

**NATIONAL****PM Narendra Modi inaugurates first assembly of International Solar Alliance**

- Prime Minister Narendra Modi on October 2, 2018 inaugurated the first Assembly of the International Solar Alliance at Vigyan Bhawan, New Delhi in the presence of the United Nations' Secretary General Antonio Guterres.
- The same event saw the inauguration of the second IORA Renewable Energy Ministerial Meeting and the 2nd Global RE-Invest (Renewable Energy Investors' Meet and Expo). The Business and Technical Sessions of ISA Assembly, IORA Meet and RE-INVEST 2018 Expo will be held at India Expo Mart, Greater Noida, Uttar Pradesh from October 3-5, 2018. At the inaugural function, 100 students from various schools lit the Solar Study Lamp. A short film on the 'Journey of Renewable Energy in India' and another film on Student Initiative on Solar Lamp were screened on the occasion.

**About International Solar Alliance (ISA)**

- International Solar Alliance (ISA) is an alliance of 121 solar resource rich countries, lying fully or partially between the Tropics of Cancer and Capricorn.
- ISA was jointly launched by the Prime Minister Narendra Modi, and the then President of France, Francois Hollande on November 30, 2015 in Paris on the side-lines of the 21st Conference of Parties (CoP 21) to the United Nations Framework Convention on Climate Change.
- The ISA Framework Agreement was opened for signature on November 15, 2016 in Marrakech, Morocco on the side-lines of CoP-22.
- ISA became the first full-fledged treaty based international intergovernmental organization headquartered in India on December 6, 2017, in conformity with the ISA Framework Agreement and 30 days after ratification by the 15th country, Guinea.
- The Governing Structure of the ISA consists of an Assembly, a Council and a Secretariat. The ISA Assembly provides guidance, direction and advice to the Secretariat for undertaking the activities.
- ISA has presently four ongoing programmes: Scaling Solar Applications for Agricultural Use, Affordable Finance at Scale, Scaling Solar Mini Grids and Scaling Solar Rooftop catering to the needs of solar energy in specific areas.
- Till date, out of 121 prospective member countries, 70 countries have signed the Framework Agreement of the ISA. 47 of these countries have ratified the ISA treaty.

**Odisha launches food security scheme to cover those left out from NFSA**

- The state government of Odisha on October 2, 2018 launched its own food security scheme to benefit the 25 lakh poor people who were left out of the National Food Security Act (NFSA).
- The State Food Security Scheme (SFSS) was launched by Odisha Chief Minister Naveen Patnaik through video conferencing on the occasion of Gandhi Jayanti. While the CM launched the scheme in four districts - Bolangir, Balasore, Sundergarh and Mayurbhanj, the state's MPs and MLAs launched the programme in the rest of the parts.

**Significance**

- The scheme will benefit 25 lakh vulnerable populace that were excluded from coverage under NFSA.
- Speaking during the launch, Odisha Chief Minister Naveen Patnaik said that sufficient and nutritious food is a basic need and prerequisite for a healthy Odisha.

**Key Highlights**

- Under the scheme, the beneficiaries will get 5 kg of rice per person per month at the rate of Rs 1 per kg, the same as availed by people covered under the National Food Security Act, 2013.
- Among the state's 4, 19, 74,218 population as per the 2011 census, 3,26,41,800 people (about 78 per cent) have been availing the benefits of NFSA.
- As per the provisions of the State Food Security Scheme, 25 lakh poor people "left out" from the benefits of the NFSA, will get the rice at subsidised rates.
- The distribution of rice to selected beneficiaries will be carried out through e-Point of sale (e-PoS) device at the designated fair price shops.
- The Odisha government will spend Rs 442 crore per year for implementation of the scheme. The state exchequer will bear additional Rs 221 crore from October 2018 to March 2019 for implementation of the programme.

In 2008, the Odisha government had decided to provide 1kg of rice to the poor people at Rs 2 per month. The price was reduced to Rs 1 per kg in 2013. The NFSA was implemented in 2014; however, many people were denied the benefit. The present state government in its 2014 election campaign had promised to introduce the state's own food security scheme.

**INTERNATIONAL**

**US, Morocco launch GCTF Terrorist Travel Initiative to curb terrorist travel**

- United States and Morocco have launched GCTF Terrorist Travel Initiative under auspices of Global Counterterrorism Forum (GCTF).
- The initiative brings together stakeholders to share expertise on developing and implementing effective counterterrorism watchlisting and screening tools. It was launched on sidelines of United Nations General Assembly (UNGA) session in New York.

**GCTF Terrorist Travel Initiative**

- The new initiative will strengthen UNSC Resolution 2396 aiming to stop terrorist travel altogether. It will improve capabilities for detecting and interdicting terrorist travel through enhanced terrorist screening and information sharing.
- Under this initiative, series of four regional workshops in 2018 and 2019 will be convened to develop set of good practices that will be endorsed at 2019 GCTF Ministerial. The resulting document will reinforce countries and organizations to use border security tools prescribed in UNSC Resolution 2396 to stop terrorist travel.

**Global Counterterrorism Forum (GCTF)**

- GCTF's is international apolitical, multilateral counter-terrorism (CT) platform of 29 countries and European Union (EU) with overarching mission of reducing vulnerability of people worldwide to terrorism by preventing, combating, and prosecuting terrorist acts and countering incitement and recruitment to terrorism. It was launched officially in New York on 22 September 2011.
- GCTF's goal is to strengthen capabilities to develop strategic, long-term approach to counter terrorism and prevent violent extremist ideologies that underpin it. Its mission is to diminish terrorist recruitment and increase countries' civilian capabilities for dealing with terrorist threats within their borders and regions.

**China urges U.S to drop pressure tactics**

- China's Foreign Minister Wang Yi has urged the U.S. to abandon fruitless pressure tactics to resolve the trade row between the two countries.
- Regarding trade frictions, China stands for a proper settlement based on rules and consensus through dialogue and consultation on an equal footing. China will not be blackmailed or yield to pressure."
- In a commentary, the People's Daily said the U.S. was working on a "interlocking" plan, which also targeted the country's Made-in-China 2025 blueprint.
- In addition to the additional tariffs on Chinese exports to the United States, the U.S. blocked the 'Made in China 2025' Initiative, a campaign to reshape China's manufacturing edges within 10 years via advanced technologies, sanctioned Chinese telecoms company ZTE, added 44 Chinese entities to its export control list and introduced the Foreign Investment Risk Review Modernization Act (FIRRMA, and even worse it is targeting China's defence industry sector this time, all of which can be perceived as interlocking and sharing 'the same root'.
- The mutation of the trade war into a full-blown geopolitical rivalry also appears to be entering the African theatre. Reuters reported that after years of paying scant attention to the continent's economic development, Washington is trying to counter China's pervasive influence. It is doubling its financing to poor countries to \$60 billion — the same amount Beijing pledged to Africa earlier this month.

**AWARD**

**2018 Nobel Prize in Chemistry**

The Royal Swedish Academy of Sciences on October 3, 2018 awarded the 2018 Nobel Prize in Chemistry with one half to Frances H. Arnold "for the directed evolution of enzymes" and the other half jointly to George P. Smith and Sir Gregory P. Winter "for the phage display of peptides and antibodies".

The all three of them harnessed the power of evolution which is revealed through the diversity of life. They took control of evolution and used it for purposes that bring the greatest benefit to humankind.

Enzymes produced through directed evolution are used to manufacture everything from biofuels to pharmaceuticals.

Antibodies, evolved using a method called phage display, are able to combat autoimmune diseases and in some cases cure metastatic cancer.

The laureates used the same principles of genetic change and selection to develop proteins that solve mankind's chemical problems.

**2018 Nobel Prize in Physiology or Medicine**

The Nobel Assembly at Karolinska Institutet on October 1, 2018 awarded the 2018 Nobel Prize in Physiology or Medicine jointly to James P. Allison and Tasuku Honjo "for their discovery of cancer therapy by inhibition of negative immune regulation".

Cancer therapy: Releasing the brakes of immunity

Cancer kills millions of people every year and is one of humanity's greatest health challenges. The laureates James P. Allison and Tasuku Honjo successfully established an entirely new principle for cancer therapy by stimulating the ability of immune system to attack tumour cells. Laureates showed how different strategies for slowing down the brakes on the immune system can be used in the treatment of cancer. Their discoveries are landmark in fight against cancer.

Until the discoveries made by Laureates, progress into clinical development was modest. "Immune checkpoint therapy" has revolutionised cancer treatment and has fundamentally changed the way we view how cancer can be managed.

### **2018 Nobel Physics Prize**

The Royal Swedish Academy of Sciences has selected three scientists Arthur Ashkin (USA), Gerard Mourou (France) and Donna Strickland (Canada) for the 2018 Nobel Prize in Physics. They were selected for groundbreaking inventions in the field of laser physics. Arthur Ashkin (91) received the half prize and remaining half was shared equally by Gérard Mourou and Donna Strickland.

## **ENVIRONMENT**

### **Policy making on Electric Vehicles**

- Jharkhand Chief Minister Raghubar Das recently announced that his government has introduced electric vehicles for official use.
- While 20 vehicles have been acquired for the first phase, another 30 are expected to be added to the fleet in the coming weeks.
- It has also been reported that 12 charging stations have been set up in Ranchi so far, and several more are slated to come up

### **Why Electric vehicles now?**

- In the 21st century, EVs saw a resurgence due to technological developments, and an increased focus on renewable energy.
- A great deal of demand for electric vehicles developed and a small core of do-it-yourself (DIY) engineers began sharing technical details for doing electric vehicle conversions.
- Government incentives to increase adoptions were introduced, including in the United States and the European Union.
- Electric vehicles will reduce fuel bills and are an integral component of the smart cities project.
- In the current scenario of soaring fuel prices and the spectre of climate change looming large over the planet, it is a welcome development that a State government is taking the lead in switching to e-vehicles.
- Not only does this reduce the burden of fuel bills on the exchequer, it is also in sync with Prime Minister Narendra Modi's strong pitch in favour of electric vehicles at the recently held Global Mobility Summit in New Delhi.
- "Clean mobility powered by clean energy is our most powerful weapon in our fight against climate change," Mr. Modi had said as he batted for investments in electric vehicles and charging stations.

### **Government officials and Fuel consumptions:**

- In this context, it is well known that government officials are tremendous guzzlers of fossil fuel.
- If ministers and politicians are taken as a single category of consumers, their per capita and per kilometre consumption of fossil fuel is likely to be many times higher than that of most ordinary users, given their penchant for moving around accompanied by lengthy convoys of gas-guzzling escort vehicles.
- One might expect that in a real democracy, public servants, with some exceptions, would typically use public transport, which also happens to be another thrust area identified by the Prime Minister as integral to the future of mobility in India.
- But if this is too unrealistic an expectation, the least they could do is to exchange their petroleum-based vehicles for electric ones.

If other States and the Centre were to follow the example set by Jharkhand, it would have two positive spin-offs:

1. It would encourage the spread of a transportation infrastructure specific to e-vehicles; and
  2. It would spur the early adoption of e-vehicles by first-time buyers, generating consumer momentum for India's stated goal of ensuring that by 2030, all public transport and 30% of private vehicles are electric.
- This is not far-fetched as quite a few countries, such as Norway and France, already have a substantial percentage of their vehicles running on either electricity or alternate fuels.

### **In a first, South African lion cubs conceived artificially**

The first ever lion cubs were born by means of **artificial insemination** the first such pair anywhere in the world in Pretoria.

**Significance:** Lions are extinct in 26 African countries and numbers in the wild have plummeted 43% over the last two decades, with roughly only 20,000 left, according to the International Union for Conservation of Nature (IUCN), which lists the African lion as vulnerable. This technique can be used to save other endangered big cats.

**#LooReview Campaign: Government and Google launch campaign to review public toilets**

- Ministry of Housing and Urban Affairs has partnered with Google to launch Loo Review campaign on Google Map. The joint campaign has been launched under aegis of Swachh Bharat Mission – Urban (SBM-U). It will run throughout October and November 2018 in an effort to increase awareness and ease of locating public toilets across India.
- This campaign aims to encourage all local guides in India to rate and review public toilets on Google Maps. It is part of feature which allows all citizens to locate public toilets in their cities on Google Maps, Search and Assistant and also provide feedback on same. 500 plus cities in India with more than 30,000 toilets with name of “SBM Toilet” are currently live on Google Maps.
- The campaign will involve and engage Local Guides in India to rate and review public toilets on Google Maps. Besides, use hashtag #LooReview will give chance to users to be featured on Google Local Guides’ social channels. Local Guides are people who will share reviews, photos, and knowledge on Google Maps to help people explore the world.

**SOCIAL ISSUES**

**Samagra Shiksha Abhiyan**

Samagra Shiksha – a holistic approach towards the school education sector. It will be extended from pre-school to class 12. It will help to improve school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes.

It subsumes three Schemes:

1. Sarva Shiksha Abhiyan (SSA),
2. Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
3. Teacher Education (TE)

Major Points of Scheme:

- It will be Centrally Sponsored Scheme.
- The fund sharing pattern for the scheme between Centre and States is at present in the ratio of 90:10 for the 8 North-Eastern States and 3 Himalayan States and rest 60:40 for all other States and Union Territories with Legislature.
- The main emphasis of the SSA is on improving quality of school education by focusing on the two T’s – Teacher and Technology.
- It will enable the SCERT to become the nodal agency for conduct and monitoring of all in-service training programmes to make it need-focused and dynamic.
- It will also be incentivizing states—there will be performance-linked grants—to work towards certain goals identified by the Centre, including improving learning outcomes and rationalizing teacher redeployment.

Major Aims of the Scheme are

- Provision of quality education and enhancing learning outcomes of students;
- Bridging Social and Gender Gaps in School Education;
- Ensuring equity and inclusion at all levels of school education; Ensuring minimum standards in schooling provisions;
- Promoting Vocationalisation of education;
- Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009;
- Strengthening and up-gradation of SCERTs/State Institutes of Education and DIET as nodal agencies for teacher training.

**Gujarat acts to save its pride**

- There has been an alarming development where many Asiatic lions have died in the Gir forest.
- 23 lions since September 12, 2018 have died.
- The Gujarat government, had initially insisted that the lions had died due to infighting for territorial domination.
- Currently, the government has sprung into action and launched not only rescue efforts but also called experts from outside, including London, and imported a vaccine from the United States.

Steps Taken: Currently, more than 500 lions have already been screened to detect viral infections in the Gir forests and revenue areas. This has been done so because as Asiatic lions are spread in as many as eight districts in the Saurashtra region. It is important to note that the Gir forests, are the only abode of Asiatic lions in the world.

The lions are famously known as Gujarat’s pride.

Analysis: Apart from the 23 lions that have died since September 12, 2018, as many as 36 are battling for their lives. A deadly outbreak of the Canine Distemper Virus (CDV) and tick-borne Babesiosis is killing these lions.