



News Analysis (31 Mar, 2020)

drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/31-03-2020/print

Migrant Workers Given Mass Disinfectant Bath

Why in News

Recently, migrant labourers returning to their homes from urban centres were forced to take an open bath with disinfectant before they were allowed to enter **Bareilly (Uttar Pradesh)**.

It was done in order to **prevent COVID-19 from spreading** even further in the town.

Key Points

- The nodal officer in-charge of **COVID-19** in the district confirmed that the disinfectant was only chlorine mixed with water and not a chemical solution.
- However, the Medical Officer of Bareilly has informed that **sodium hypochlorite solution** was sprayed on the migrants.
- The solution is also **being used in Gujarat, Maharashtra and Punjab** for disinfecting buildings and solid surfaces in a bid to wash away any presence of novel coronavirus.
- It was argued that the move was initiated for the safety of the incoming migrants who arrived in special buses run by the government as it was necessary to eradicate the possible spread of the disease.
- The District Magistrate has ordered action against officials who recklessly forced migrants to take bath with the disinfectant without knowing its harmful effects on humans.
 - In Delhi, a 1% sodium hypochlorite solution was used in the spray applied on migrant workers' belongings.
 - A **1% solution can cause damage to the skin** of anyone who comes in contact with it.

Sodium Hypochlorite

- Sodium hypochlorite is commonly used as a **disinfectant**, a **bleaching agent**, and also to **sanitise swimming pools**.
- It **releases chlorine**, which is a disinfectant and big quantities of chlorine can be harmful.
- **Uses:**
 - A **normal household bleach** usually is a **2-10%** sodium hypochlorite solution.
 - At a much lower **0.25-0.5%**, this chemical is used to **treat skin wounds** like cuts or scrapes.
 - An even **weaker solution (0.05%)** is sometimes used as a **handwash**.
- **Harmful effects on human beings:**
 - Sodium hypochlorite is **corrosive**, and is meant largely to clean hard surfaces.
 - If it gets inside the body, it can cause **serious harm to lungs**.
 - Even a 0.05% solution could be very **harmful for the eyes**.
 - It can cause **itching or burning** and is not recommended to be used on human beings, certainly not as a spray or shower.
- **Effect on the novel coronavirus:**
 - The **World Health Organization** (WHO), and the US Centers for Disease Control and Prevention, **recommend homemade bleach solutions** of about 2-10% concentration to clean hard surfaces to **disinfect them from coronavirus**.
 - A Michigan State University tutorial says that cleaning hard surfaces with this solution can disinfect them not just from novel coronavirus but also **help prevent flu, food borne illnesses, and more**.
 - However, it advises to **always use the bleach in a well-ventilated area and wear gloves** when handling the product or solution.

Source: TH

IIT-B Designs UV Sanitiser

Why in News

Recently, the **Industrial Design Centre** (IDC) of **Indian Institute of Technology** (IIT), **Bombay** has developed a **portable UltraViolet (UV) sanitiser**.

It can sterilise wallets, purses and other small items that are passed on from hand to hand.

Key Points

- The UV sanitiser has been made **using stainless steel kitchen containers and aluminium mesh** and is in the **proof-of-concept stage** right now.

- It's design is based on a study published in a journal PubMed, by the US National Library of Medicine.

The study demonstrates how **ultraviolet C Light can inactivate Severe Acute Respiratory Syndrome Coronavirus, Crimean-Congo Haemorrhagic Fever (CCHF) Virus and Nipah Virus.**

- **Objects might be carriers of the viruses** and sanitising gel cannot be used on every object humans come in contact with like papers, files, currency notes and phones.
- **Other contributions by IDC:**
 - IDC is also working on projects on sanitising bigger surfaces and working on different models.
 - The institute has also been making its own **cotton masks**, which are **double-layered and washable**.
 - IDC has also **collaborated with a company called Applied Systems** to **manufacture face shields using helmet visors**.
 - IIT also **developed apps** to help **keep quarantine violations in check**.

Crimean-Congo Haemorrhagic Fever

- It is a **viral haemorrhagic fever** usually transmitted by ticks.
- It can also be **contracted through contact with viraemic animal tissues** (animal tissue where the virus has entered the bloodstream) during and immediately post-slaughter of animals.
- CCHF outbreaks constitute a threat to public health services as the virus can lead to **epidemics**, with a **high case fatality ratio** (10-40%).
- CCHF is endemic in all of Africa, the Balkans, the Middle East and in Asia.
- **Symptoms:**
 - Fever, muscle ache, dizziness, neck pain, backache, headache, sore eyes and photophobia (sensitivity to light).
 - There may be nausea, vomiting, diarrhoea, abdominal pain and sore throat early on, followed by sharp mood swings, confusion, depression and liver enlargement.
- **Treatment:**
 - General supportive care with treatment of symptoms is the main approach to managing CCHF in people.
 - The **antiviral drug ribavirin** has been used to treat CCHF infection with apparent benefit. Both oral and intravenous formulations seem to be effective.
 - There are **no vaccines widely available for human or animal use**. In the absence of a vaccine, the only way to reduce infection in people is by raising awareness of the risk factors and educating people about the measures they can take to reduce exposure to the virus.

Source: IE

Lockdown Made Kaveri and Tributaries Cleaner

Why in News

According to the Karnataka State Pollution Control Board (KSPCB), the strict enforcement of 21-day lockdown due to the **COVID-19** pandemic has **reduced the pollution in Kaveri river and its tributaries.**

However, the Board will test the water samples at the regional laboratory in Mysore under the national programme '**Monitoring of Indian National Aquatic Resources**' and **Global Environmental Monitoring Scheme.**

Key Points

- **Untreated sewage** from residential areas; **pollutants from industries; religious waste material** from pilgrims, and **construction debris** had been polluting the rivers.
- These rivers were flowing with **hazardous elements such as lead, fluoride, faecal coliform, and some suspended solids** in highly dangerous quantities.
- The prohibition of industrial and religious activities has helped in reducing pollution levels in the rivers.

Kaveri River

- Kaveri is a **sacred river** of southern India. It **rises in the Brahmagiri range of the Western Ghats** and **falls in the Bay of Bengal** south of Cuddalore, in Tamil Nadu.
- It **forms the sacred islands of Srirangapatna and Shivanasamudra** and **Shivanasamudra falls** and also **a wide delta.**
- Total Length of the river is about 760 km.
- Its main tributaries are **Amravati, Bhavani, Hemavati, Kabini, Shimsha, and Lakshmana Tirtha.**
- It's basin drains parts of **Karnataka, Kerala and Tamil Nadu.**

Global Environment Monitoring System (GEMS)

- It was introduced in 1975 at the United Nations Conference on the Human Environment.
- It is a global operation that collects information to better understand and protect the Earth's environment.
- This effort is made with the cooperation of other countries, who contribute data to the GEMS.

Monitoring of Indian National Aquatic Resources (MINARS)

- MINARS is a National Programme of monitoring national aquatic resources.
- It was started in 1984, with a total of 113 stations spread over 10 river basins.
- The present network comprises 870 stations on rivers, lentic water bodies and subsurface waters.

Source: TH

NRIs Can Invest in Specified Government Securities

Why in News

Recently, the **Reserve Bank of India (RBI)** has introduced a separate channel called **Fully Accessible Route (FAR)** to enable non-residents to invest in specified Government of India dated securities with effect from April 1.

The move follows the **Union Budget** announcement that certain specified categories of government securities would be opened fully for non-resident investors without any restrictions.

Key Points

- **'Specified securities'** shall mean Government Securities as periodically notified by the Reserve Bank for investment under the FAR route.
 - The RBI has said that **all new issuances of Government securities (G-secs)** of 5-year, 10-year, and 30-year tenors will be eligible for investment as specified securities.
- Non Resident investors can invest in specified government securities **without being subject to any investment ceilings.**
- This scheme shall operate along with the two existing routes:
 - **The Medium Term Framework (MTF)** for Foreign Portfolio Investment (FPI) in Central Government Securities (G-secs) and State Government Securities (SDLs) was introduced in October 2015.
 - FPI consists of securities and other financial assets passively held by foreign investors.
 - **The Voluntary Retention Route (VRR)** encourages Foreign Portfolio Investors to undertake long-term investments in Indian debt markets.

Benefits of the Scheme

- This will **ease the access** of non-residents to Indian government securities markets.
- This would facilitate **inclusion in global bond indices**.
Being part of the global bond indices would help Indian G-secs **attract large funds from major global investors**, including pension funds.
- This would also facilitate **inflow of stable foreign investment** in government bonds.

Government Security

- A G-Sec is a **tradable instrument** issued by the Central Government or the State Governments.
- It acknowledges the Government's debt obligation. Such securities are **short term** (usually called treasury bills, with original maturities of less than one year- presently issued in three tenors, namely, 91 day, 182 day and 364 day) or **long term** (usually called Government bonds or dated securities with original maturity of one year or more).
- In India, the **Central Government issues both treasury bills and bonds or dated securities** while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs).
- G-Secs carry practically **no risk of default** and, hence, are called risk-free **gilt-edged instruments**.
- Gilt-edged securities are high-grade investment bonds offered by governments and large corporations as a means of borrowing funds.

Source: TH

Humidity and Spread of Coronavirus

Why in News

Recently, a study by researchers at the **Massachusetts Institute of Technology (MIT)** in the United States found that regions experiencing a monsoon might see a slowdown (not a stop) in transmission of the coronavirus as a result of moderate levels of humidity.

This could help **mitigation strategies in tropical countries** such as India.

Key Points

- The findings show that 90% of the novel coronavirus transmissions have occurred in regions with **temperatures between 3 and 17 degrees Celsius**.
- These regions also had an **average humidity range of 3-9** gram per cubic metre (g/m³).

- These regions comprised the **United States and several European countries** that are inundated by **COVID-19** infections.
- There are comparatively **fewer infections in warmer and humid countries** such as Singapore, Australia, Taiwan and Qatar.
 - It is also possible that **warmer temperatures retarded the spread of the virus.**
- A series of experimental studies have shown that the **Coronaviruses** are sensitive to humidity and are less likely to thrive at moderate levels of humidity.
- A 2018 study in the peer-reviewed Applied and Environmental Microbiology concluded that
 - Coronaviruses thrived when the **Relative Humidity (RH)** (the proportion of water vapour in the air compared to what's the maximum possible) exceeded 85% or dipped below 60%.
 - There is a **significant decrease in infectivity at mid-range RHs** (60 to 85%).
- A similar experiment that tested the ability of viruses to survive on **stainless steel surfaces**, found that :
 - At 4°C, infectious viruses persisted for as long as 28 days.
 - The lowest level of inactivation occurred at 20% RH.
 - Inactivation was quicker at 20°C than at 4°C at all humidity levels.
 - The slowest inactivation occurred at low levels of RH.

Source: TH

Public Health vs Private Information

Why in News

Recently, a list containing private information of suspects of **Covid-19** was not only found on social media but also some state governments, officially, have made public the disclosure of data of those under quarantine.

Such disclosures have raised concerns over balancing the importance of **public health, doctor-patient confidentiality** and the **fundamental right to privacy.**

Key Points

- In the **absence of a national protocol or law**, state governments are divided on the approach to handle the situation.
- While some states have put data in the public domain to **better inform citizens**, other states are making efforts to **protect identities to avoid panic and to respect privacy.**

- For **contact tracing** and **ensuring social isolation**, states are relying upon **informing communities. Example:**
 - **Karnataka** has published a district-wise list of those who are home-quarantined with travel details and exact addresses on the Department of Health and Family Planning's website.
 - Many states including **Delhi, Gujarat, and Karnataka** have instructed local authorities to label houses where individuals are quarantined.
- However, **West Bengal**, which has put peoples under home surveillance and in isolation, has **not disclosed the identities of individuals or hospitals** in which they are kept.

Legal Perspective

- There is **no law which backs disclosure** of personnel information to the public.
- The **Code of Medical Ethics** prescribed by the Indian Medical Council, bars disclosure of information relating to the patient learnt during the treatment **except in certain cases.**

The exceptions include circumstances **where there is a serious and identified risk to a specific person and/or community;** and in the case of **notifiable diseases.**
- Even the **Ministry of Health guidelines** for surveillance provide for sharing of patient/contact information with the **state or district level surveillance units** of the Integrated Disease Surveillance Programme or any **other authority** that first comes in contact with the patient.

But there is **no provision** in these guidelines to **make patient details public or even naming missing patients.**
- Legislation invoked to handle a public health emergency, **the Epidemic Act, 1897**, and **the Disaster Management Act, 2005**, provide **legal immunity** to action taken in **“good faith”** during this time.

The provision states that officers and employees of the Central/ State Government, shall be immune from legal process in regard to any warning in respect of any impending disaster communicated or disseminated by them in their official capacity or any action taken or direction issued by them in pursuance of such communication or dissemination.
- Even, under **the Data Protection Bill**, a data fiduciary (the government) can process personal data of individuals to respond to a medical emergency where the life of a data principal is at risk.
 - It can also be processed in the face of an epidemic, outbreak of diseases or any other threat to public health.
 - The COVID-19 pandemic can fall under these categories.

Issues

- Publishing names of individuals, along with their addresses on social media or in front of their houses puts families at **risk of physical or emotional distress**.
- It will also create more **panic among the people**.
- If challenged in court, disclosure of personnel information by the government will have to pass the **“proportionality test”** prescribed by the Supreme Court in the landmark 2017 **Puttaswamy verdict** that **recognised the fundamental right to privacy**.
 - **Proportionality test** is a legal method used by **constitutional courts**, to decide hard cases, that is cases **where legitimate rights collide**.
 - In such a case, a **decision necessarily leads to one right prevailing at the expense of another**.

Way Forward

- Disclosures that are needed for contact tracing need to be **restricted to public officials** who are entrusted with enforcing the quarantine.
- Personal details must be **masked when disclosed in public**.

Source: IE

Withdrawal from EPF Accounts

Why in News

The **Union Ministry of Labour and Employment** has notified an **amendment to the Employees’ Provident Funds (EPF) Scheme** allowing members to withdraw non-refundable advance amounts in the wake of the **COVID-19 pandemic**.

Key Points

- The notification amends the EPF Scheme, 1952 by inserting Sub-Para (3) under Para 68L of the EPF Scheme, 1952.
- This permits **withdrawal not exceeding the basic wages and dearness allowance for three months or up to 75% of the PF balance, whichever is lower**, in the event of outbreak of epidemic or pandemic.
 - **Earlier, non-refundable advances were permitted only for specified purposes** such as housing and marriage. Even these were permitted only where the employee has put in a minimum service period.

- Since **the outbreak of COVID-19 had been declared a pandemic** for the entire country, all employees of establishments and factories in India who are members of the EPF scheme would be eligible for the amended scheme.
- Recently, the Finance Minister — as part of the **Pradhan Mantri Garib Kalyan Yojana** — said that the government will bear the **cost of the provident fund contributions, both of the employer and employees—12% each—for the next three months** for those establishments which have up to **100 employees** and **90% of whom are earning less than ₹15,000 per month as salary**. It also relaxed withdrawal conditions from EPF accounts.

Employees' Provident Funds Scheme

- EPF is the main scheme under the **Employees' Provident Funds and Miscellaneous Act, 1952**. This scheme offers the institution of provident funds for factory employees and other establishments.
- The employee and employer each contribute 12% of the employee's basic salary and dearness allowance towards EPF.
 - The **Economic Survey 2016-17** had suggested that employees be allowed to choose whether or not to save 12% of their salary into EPF or keep it as take home pay.
- As per current laws, a person mandatorily becomes a member of EPF if his monthly **salary does not exceed Rs. 15,000**.

Source: IE

GPS Data to Map Corona High-risk Zones

Why in News

Recently, the **Brihanmumbai Municipal Corporation (BMC)** has decided to use **Global Positioning System (GPS) data to map high-risk zones** in the city and the number of positive cases in the wake of the **COVID-19 pandemic**.

Key Points

- Till now, BMC had refrained from revealing details pertaining to **COVID-19-afflicted** patients to mitigate fear and prevent stigmatization.
- However, with a spike in the numbers, **lockdown** and quarantine violations, the civic body has decided to map the high-risk zones to alert citizens to stay away from these areas and follow lockdown instructions.

- Ward officers will ensure **mandatory home-delivery of essentials like medicines and grocery** items to restrict citizens movement in these zones.
- **Other initiatives:**
 - To **strengthen the healthcare facilities**, final-year medical and nursing students will be drafted into its workforce and given charge of OPDs and administrative duties at various civic-run hospitals.
 - To **decongest major hospitals** and **effectively use isolation beds** for patients, BMC has decided to categorise patients based on the **three categories-**
 - asymptomatic patients below 55 years and without any co-morbidity.
 - asymptomatic or mildly symptomatic patients above 55 years.
 - symptomatic patients.

Global Positioning System

- It is a **Global Navigation Satellite System** (GNSS), used to determine the ground position of an object.
- It is a **US-owned utility** that provides users with **positioning, navigation, and timing (PNT) services**.
- **Services Provided:**
 - The **civilian service** is **freely available** to all users on a continuous, worldwide basis.
 - The **military service** is available to **US and allied armed forces** as well as **approved Government agencies**.
- Other GNSS include **European Union's Galileo, Russia's GLONASS, China's BeiDou Navigation Satellite System** and **India's Navigation in Indian Constellation (NavIC)**.

Navigation in Indian Constellation

- It has been developed by the **Indian Space Research Organization** (ISRO).
- The **main objective** is to provide reliable position, navigation and timing services over India and its neighbourhood
- It is named after Indian fishermen and navigators and will provide **two types of services-**
 - **Standard Positioning Service** (SPS) is meant for the **general public**.
 - **Restricted Service** (RS) is an **encrypted service meant for authorised users and agencies**.
- Unlike the widely used **GPS which includes 24 satellites, NavIC has 7 satellites** and their range is within India and its adjoining regions extending up to 1,500 km from the country's border.
- Technically **satellite systems with more satellites provide more accurate positioning** information.

- However, compared to **GPS which has a position accuracy of 20-30 metres**, the **NavIC is able to pinpoint location to an estimated accuracy of under 20 metres.**

Source: IE

Earth Hour

Why in News

The Earth Hour was observed on 28th March, 2020.

Key Points

- Earth Hour is the **World Wildlife Fund for Nature (WWF)**'s annual initiative that began in 2007.
- It is held **every year on the last Saturday of March.**
- It encourages people from more than 180 countries **to switch off the lights from 8.30 pm to 9.30 pm as per their local time.**
- The idea is to **refrain from the use of non-essential lighting to save energy** in a symbolic call for **environmental protection.**
- Earth Hour has become a catalyst for positive environmental impact, driving major legislative changes by harnessing the power of the people and collective action.
- **Examples:** It **helped create** a 3.5 million hectare **marine-protected area in Argentina** and **ban all plastics in the Galapagos** in 2014, **plant 17 million trees in Kazakhstan, light up homes with solar power in India** and the Philippines and push new legislation for the protection of seas and forests in Russia.

WWF

- It is the **world's leading conservation organization** and works in more than 100 countries.
- It was established in 1961 and is **headquartered** at Gland, **Switzerland**
- Its **mission is to conserve nature and reduce the most pressing threats** to the diversity of life on Earth.
- WWF collaborates at every level with people around the world to develop and deliver innovative solutions that protect communities, wildlife, and the places in which they live.

Source: IE
