

**INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS****World Press Freedom Index 2019**

The Reporters Without Borders (RSF) has released the World Press Freedom Index 2019, reflecting growing animosity towards journalists.

**Performance of various countries:**

- The index has been topped by Norway again for the third year, followed by Finland and Sweden at second and third positions, respectively.
- Only 24 percent of the 180 countries and territories were classified as “good” or “fairly good”, as opposed to 26 percent last year.
- Of all the world’s regions, Americas (North and South) suffered the greatest deterioration, falling by 3.6 percent, in its regional score.
- The Middle East and North Africa region continues to be the most difficult and dangerous for journalists.
- Syria (174th) continues to be extremely dangerous for media personnel and as does Yemen (168th).
- The Asia-Pacific region continues to rank third last. The number of murdered journalists was extremely high in Afghanistan, India and Pakistan. Disinformation is becoming a big problem in the region.

**Observations on India:**

- India’s rank dropped down to 140th from 138th in 2018, two points below the previous year.
- As per the Index, one of the most striking features of the current state of press freedom in India is violence against journalists including police violence, attacks by Maoist fighters, criminal groups and corrupt politicians.
- The media coverage in the sensitive regions like Kashmir continues to be very difficult. Even the entry of foreign reporters is prohibited in Kashmir and the Internet is often disconnected there.

**About World Press Freedom Index:**

- Published annually by Reporters Without Borders since 2002, the World Press Freedom Index measures the level of media freedom in 180 countries.
- It is based on an evaluation of media freedom that measures pluralism, media independence, the quality of the legal framework and the safety of journalists.
- It also includes indicators of the level of media freedom violations in each region.
- It is compiled by means of a questionnaire in 20 languages that is completed by experts all over the world. This qualitative analysis is combined with quantitative data on abuses and acts of violence against journalists during the period evaluated.

**Asian Tea Alliance (ATA):**

The Asian Tea Alliance (ATA) was launched in Guizhou in China.

**ATA:**

- Asian Tea Alliance (ATA) is a union of five tea-growing and consuming countries. The members of the alliance are the Indian Tea Association, China Tea Marketing Association, Indonesian Tea Marketing Association, Sri Lanka Tea Board and Japan Tea Association.
- ATA plans to work towards enhancing tea trade, cultural exchanges, technology exchanges as well as globally promoting tea. It will also work towards enhancing global consumption of tea, while creating a sustainability agenda for the future of Asian tea.

**INDIAN ECONOMY****Renewable Energy Certificates (RECs)**

Renewable Energy (RE) companies have moved the Delhi High Court, seeking an exemption for Renewable Energy Certificates (RECs) under the GST.

**What are Renewable Energy Certificates (RECs)?**

Renewable Energy Certificates (RECs), also known as green energy certificates or tradable renewable certificates are proof that energy has been generated from renewable sources such as solar or wind

power. Each REC represents the environmental benefits of 1MWh of renewable energy generation. When you purchase RECs, renewable energy is generated on your behalf.

Significance:

- It is a market based mechanism which will help the states meet their regulatory requirements (such as Renewable Purchase Obligations (RPOs)) by overcoming the geographical constraints on existing renewable potential in different states.
- RECs unbundle the electricity component (commodity) from the green/environmental attributes of the power generated from renewable sources. Both the components can then be traded separately.
- Thus, RECs help in incentivizing the production of renewable energy over and above the RPO state limit as tradable certificates are not constrained by the geographical limitations of commodity electricity.

Need for removal of GST:

- RECs are being charged GST, while bundled power (RECs plus electricity, irrespective of source) or even just electricity are devoid of the same.
- Cost of electricity generation from renewable energy sources is classified as cost of electricity generation (equivalent to conventional energy sources) and the cost of environmental attributes. REC is the environmental attribute of the electricity derived from RE.
- As per regulations, RPO compliance through REC is at par with sourcing electricity directly from RE. Therefore, GST applicable on the sale of RECs negatively affects its parity with similar electricity sale alternatives, be it conventional or renewable.
- Moreover discoms, the major buyer of RECs (around 50-60 per cent), do not get GST credit; and the increase in their cost of RPO compliance will translate to increased tariff for the end consumer.

## **ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES**

### **Indian bullfrogs take to invasive behaviour early in Andaman**

Indian bullfrogs introduced in the Andaman islands are invasive, and eat native wildlife including fish and lizards.

#### Indian Bullfrog

- The Indian bullfrog *Hoplobatrachustigerinus* (native to the Indian subcontinent) has rapidly invaded the Andaman islands after it was introduced there in the early 2000s.
- In human-dominated areas, it now shares space with other native (and often endemic) frog species.
- The bullfrogs are prolific breeders: they have short breeding seasons, and each egg clutch can contain up to 5,750 eggs.
- Its tadpoles are carnivorous and eat other tadpoles (including their own species).

#### Invasive nature

- Now, experiments reveal that the frogs take to this invasive behaviour early in their lives.
- Even in the developmental stages, the large bullfrog tadpoles eat other native frog tadpoles.
- The survival of both endemic frog tadpoles reduced to zero when bullfrog tadpoles were present.
- The proportion of bullfrog tadpoles surviving was greater in the presence of both endemic frog tadpoles.
- This is worrying because other native frog species – many of which are only being described – could also be affected.

## **SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE ETC**

### **Antares rocket**

- Antares rocket built by Northrop Grumman recently lifted off from NASA's Wallops Flight Facility on Virginia's Eastern Shore carrying the Cygnus Cargo Spacecraft to the International Space Station.

- The mission is called NG-11. It is the eleventh cargo flight for NASA by Northrop Grumman and will be the company's longest one to date.
- The NG-11 mission is also the final cargo mission for NASA by Northrop Grumman under the agency's Commercial Resupply Services 1 program. To mark the occasion, Northrop Grumman named the NG-11 Cygnus the S.S. Roger Chaffee in honor of NASA astronaut Roger Chaffee, who was killed in the Apollo 1 fire alongside crewmates Gus Grissom and Ed White, Jr.

Mice aboard: The mice aboard Cygnus are at the core of one such study, which aims to test the effectiveness of an anti-tetanus vaccine. The rodents are split into two groups of 20; half will receive the vaccine in space and the other 20 will not receive the vaccine. Scientists will study the mice to see how the animals responded to the vaccine once they are back on Earth.

Other experiments:

- Other wild science experiments on Cygnus include testing out two robotic systems; Seeker, which is designed to hunt for air leaks on the Space Station, and Astrobees, which aims to help the station's staff with tasks such as inventory and maintenance.
- There's gear to build pristine ZBLAN fiber-optic cables in space, and a prototype for a novel air scrubber that removes carbon dioxide from the station's atmosphere.
- On the exterior of the Cygnus are small CubeSats that will be deployed after the spacecraft leaves the space station this summer.
- The Antares rocket's upper stage also carried 60 so-called ThinSats (tiny satellites) were built by elementary and high school students; one NASA CubeSat (called SASSI2) was built by students at both universities in Indiana and Illinois.

**QUOTE OF THE DAY**

**What comes easy won't last. What lasts won't come easy.**