



News Analysis (23 Oct, 2019)

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Whistleblowers Protection Act

Recently, the accusations raised against the Infosys Chief Executive Officer (CEO) and other senior officials have brought back the focus on whistleblowers' safety in India.

In recent years, the number of whistleblowing complaints has risen in the corporate sector, with Wipro and State Bank of India (SBI) facing most of them in 2018.

Background

- Whistleblowing is defined as an **act of disclosing information** by an employee or any concerned stakeholder about an **illegal or unethical conduct within an organization**.
 - A whistleblower is a person who informs about a person or organization engaged in such illicit activity.
- The **Law Commission of India** in **2001**, had recommended that, in order to eliminate corruption, a **law to protect whistleblowers** was necessary. It had drafted a bill as well to address this issue.
- In **2004**, in response to a petition filed after the infamous murder of NHA Official, the **Supreme Court of India** directed the Central government that, 'administrative machinery be put in place for acting on complaints from whistleblowers till a law is enacted.'
 - The government, in response, notified a resolution in 2004 named, '**Public Interest Disclosure and Protection of Informers Resolution (PIDPIR)**'.
 - This resolution gave the **Central Vigilance Commission (CVC)** the power to act on complaints from whistleblowers.

- In **2007**, the report of the **Second Administrative Reforms Commission** also recommended that a specific law needs to be enacted to protect whistleblowers.
 - The **UN Convention against Corruption** to which **India is a signatory** (although not ratified) since 2005, encourages states to facilitate reporting of corruption by public officials and provide protection for witnesses and experts against retaliation.
 - The Convention also provides safeguards against victimization of the person making the complaint.
- To conform with such regulations, in 2011 **Whistleblowers Protection Bill** was proposed which finally became a law in 2014.
- The **Companies Act, 2013**, as well as the **Securities and Exchange Board of India** regulations have made it mandatory for companies to take notice of all such complaints.

Key Highlights of Whistleblower Protection Act, 2014

- The act establishes a mechanism to receive complaints related to disclosure of allegations of corruption or wilful misuse of power or discretion, **against any public servant**, and to inquire or cause an inquiry into such disclosure.

The act also provides adequate safeguards against victimization of the person making such complaints.
- It allows any person, including a public servant, to make a **public interest disclosure** before a **Competent Authority**. The law has elaborately defined various competent authorities. For instance, Competent authority to complaint against any union minister is the Prime Minister.
- The law does **not allow anonymous complaints** to be made and clearly states that no action will be taken by competent authority if the complainant does not establish his/her identity.

The maximum time period for making a complaint is **seven years**.
- **Exemptions:** The act is **not applicable** to the armed forces of the Union and the **Special Protection Group (SPG)** personnel and officers, constituted under the **Special Protection Group Act, 1988**.
- **Court of Appeal:** Any person aggrieved by any order of the Competent Authority can make an appeal to the concerned **High Court** within a period of sixty days from the date of the order.
- **Penalty:** Any person who negligently or mala-fidely **reveals the identity** of a complainant will be punishable with imprisonment for a term extending up to **3 years** and a fine which may extend up to Rs 50,000.

If the **disclosure** is done mala-fidely and knowingly that it was incorrect or false or misleading, the person will be punishable with imprisonment for a term extending up to 2 years and a fine extending up to Rs. 30,000.

- **Annual Report:** The Competent Authority prepares a consolidated **annual report** of the performance of its activities and **submits it to the Central or State Government** that will be further laid before each House of Parliament or State Legislature, as the case may be.
- The Whistleblowers Act overrides the **Official Secrets Act, 1923** and allows the complainant to make public interest disclosure before competent authority even if they are violative of the later act but not harming the sovereignty of the nation.
In **2015, an amendment bill** was moved that proposes, whistleblowers must not be allowed to reveal any documents classified under the Official Secrets Act of 1923 even if the purpose is to disclose acts of corruption, misuse of power or criminal activities. This dilutes the very existence of the 2014 Act.

Way Forward

- Suitable legislation must be enacted to provide protection to innocent whistleblowers and the dilution of the act that is proposed by the 2015 Amendment Bill must be abandoned.
- Strengthening of the whistleblower protection mechanism will help in ensuring that the integrity of democracy is **protected, cherished and upheld**.

Source: Mint

Mission Indradhanush

The Government will launch the **second phase of nationwide immunisation drive** in the second week of December 2019 i.e. **Intensified Mission Indradhanush 2.0**, with an **aim** to achieve at least **90% pan-India immunisation coverage by 2022**.

- **Mission Indradhanush**, that was launched in December 2014, has **increased** India's **immunisation coverage** significantly **to 87% from 67% in 2014**.
- However, **official data** on India's immunisation coverage is still **62%**, given as the **National Family Health Survey-4** (2015-16).

Immunization Programme in India

- Immunization Programme in India was introduced in **1978** as '**Expanded Programme of Immunization (EPI)**' by the Ministry of Health and Family Welfare.

- In **1985**, the Programme was modified as '**Universal Immunization Programme (UIP)**'. The stated **objectives** of the Programme include:
 - Rapidly increasing immunization coverage,
 - Improving the quality of services,
 - Establishing a reliable cold chain system to the health facility level,
 - Introducing a district-wise system for monitoring of performance,
 - Achieving self-sufficiency in vaccine production.
- UIP prevents mortality and morbidity in children and pregnant women against 12 vaccine preventable diseases. But in the past it was seen that the **increase in immunization coverage had slowed down** and it increased at the rate of 1% per year between 2009 and 2013.
- To accelerate the coverage, **Mission Indradhanush was envisaged** and implemented since 2015 to rapidly increase the full immunization coverage to 90%.

Mission Indradhanush

- The aim is to fully immunize more than 89 lakh children who are either unvaccinated or partially vaccinated under UIP.
- It targets children under 2 years of age and pregnant women for immunization.
- It provides **vaccination against 7 Vaccine Preventable Diseases (VPD)** i.e. diphtheria, whooping cough, tetanus, polio, tuberculosis, measles and hepatitis B.
 - In addition, vaccination against Japanese Encephalitis and Haemophilus influenzae type B is being provided in selected districts of the country.
- It is a nationwide initiative with a **special focus on 201 high focus districts**. These districts accounted for nearly 50% of the total partially vaccinated or unvaccinated children in the country.
- The rate of increase in full immunization coverage increased to 6.7% per year through the first two phases of 'Mission Indradhanush'.

Intensified Mission Indradhanush

- The Intensified Mission Indradhanush (IMI) was launched by the Government of India in **2017** to reach each and every child under two years of age and all those pregnant women **who have been left uncovered** under the routine immunisation programme.
 - Under IMI, **greater focus** has been given on **urban areas** which was **one of the gaps of Mission Indradhanush**.
- The target under IMI was to increase the full immunization coverage to 90% by December 2018. However, **only 16 districts in the country have achieved 90% coverage** so far.
- The **Intensified Mission Indradhanush 2.0** will **target the districts** which have **immunisation coverage of 70% or below**.

National Anti-Drone Guidelines

Recently, the Indian government has finalized National Counter Rogue Drone Guidelines for handling the **threats from Unmanned Aircraft Systems**.

- The genesis of the counter rogue drone guidelines lies in the **rising number of drone-related safety incidents** across the world including in India.
 - Recent incidents of the utilization of drones to target **VVIPs in Venezuela** and **Saudi Aramco drone attacks** are a stark reminder of the threat level from rogue drones.
 - India has an estimated **over 6 lakh rogue or unregulated Unmanned Aerial Vehicles** (UAVs) of various sizes and capacities
- To handle the above scenario the **Ministry of Civil Aviation** has suggested a **counter-rogue drone deployment plan**, categorized across **three models**, based on the **sensitivity of vital assets and installations**.
- The **strategic installations differ** from state to state and place to place, **based on their geographical condition**, criticality and construction type but standard categorization would be:
 - **Full-scale model :**
 - It will work for the protection of vital assets of critical **national importance** like Rashtrapati Bhawan, Parliament House, nuclear installations, major airports, etc;
 - Counter-Unmanned Aircraft System(C-UAS) with primary and passive detection means like radar, Radio Frequency (RF) detectors, electro-optical, and infrared cameras to be installed.
 - **Mid-segment model:**
 - It will protect installations like metro airports, oil refineries, ports, and power plants, etc
 - A lower level of threat mitigation techniques(compared to the full-scale model) to be installed with Counter-Unmanned Aircraft System(C-UAS).
 - **Basic model:**
 - Aims to protect state secretariats, important official premises, monuments of national importance etc.
 - The basic threat mitigation technology to be used.
- A **realistic vulnerability analysis** of identified **vital areas/vital points** by specialist security agencies based on **impact assessment** from a different category of drones, natural camouflage, and local security scenario would help to establish Counter-Unmanned Aircraft System(C-UAS).

- The Counter-Unmanned Aircraft System(C-UAS) includes the following modern weapons:
 - **Sky Fence:**

It aims to block a lethal drone that uses a range of signal disruptors to jam the flight path and prevent them from entering their target, a sensitive installation or event venue.
 - **Drone gun:**
 - It is capable of jamming the radio, a global positioning system (GPS) and a mobile signal between the drone and the pilot.
 - Further, it forces the drone to the ground in good time before it could wreak any damage.
 - Australia has already designed such kind of weapon with an effective range of 2 km.
 - **Advanced Test High Energy Asset (ATHENA):**
 - It works by firing a high energy laser beam on a rogue drone resulting in its complete destruction in the air.
 - It is a very costly technology and is currently being tested by the US army.
 - **Drone Catcher:**
 - It swiftly approaches an enemy drone and grabs it by throwing a net around it.
 - Such a tool is required when a rogue drone is needed to be captured safely to extract incriminating evidence from it
 - **Skywall 100:**

It is the ground version of the 'drone catcher' and it works by bringing down a UAV using a parachute that is hurled through a net from 100 meters distance.
- In addition to the counter rogue drone deployment models, the civil aviation ministry has also suggested a set of **legal procedures to handle rogue drones**.
 - The legislation needs to address the **risk-based use** of Counter-UAS authority and **coordination among relevant departments** and agencies.
 - It shall also aim to **mitigate adverse impacts of anti-drone guidelines** on the safety, efficiency, and accessibility to the Indian airspace to the maximum extent feasible.
 - The law shall state a **legal framework for authorized use of C-UAS systems** by security agencies for protecting vital assets, safeguarding manned aviation, supporting law enforcement activities, protecting national borders and conducting operations.

Radio Frequency (RF)

- It refers to the **electromagnetic radio waves** in the range of 3 kHz to 300 GHz, as well as the alternating currents carrying the radio signals.

- This is the frequency band that is used for wireless communications transmission and broadcasting.
- The frequency band is being divided into different parts, which are then assigned to different technology industries. This is known as the radio spectrum. For example, the Very High Frequency(VHF) band, which ranges from 30-300 MHz, is being used for FM radio, TV broadcasts, and amateur radio and its counterparts.

Source:IE

Artificial leaf For Clean Gas

Scientists have developed an '**artificial leaf**' device that **uses sunlight** to produce a widely-used gas (**syngas**) currently made from fossil fuels, and could be used to create a sustainable liquid fuel alternative to petrol.

- It is a **carbon-neutral device** that can directly produce **syngas** in a sustainable and simple way from carbon dioxide and water, setting a new benchmark in the field of solar fuels.
 - Unlike the current industrial processes for producing syngas, the leaf does not release any additional carbon dioxide into the atmosphere.
- **Syngas (Synthesis Gas)** is currently made from a **mixture of hydrogen and carbon monoxide**, and is used to produce a range of commodities, such as fuels, pharmaceuticals, plastics and fertilisers.
 - The syngas is produced by gasification of a carbon containing fuel to a gaseous product that has some heating value. Some of the examples of syngas production include gasification of coal emissions, waste emissions to energy gasification, and steam reforming of coke.
 - The general raw materials used for gasification (creation of syngas) are coal, petroleum based materials (i.e. fossil fuels), or other materials that would be rejected as waste.
 - The name syngas is derived from the use as an intermediate in generating synthetic natural gas and to create ammonia or methanol. It is a gas that can be used to synthesize other chemicals, hence the name synthesis gas, which was shortened to syngas. Syngas is also an intermediate in creating synthetic petroleum to use as a lubricant or fuel.

- Rather than running on fossil fuels, the artificial leaf is powered by sunlight.
 - The device is **inspired by photosynthesis**—the natural process by which plants use the energy from sunlight to turn carbon dioxide into food.
 - On the artificial leaf, two light absorbers, similar to the molecules in plants that harvest sunlight, are combined with a catalyst made from the naturally abundant element cobalt.
 - When the device is immersed in water, one light absorber uses the catalyst to produce oxygen.
 - The other carries out the chemical reaction that reduces carbon dioxide and water into carbon monoxide and hydrogen, forming the syngas mixture.
 - The researchers discovered that the **light absorbers work even under the low levels of sunlight** on a rainy or overcast day. This means that the technology can **be used anywhere in the world.**

Source: Tol

White Bellbird

According to a study, published in the journal 'Current Biology', the male white bellbird's mating call is about **three times louder than screaming phias** — the **previously loudest**



- The discovery offers **another example of the consequences of sexual selection.**
 - Sexual selection happens when males compete for mates, driving the evolution of truly bizarre and exaggerated traits such as the peacock's tail, and the now found loud singing abilities of the male bellbirds.
 - In general, **sexual selection** is a theory in postulating that the evolution of certain conspicuous physical traits—such as pronounced coloration, increased size, or striking adornments—in animals may grant the possessors of these traits greater success in obtaining mates.

- The **white bellbird** is one of the **four bellbird species** in **South and Central America**.
- It is listed on the '**Least Concern**' category under the IUCN.

Source: TH
