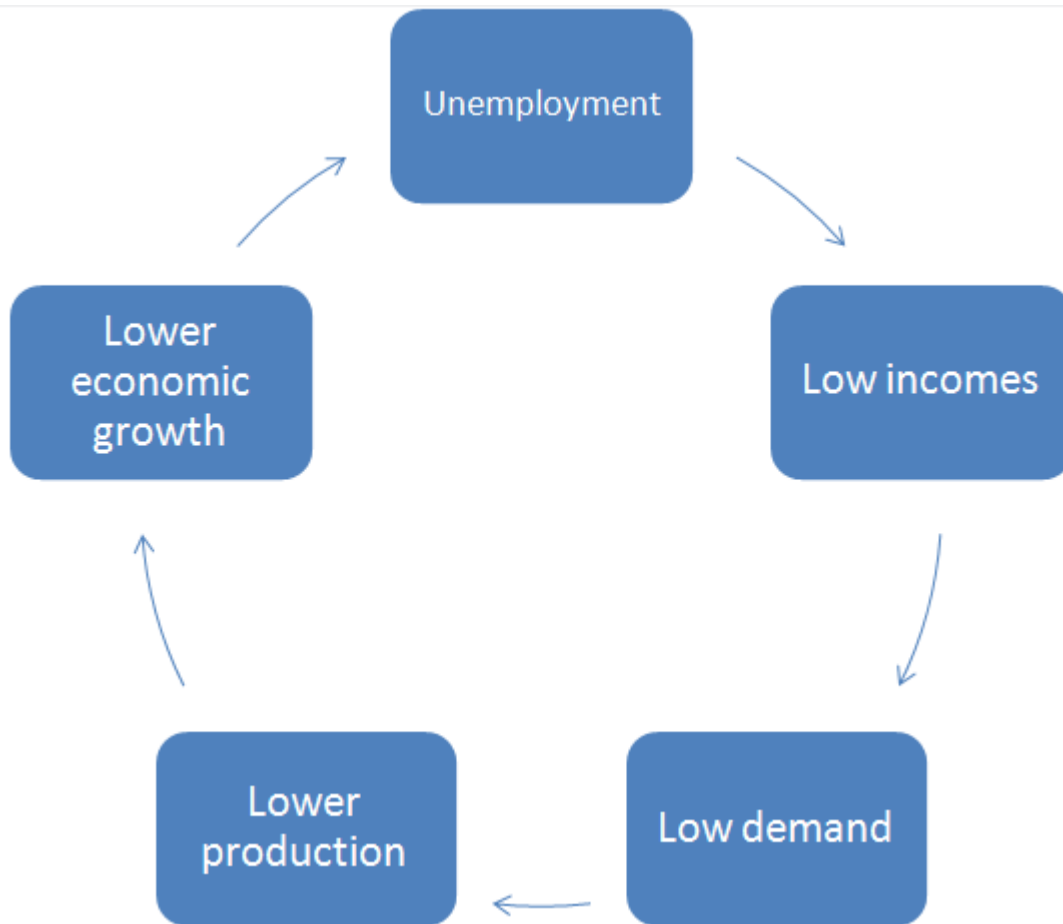
Details:

- The restrained economic activity has resulted in **large scale job losses** in India.
 - According to the Centre for Monitoring Indian Economy (CMIE), the **unemployment rate has shot up** to 8% in April 2021 as several States started imposing lockdowns. The month of May has seen the rates rise further.
 - There have been a mammoth 73.5 lakh job losses in April alone.
 - As of May 21, the 30-day moving average for overall unemployment was 10.3%, with the relevant figures for urban and rural areas at 12.2% and 9.4%, respectively.
- The salaried class has also witnessed significant loss of jobs since the pandemic began.
- Even states with traditionally low unemployment rates like Gujarat have also witnessed increases in unemployment rates.
- There has been a **steady fall in the number of employees (both salaried and non-salaried) for the third straight month**.
- This is a clear indication that the **jobs scenario is weakening**

Economic consequences of rising unemployment:

- Job losses have a **depressing impact on incomes**.
 - Almost 90% of Indian families have seen their incomes shrink over the course of the past 13 months.
- The job losses **dampen consumer sentiment and lowers discretionary spending, economic demand** and subsequently consumption expenditure which is so very vital for a developing economy like India.
 - The RBI's monthly bulletin also acknowledges this demand shock which has been a character of the economic impact of the second wave of the pandemic.
 - The contraction in e-way bills of GST might be indicative of such a contraction in demand for goods.
- The reduction in demand for goods would invariably lead to **lower GST collections** in the coming months. This would severely impede public expenditure by the government which is so very important for economic revival.

- The reduced income levels would have a detrimental **impact on the food security of the poor and vulnerable**. This could have a debilitating impact on the health and productivity of the workforce.
 - Several reports have highlighted the problem of the low-income population cutting back on food intake due to income losses.
- **The high levels of unemployment will push the economy into a vicious cycle of low economic growth.**



Economic concerns associated with second wave:

Long term impact of the pandemic:

- The poor have been forced to cope with this economic shock by borrowing, largely from informal sources or by selling their assets.
 - Surveys have shown that the poorest households having taken the largest loans relative to their earnings.
- Experts have noted that the affected people will indulge in building back the depleted savings or will try and pay back the incurred debt by curtailing future consumption and investment.
- This means that **even after a lockdown is lifted the consumer spending may remain muted**. Hence the **economic revival would take longer**, thus belying hopes of an economic revival in the aftermath of the first wave of the pandemic.

Impact on agricultural sector:

- Unlike during the first wave when the agricultural sector witnessed positive growth rates and also increased employment opportunities, it is not so during the second one.
 - The rural hinterland has been far more affected by the pandemic in the second wave as compared with the first wave.
- **The agricultural sector has also been witnessing job losses in the second wave.** In April 2021, agriculture shed 6 million jobs just in a month's time.

Disproportionate impact on the most vulnerable:

- **Women** face a double challenge in the form of lower labour participation and a higher unemployment rate for females compared with males (for ages above 15).
- The vulnerable population like the **daily wage labourers and small traders** have witnessed a loss of employment

High degree of uncertainty:

- Also notably, **the labour participation rate (LPR) for April 2021, at 40%, remained lower than the levels seen before last year's lockdown.** This is indicative of the high uncertainty associated with the second wave.
 - The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work; it provides an indication of the size of the supply of labour available to engage in the production of goods and services, relative to the population at working age

For more related information refer to:

UPSC Comprehensive News Analysis of 21st May 2021

Governmental measures taken:

- The **Mahatma Gandhi National Rural Employment Guarantee scheme** has been broadened to cater to the increased demand for work in rural areas as reverse migration of labour picked up. The
- The Central government's decision to distribute 5 kg of rice and wheat for free to ration card holders across the country will help limit the impact of job losses on nutritional security of the poor and vulnerable.
- The state governments have also taken several measures to mitigate the impact of job losses on the general populace.
 - Bihar has announced that it would issue an equal measure to the Centre's distribution from the State's resources for free distribution via the Public Distribution System.
 - Tamil Nadu has announced Rs 4,000 handout per ration card.
 - Kerala has undertaken distribution of free food kits for vulnerable families
 - Karnataka has announced a Rs. 1,250-crore relief package, for vulnerable sections like farmers, auto and taxi drivers, construction workers and other informal sector workers.

Category: SCIENCE AND TECHNOLOGY

1. Identifying mutants

Indian SARS-CoV-2 Genomic Consortia:

- The Indian SARS-CoV-2 Genomic Consortia (INSACOG) is an advisory group to the Central government.
- It is a **national multi agency consortium of ten laboratories** of Department of Biotechnology, CSIR, ICMR and Ministry of Health & Family Welfare.
- It has helped **undertake the whole genome sequencing of SARS-CoV-2 virus** across the nation in a more co-ordinated way. Thus it keeps a tab on the variants found in India. This **continuous genomic surveillance and epidemiological surveillance** will help the INSACOG flag potential virus variants of concern.
 - As per the Department of Biotechnology (DBT) around 20,000 samples have been sequenced till now and about 3,900 variants have been identified.
 - This included foreign variants like the B.1.1.7 (first identified in the United Kingdom), the B.1.351 (first found in South Africa) and a small number of P2 variants (from Brazil).
 - **The B.1.617 variant also known as the 'double mutant' variant** has also been flagged by it. In March, it was linked to a spurt in cases in Maharashtra.

For more information on the double mutant variant refer to:

UPSC Comprehensive News Analysis of 12th May 2021

Significance of genome sequencing:

- The genome sequencing and correlating them with disease intensity **helps flag variants of concern**. Timely measures to limit the spread of variants of concern help limit the spread of the pandemic.
- Genome sequencing **helps understand the role of certain mutations in increasing the virus's infectivity** and this will help in the refabrication of existing vaccines if need be.
 - Some mutations have also been linked to immune escape, or the virus's ability to evade antibodies, which could have a huge impact on the efficacy of existing vaccines.

Challenges for INSACOG:

- INSACOG has not been able to achieve its target of sequencing at least 5% of the samples in India. It has been only around 1%. The **shortage of funds and materials** to scale up the process has been the major challenge to test more samples.
- The sharing of datasets, even within constituent groups of the INSACOG has been less than ideal. This robs the initiative of the potential benefits that a more co-ordinated approach would bring, like more accurate and informed warnings and also a more responsive structure.
- **The INSACOG is only an advisory group to the Central government and its advice has not been given due weightage**. Warnings about emerging variants were not made public with sufficient urgency.

F. Prelims Facts

1. Serum's supply to COVAX hit by India's poor planning

COVAX facility:

- **COVID-19 Vaccines Global Access, abbreviated as COVAX**, is a global initiative aimed at **equitable access to COVID-19 vaccines**.
 - It is one of the three pillars of the **Access to COVID-19 Tools Accelerator**.
- COVAX coordinates international resources to accelerate the development and manufacture of COVID-19 vaccines and to guarantee fair and equitable access of vaccines for every country in the world. It emphasizes on pooled procurement and fair distribution of COVID-19 vaccines,
- It is led by Gavi, also known as the **Global Alliance for Vaccines and Immunization (GAVI)**, the **Coalition for Epidemic Preparedness Innovations (CEPI)**, and the **World Health Organization (WHO)**.
 - GAVI is a public-private global health partnership with the goal of increasing access to immunisation in poor countries.

2. Celestial history

- The Milky Way galaxy merged with a **satellite dwarf galaxy Gaia-Enceladus**.
- As per a recent study, this merger is believed to have taken place some ten billion years ago.

G. Tidbits

1. BRICS Astronomy Working Group moots networking of existing telescopes

- Under the **science, technology and innovation track of the BRICS 2021** calendar, India recently hosted the seventh meeting of **BRICS Astronomy Working Group (BAWG)**.
 - **India assumed the BRICS Presidency from January 2021** and has been organizing events, including ministerial level meetings, senior official meetings, and sectorial meetings or conferences.
- The BRICS Astronomy Working Group has recommended **networking of telescopes in member countries and creating a regional data network**.
- There was also a proposal to develop a collaborative flagship project in the area of astronomy. This could involve building a network of intelligent telescopes and regional data network, study of transient astronomical phenomena in the universe, and the use of big data, artificial intelligence and machine learning applications to process the data generated by astronomical observations.

H. UPSC Prelims Practice Questions

Q1. Which of the given statement/s is/are correct w.r.t National Crisis Management Committee (NCMC)?

1. Vice-chairman of the National Disaster Management Authority is the ex-officio chairman of the NCMC.
2. NCMC and Cabinet Committee on Security (CCS) are the key committees involved in the top-level decision-making with respect to Disaster Management (DM).
3. It coordinates the activities of the ministries in the central government and the state governments in ensuring disaster preparedness and relief operations.

Options:

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

Answer: d

Explanation:

- Cabinet Secretary chairs the National Crisis Management Committee.
- NCMC and Cabinet Committee on Security (CCS) are the key committees involved in the top-level decision-making with respect to Disaster Management (DM).
- NCMC coordinates the activities of the ministries in the central government and the state governments in ensuring disaster preparedness and relief operations.

Q2. Which of the given statement/s w.r.t Spiralling whitefly is/are correct?

1. It is an invasive species native to Sri Lanka.
2. It predares upon fruit plants, vegetables and entomopathogenic fungi.
3. First reported in Kerala, it is now distributed throughout India except for Jammu and Kashmir.

Options:

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

Answer: c

Explanation:

- Spiralling Whitefly (*Aleurodicus disperses*) is an invasive species native to Caribbean islands or Central America or both.
- It predares upon fruit plants, ornamental plants, medicinal plants, vegetables etc. However, it does not feed on entomopathogenic fungi.

- Entomopathogenic fungi is one of the measures used in controlling Spiralling Whitefly. The Entomopathogenic fungi kill and feed on Spiralling Whiteflies.
- First reported in Kerala in 1995, it is now distributed throughout India except for Jammu and Kashmir.

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

1. Genome sequencing helps in understanding the role of mutations in increasing the virus's infectivity.
2. Coronavirus genome is made of RNA only.
3. The Human Genome Project is India's research effort to determine the sequence of the human genome and identify the genes that it contains.

Options:

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

Answer: a

Explanation:

- Genome sequencing helps in understanding the role of mutations in increasing the virus's infectivity.
- The Coronavirus genome is made of RNA.
- The Human Genome Project (HGP) was an international scientific research project that led to the decoding of the entire human genome.
- Inspired by Human Genome Project (HGP), India started the Genome India Project

Q4. Which of the given pairs are correctly matched?

Cyclones	Suggested by
1. Yaas	Oman
2. Nisarga	India
3. Nivarm	Bangladesh
4. Burevi	Maldives

Options:

- a. 1 and 3 only
- b. 1, 2 and 4 only
- c. 2 and 4 only
- d. 1 and 4 only

Answer: d

Explanation:

Cyclones	Suggested by
1. Yaas	Oman
2. Nisarga	Bangladesh
3. Nivar	Iran
4. Burevi	Maldives

Q5. With reference to Asian Infrastructure Investment Bank (AIIB), consider the following statements: (UPSC 2019)

1. AIIB has more than 80 member nations.
2. India is the largest shareholder in AIIB.
3. AIIB does not have any members from outside Asia.

Which of the statements given above is/are correct?

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

Answer: a

Explanation:

- Asian Infrastructure Investment Bank has 103 members.
- For Asian or Non-Asian members, the allocated shares in the bank are based on the size of each member country's economy.
- China is the largest shareholder in the bank followed by India.
- The bank has members from outside Asia as well.

I. UPSC Mains Practice Questions

1. In the light of the increasing frequency and intensity of tropical cyclones, discuss the cyclone preparedness and effective mitigation strategies required to deal with future cyclones. (15 marks, 250 Words)[GS-3, Disaster Management].
2. The spike in COVID cases and the subsequent lockdowns has led to Job losses and created an unemployment Crisis. Illustrate with examples the initiatives taken by the Governments to compensate wage losses and also support livelihood. (15 marks, 250 Words)[GS-3, Economy].