

“Don't wish it were easier. Wish you were better.” Jim Rohn

INTERNATIONAL AND BILATERAL**UN GENERAL ASSEMBLY ADOPTED A RESOLUTION TO SET UP GLOBAL PACT FOR THE ENVIRONMENT**

The UN General Assembly has adopted a resolution to set up a working group for negotiations aimed at creating a Global Pact for the Environment, a **legally binding international instrument**.

The resolution requests UN Secretary-General Antonio Guterres to submit to the General Assembly a report that identifies and assesses possible gaps in international environmental law and environment-related instruments with a view to strengthening their implementation.

It decides to establish an ad hoc open-ended working group to consider the report, and if deemed necessary, to consider the scope, parameters and feasibility of a Global Pact for the Environment.

The resolution requests the current president of the General Assembly to appoint two co-chairs of the working group — one from a developing country and one from a developed country — to oversee its consultations.

The resolution was sponsored by France and won the support of 143 countries.

Iran, the Philippines, Russia, Syria, Turkey and the United States voted against it.

Six other countries abstained while several states did not vote.

SUPREME COURT UPHELD THE RULING ON DOMESTIC VIOLENCE ACT

The Supreme Court has upheld a ruling that the Domestic Violence Act, intended to safeguard women against marital abuse, will apply even after divorce. The court observed that the act extends to all man-woman relationships, and also protects divorced women from their former husbands.

The apex court has upheld Rajasthan High Court's interpretation that 'domestic relationship' is not confined to the "relationship as husband and wife or a relationship in the nature of marriage, but it

includes other relationship as well such as sisters, mother, etc.”.

Protection of Women from Domestic Violence Act 2005:

It is an act to provide for more effective protection of the rights of Women guaranteed under the Constitution who are victims of violence of any kind occurring within the family and for matters connected therewith or incidental thereto.

Domestic Violence Act 2005 is the first significant attempt in India to recognize domestic abuse as a punishable offence, to extend its provisions to those in live-in relationships, and to provide for emergency relief for the victims, in addition to legal recourse. It extends to the whole of India except the State Jammu & Kashmir.

It aims to protect women from physical, sexual, verbal, emotional and economic abuse at home.

Domestic violence can continue even after divorce and the reach of the Act should not be shackled by confining only for the protection of women living in marriage.

5,000 ATAL TINKERING LABS TO BE SET UP BY MARCH 2019

The NITI Aayog will set up 5,000 Atal Tinkering Labs (ATLs) by March 2019 covering all districts in the country.

The goal of the student innovator programme is to test the innovations in the community. Students will be trained on business and entrepreneurship skills, including intellectual property, effective communication, making an elevator pitch and so on.

NITI Aayog had in December selected an additional 1,500 schools for setting up ATLs under the government's flagship programme Atal Innovation Mission (AIM) taking the total number of such labs to 2,441.

The NITI Aayog had recently organized the innovation marathon to identify India's best student innovators across six different thematic areas including clean energy, water

resources, waste management, healthcare, smart mobility and agri-tech.

Atal Tinkering Labs are innovation play workspaces for students between grade 8 to 12, stimulating innovations combining science and technology.

Their aim is to promote innovation and entrepreneurship in schools, universities and industry.

NITI Aayog's Atal Innovation Mission is among one of the flagship programs of the Government of India to promote innovation and entrepreneurship in the country to set up the Atal Tinkering Labs across the country.

NEW OPEN ACREAGE LICENSING POLICY (OALP)

The Directorate General of Hydrocarbons (DGH) had recently announced the completion of the first round of bidding under its new Open Acreage Licensing Policy (OALP), a part of its revamped Hydrocarbon Exploration and Licensing Policy (HELP) unveiled in March 2016.

OALP:

The policy was brought out in June 2017 and marked a departure from the previous regime in terms of the geographical area that could be explored, the number of licenses required, the manner in which proceeds are to be shared with the government, and the procedure to sell what is extracted. OALP is a part of HELP, which itself was a replacement to the New Exploration and Licensing Policy.

The 'open acreage' in OALP refers to the fact that potential investors are now able to choose exactly which areas they want to explore and develop. Under **OALP, investors choose the exact areas they are interested in, convey their interest to the government, which then places just those blocks up for bidding, typically twice a year.**

Under the new policy, developers don't need to apply for separate licences for each of the hydrocarbons they want to extract from the block. They can obtain a single unified license that will allow them to extract and market oil, gas, coal bed methane, shale oil and shale gas.

The new policy also does away with the earlier provision for a profit-sharing model with the government. Profit sharing as a policy led to a number of delays and complications over what exactly constituted the cost, and therefore profit, of the firm doing the exploring. **The new policy hinges on revenue-sharing, doing away with this ambiguity.**

New Exploration Licensing Policy (NELP) created in 1997 ended the state dominance and created a competitive environment leading to liberalization of oil and gas exploration and production industry. However, it failed to keep the momentum of production growth and attracting the foreign investment and Bureaucratic hurdles like multiple approvals and sanctions, cost overruns, and disputes led to some oil majors leaving their awarded blocks and exit from the space.

ENVIRONMENT

SAWEN

SAWEN recently it's first ever meeting in India. Representatives of seven countries participated in the meeting and the members agreed on having an operational framework for strengthening the regional body to combat wildlife crime.

During the meet six proposals, including tracking of wildlife smuggling route, review of existing laws and a structure for the organization were tabled.

SAWEN:

SAWEN is a regional network comprises eight countries in South Asia –Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

It aims at working as a strong regional intergovernmental body for combating wildlife crimes by attempting common goals and approaches for combating illegal trade in the region.

The South Asia region is very vulnerable to illegal traffic and wildlife crimes due to presence of precious biodiversity and large markets as well as traffic routes for wildlife

products in the region. The collaboration in harmonizing as well as enforcing the wildlife protection in the region is considered very important for effective conservation of biodiversity.

India along with other member countries will take initiatives to bring “harmonization and standardization” in laws and policies to conserve fauna and flora and will also document the trend of poaching, illegal trade and related threats to the natural biodiversity.

This will also **strengthen institutional responses to combat wildlife crime by promoting research and information sharing, training and capacity building, technical support, sharing experiences** and outreach and to encourage member countries to prepare and implement their national action plans in curbing wildlife crime.

MULTIPLE THREATS TO HIMALAYAN BIODIVERSITY

The Indian Himalayas, which constitute about 12% of the country’s landmass, is home to about 30.16% of its fauna, says a new publication from the Zoological Survey of India (ZSI).

Spread across six States — from Jammu and Kashmir in the west through Himachal Pradesh, Uttarakhand, Sikkim and West Bengal’s Darjeeling to Arunachal Pradesh in the far east, The Indian Himalayas are divided into two bio-geographic zones — the Trans-Himalaya and the Himalaya, based on physiographic, climatic and eco-biological attributes.

The entire region, spread over 3.95 lakh sq. km. is home to 280 species of mammals, 940 species of birds, 316 species of fishes, 200 species of reptiles and 80 species of amphibians

This put together accounts for 27.6% of the total vertebrate diversity of the country

The ZSI publication lists 133 vertebrate species of the region cited as threatened in the IUCN Red List. This includes 43 species of mammals like the critically endangered Pygmy Hog, the Namdapha flying squirrel and the endangered

Snow leopard, the Red Panda and the Kashmir Gray Langur.

Fifty-two species of birds are also in the threatened category like the critically endangered White-Bellied Heron and Siberian crane and vulnerable species like the Black Necked crane and the Indian Spotted Eagle, among others.

Most of the threatened species of vertebrates, particularly mammals, require population assessment and study of the role of climate change on their habitat.

Climate change is a major threat as far as mammals and birds are concerned.

The impact is visible in the shifting distribution of sensitive species like the Asiatic Black Bear, the Snow leopard, and the Himalayan Marmot Carnivores and their habitats are threatened by ever-increasing human-wildlife conflict in the region.

Habitat loss due to land use change, illegal wildlife trade, forest fires and increasing anthropogenic activities pose threats to this Himalayan biodiversity.

SCIENCE AND TECHNOLOGY

NASA IS PLANNING TO SEND A SMALL HELICOPTER TO MARS AS PART OF 2020 MISSION

NASA is planning to send a small helicopter to Mars as part of the space agency’s 2020 mission to place a next-generation rover on the Martian surface, marking the first time such an aircraft will be used on another world.

The Mars Helicopter, a small, autonomous rotorcraft, will travel with the agency’s Mars 2020 rover mission, currently scheduled to launch in July 2020, to demonstrate the viability and potential of heavier-than-air vehicles on the Red Planet.

The helicopter also contains built-in capabilities needed for operation at Mars, including solar cells to charge its lithium-ion batteries, and a heating mechanism to keep it warm through the cold Martian nights. But before the helicopter can fly at Mars it has to get there. It will do so attached to the belly pan of the Mars 2020 rover.

As a technology demonstration, the Mars Helicopter is considered a high-risk, high-reward project. If it does not work, the Mars 2020 mission will not be impacted. If it does work, helicopters may have a real future as low-flying scouts and aerial vehicles to access locations not reachable by ground travel.

Mars 2020:

Mars 2020 will launch on a United Launch Alliance (ULA) Atlas V rocket from Space Launch Complex 41 at Cape Canaveral Air Force Station in Florida, and is expected to reach Mars in February 2021.

The rover will conduct geological assessments of its landing site on Mars, determine the habitability of the environment, search for signs of ancient Martian life, and assess natural resources and hazards for future human explorers.

Scientists will use the instruments aboard the rover to identify and collect samples of rock and soil, encase them in sealed tubes, and leave them on the planet's surface for potential return to Earth on a future Mars mission.

ENVIRONMENT-FRIENDLY PROPELLANT TO POWER SATELLITES AND SPACECRAFT

Scientists at the ISRO have reported progress in the development of an environment-friendly propellant to power satellites and spacecraft.

The effort is to replace the conventional hydrazine rocket fuel, a highly toxic and carcinogenic chemical, with a greener propellant for future missions.

Due to its high-performance characteristics, hydrazine has dominated the space industry as the choice of propellant for over six decades, despite its environmental and health hazards and the challenges faced in its manufacturing, storage, ground handling and transportation.

Initial tests by a research team at the Liquid Propulsion Systems Centre (LPSC) here have shown promising results in the formulation and associated tests of a propellant blend based on hydroxyl-ammonium nitrate (HAN).

HYDROXYL-AMMONIUM NITRATES (HAN):

The LPSC team has formulated the HAN-based monopropellant.

A monopropellant is a chemical propulsion fuel which does not require a separate oxidizer. It is used extensively in satellite thrusters for orbital correction and orientation control.

The in-house formulation consists of HAN, ammonium nitrate, methanol and water.

Methanol was added to reduce combustion instability, the choice of ammonium nitrate was dictated by its capacity to control the burn rate and lower the freezing point of the propellant.
