

**“A gentleman is someone who does not what he wants to do, but what he should do.”****Haruki Murakami****NATIONAL****BILL TO ALLOW PROXY VOTING BY NRIS PASSED BY LOK SABHA**

A bill to extend the facility of ‘proxy voting’ to overseas Indians, on the lines of service voters, was passed by the Lok Sabha.

Proxy is not a negated word. It is now a legal and defined word.

The Bill was passed by a voice vote in the Lower House, proposes that overseas Indians, who are entitled to vote in India, could now appoint a proxy voter to cast their votes.

As of now, overseas Indians were free to cast their votes in the constituencies where they were registered.

The Bill seeks to give them the option of proxy voting, which until now was only available to service personnel.

According to estimates of the Ministry of External Affairs, there are about 10 crore NRIs living in different countries across the world.

**Preventing Misuse:**

While framing the rules, the government will ensure that the system of proxy voting is not misused by anyone.

On the issue of allowing migrant workers to vote without having to travel to their place of residence, Prasad said it was “work in progress our sympathies are with them they should be given the right to vote.” Some members demanded that the facility of postal ballots to be extended to them.

Provision for e-voting has several difficulties in implementing in a large country like India due to security concerns.

Unofficial data with EC shows that only 10,000 to 12,000 overseas voters have exercised their franchise because they do not want to spend foreign currency to come to India and vote.

The necessary provision of coming to India to cast ballot caused hardship for overseas electors.

Provision related to Spouses of Service Voters

As of now, an army man’s wife is entitled to be enrolled as a service voter, but a woman army officer’s husband is not, according to the provisions in the electoral law.

The bill proposes to replace the term ‘wife’ with ‘spouse’, thus making the provision gender neutral.

Members of the armed forces, central armed police forces, personnel of state police forces posted outside their state and employees of the centre posted outside India are eligible to be enrolled as service voters.

**Concerns with the Bill:**

This facility could be misused by political parties by persuading the proxies appointed by the NRIs.

The foreign missions attempts to elections of India by distributing literature to influence the voting pattern in favour of the ruling party.

There should be e-voting for NRIs to prevent misuse.

It could lead to vote to trade.

**‘INDIA TO TRIPLE ETHANOL PRODUCTION BY 2022’**

PM says India will triple its ethanol production by 2022.

Government has planned 12 biofuel refineries in the country at an investment of Rs. 10,000 crore.

This will increase the total ethanol production from 141 crore litre to 450 crore litre

This will result in an import savings of Rs. 12,000 crore.

The government will achieve 10% ethanol blending in petrol by 2022. The current level is mere 2% only

Government is also aiming to double ethanol blending to 20%

To achieve this government, need to adopt a holistic approach

Government has recently adopted national biofuel policy.

**INDECENT REPRESENTATION OF THE WOMEN  
(PROHIBITION) ACT, 1986**

After taking into account of the recent technological advancement in the field of communications such as social media platforms, etc, the Ministry of Women and Child Development has decided to move fresh Bill to broaden the scope of the Indecent Representation of the Women (Prohibition) Act, 1986 to cover the audio-visual media and content in electronic form.

The reformulated Bill proposes following amendments in the parent Act:

Amendment in definition of term advertisement to include digital form or electronic form or hoardings, or through SMS, MMS etc.

Amendment in definition of distribution to include publication, license or uploading using computer resource, or communication device.

Insertion of a new definition to define the term publish.

Amendment in section 4 to include that No person shall publish or distribute or cause to be published or cause to be distributed by any means any material which contains indecent representation of women in any form.

Penalty similar to that provided under the Information Technology Act, 2000

Creation of a Centralised Authority under the aegis of National Commission of Women (NCW). This Authority will be headed by Member Secretary, NCW, having representatives from Advertising Standards Council of India, Press Council of India, Ministry of Information and Broadcasting and one member having experience of working on women issues.

Functions: This Centralised Authority will be authorized to receive complaints or grievances regarding any programme or advertisement broadcasted or publication and investigate/ examine all matters relating to the indecent representation of women.

**Need for revisiting the law:**

The Government of India has enacted the Indecent Representation of Women (Prohibition) Act (IRWA), 1986 to prohibit indecent representation of women through advertisements, publications, writings, paintings, figures or in any other manner.

Since the enactment of the Act, technological revolution has resulted in the development of new forms of communication, such as internet, multi-media messaging, cable television, over-the-top (OTT) services and applications e.g. Skype, Viber, WhatsApp, Chat On, Snapchat, Instagram etc.

Therefore, these technological advancements make it necessary to widen the scope of the law so as to cover such forms of media on one hand and to strengthen the existing safeguards to prevent indecent representation of women through any media form on the other.

**SCIENCE AND TECH****PARKER, WORLD'S FIRST MISSION TO SUN LIFTS OFF**

NASA launched the Parker Solar Probe – the space agency's first mission to the sun – that will explore the sun's atmosphere and its outermost atmosphere, the corona.

The spacecraft is named after 91-year old solar physicist Eugene Parker, 91, who was the first scientist to describe solar wind in 1958.

The probe, about the size of a car, will fly through the Sun's atmosphere and will come as close as 3.8 million miles to the star's surface, well within the orbit of Mercury.

It will be more than seven times closer than any spacecraft has come before. The Parker probe is expected to make 24 loops of the Sun over seven years.

During the journey, the spacecraft will fly by Venus at speeds of 4, 30, 000 mph, the equivalent of flying from New York to Tokyo in one minute.

In order to reach an orbit around the sun, the Parker Solar Probe will take seven flybys of Venus that will essentially give a gravity assist,

shrinking its orbit over the course of nearly seven years.

It will have to endure temperatures up to 2,500 degrees Fahrenheit (1,370 degrees Celsius) and solar radiation intensities 475 times higher than we're used to here on Earth.

#### **Main objectives of Parker Solar Probe:**

The mission will attempt to uncover the Sun's mysteries about its structure and magnetic and electric fields, as well as the energetic particles cruising near and away from Earth's star.

These events can affect satellites and astronauts as well as the Earth including power grids and radiation exposure on airline flights.

The information will help researchers and scientists solve longstanding mysteries:

How the solar wind is accelerated

Why the sun's outer atmosphere, or corona, is so much hotter than the solar surface

Explore mechanisms that accelerate and transport energy particles

The Solar Probe Cup, dubbed 'the bravest little instrument', is a sensor will extend beyond the heat shield to take samples of the Sun's atmosphere.

The cup will glow red when the probe makes its closest approach to the sun, sampling the solar wind and effectively touching the sun.

#### **Mission to end in 2025**

The mission is scheduled to end in June 2025 till it runs out of propellant.

The first data download from the Parker Solar Probe is expected in early December after the probe reaches its first close approach of the sun in November.

In 10 to 20 years, a carbon disk will be floating around the sun in orbit, and it will be around until the end of the solar system.

The European Space Agency is also building a similar solar probe.

Solar Orbiter, or SolO is undergoing final assembly and testing in the UK.

It is expected to launch in 2020, arriving at its closest position to the Sun towards the end of Parker's planned seven years of operations.

Solo will go to within 42 million km of the Sun's surface. That's further away than Parker but it will still need an impressive shield.

Aditya-L1 is a spacecraft whose mission is to study the Sun.

It was conceptualised by the Advisory Committee for Space Research in January 2008.

It has been designed and will be built in collaboration between Indian Space Research Organisation (ISRO) and various Indian research organizations.

It will be launched by ISRO around 2019 or 2020.

#### **ISRO SET TO LAUNCH ITS TV CHANNEL**

The ISRO is all set for a year-long Vikram Sarabhai centenary celebration starting in August 2019 to honour the visionary scientist and its legendary founding father.

In a few months' time, it plans to roll out a dedicated ISRO TV channel showcasing space applications, developments and science issues, targeting young viewers and people in remote areas in their language.

As it strengthens its public outreach, ISRO will shortly start allowing the public to watch satellite launches from its Sriharikota launch centre.

Selected students of classes 8 to 10 will be the trained at ISRO for a month and taken to various laboratories and centres across the country.

Sarabhai, the architect of the Indian space programme, the first ISRO chief and renowned cosmic ray scientist, was born on August 12, 1919.

ISRO's tributes to Sarabhai start with naming the first Indian moon landing spacecraft of the Chandrayaan-2 mission 'Vikram'.

**Sky is the limit**  
ISRO has identified as many as 50 missions in the next three years. A lowdown of missions in the next nine months:

<b>SEPTEMBER 2018:</b> NovoSAR-S & SSTL-S1 (on PSLV-C42 rocket)	<b>DECEMBER 2018:</b> EMISAT (PSLV-C44), GSAT-31 (by Arianespace)
<b>OCTOBER 2018:</b> HYSIS + 30 small foreign satellites (PSLV-C43)	<b>JAN. - MARCH 2019:</b> Chandrayaan-2 (GSLV-Mk3)
<b>NOVEMBER 2018:</b> GSAT-11 (launch by Arianespace), GSAT-7A (GSLV-F11)	<b>JAN. 2019:</b> RISAT-2B (PSLV-C45)
	<b>MAY 2019:</b> GSAT-30 (by Arianespace)

**ALSO IN 2019:**  
Solar mission Aditya-L1 (PSLV)  
Navigation satellite IRNSS-1J (PSLV)  
Fixed or Geostationary Earth Imager GISAT (GSLV)

Sarabhai was only 28 when he sowed the seeds of a space agency around the late 1940s and 1950s.

**CSIR'S NEW PATENTED CLOT BUSTER, PEGYLATED STREPTOKINASE SET TO REVOLUTIONIZE THE TREATMENT OF STROKES**

**Clot Buster:**

A clot buster is used to break-up the clot that causes a blockage or disruption in the flow of blood to the brain and helps restore the blood flow to the area of the brain.

It is a new clot buster developed by at CSIR-Institute of Microbial Technology (CSIR-IMTECH), Chandigarh.

It is all set to revolutionize the treatment of ischemic strokes.

Ischemic stroke is a condition caused by a dysfunction in the supply of blood to the brain due to emboli, thrombus or atherosclerosis occurring in cerebral arteries.

PEGylated Streptokinase, the novel recombinant protein Thrombolytic molecule has been precisely engineered through decades of research for enhanced proteolytic stability.

Its advantages are reduced probability of hemorrhage over current treatment regimens of thrombolytic drugs for acute stroke.

CSIR-IMTECH and Epygen Biotech Pvt. Ltd., Mumbai, have entered into an agreement for the latter to develop PEGylated Streptokinase for treatment of Ischemic Stroke.

Epygen is the first company in India with exclusive license of this Novel Biological Entity (NBE) thrombolytic protein for ischemic stroke.

According to the American Stroke Association (ASA), brain strokes are the second leading cause of death in the world with a staggering 15 million people effected.

It is causing 11 million people either die or become permanently disabled.

Surprisingly, the prevalence of stroke is much higher in India than the West and about 87% of all strokes are ischemic strokes.

**Council of Scientific and Industrial Research:**

The Council of Scientific and Industrial Research was established by the Government of India in 1942 is an autonomous body that has emerged as the largest research and development organisation in India.

It runs thirty-eight laboratories and thirty-nine field stations or extension centres throughout the nation, with a collective staff of over 12,000 scientists and scientific and technical personnel.

Although it is mainly funded by the Ministry of Science and Technology, it operates as an autonomous body through the Societies Registration Act, 1860.

The research and development activities of CSIR include aerospace engineering, structural engineering, ocean sciences, life sciences, metallurgy, chemicals, mining, food, petroleum, leather, and environmental science.

\*\*\*