

**“Stop blaming outside circumstances for your inside chaos.” Steve Maraboli**

**INTERNATIONAL AND BILATERAL**
**WORLD BIOFUEL DAY 2018**

World Biofuel Day is observed every year on **10th August** to create awareness about the importance of non-fossil fuels as an alternative to conventional fossil fuels and to highlight the various efforts made by the Government in the biofuel sector.

**World Bio Fuel Day:**

Every year 10th August is observed as World Bio-Fuel Day in a bid to create awareness about non fossil-fuels (Green Fuels). On this day in 1893, Sir Rudolph Diesel (inventor of the diesel engine) for the first time successfully ran mechanical engine with Peanut Oil. His research experiment had predicted that vegetable oil is going to replace the fossil fuels in the next century to fuel different mechanical engines. Thus to mark this extraordinary achievement, World Biofuel Day is observed every year on 10th August.

**Government initiatives to promote the use of Biofuels:**

Since 2014, the Government of India has taken a number of initiatives to increase blending of biofuels. The major interventions include administrative price mechanism for ethanol, simplifying the procurement procedures of OMCs, amending the provisions of Industries (Development & Regulation) Act, 1951 and enabling lignocellulosic route for ethanol procurement.

The Government approved the National Policy on Biofuels-2018 in June 2018. The policy has the objective of reaching 20% ethanol-blending and 5% biodiesel-blending by the year 2030. Among other things, the policy expands the scope of feedstock for ethanol production and has provided for incentives for production of advanced biofuels.

Recently, the Government has increased the price of C-heavy molasses-based ethanol to Rs. 43.70 from Rs. 40.85 to give a boost to EBP Programme. Price of B-heavy molasses-based ethanol and sugarcane juice-based

bio-fuel has been increased to Rs. 47.40. The Government has reduced GST on ethanol for blending in fuel from 18% to 5%. The Ministry of Petroleum & Natural Gas is making all efforts to increase ethanol supply for petrol and has taken several steps in this direction.

These interventions of the Government of India have shown positive results. Ethanol blending in petrol has increased from 38 crore litres in the ethanol supply year 2013-14 to an estimated 141 crore litres in the ethanol supply year 2017-18. Bio-diesel blending in the country started from 10th August, 2015 and in the year 2018-19, Oil Marketing Companies have allocated 7.6 crore litres of biodiesel. Oil PSUs are also planning to set up 12 Second Generation (2G) Bio-refineries to augment ethanol supply and address environmental issues arising out of burning of agricultural biomass.

**NATIONAL ENERGY STORAGE MISSION**

In February 2018, an Expert Committee under the chairpersonship of Secretary, Ministry of New and Renewable Energy, with representatives from relevant Ministries, industry associations, research institutions and experts was constituted by the Ministry of New & Renewable Energy to propose draft for setting up National Energy Storage Mission (NESM) for India.

The Expert Committee referred has proposed a draft NESM with objective to strive for leadership in energy storage sector by creating an enabling policy and regulatory framework that encourages manufacturing, deployment, innovation and further cost reduction.

Key areas for energy storage application include:

- Integrating renewable energy with distribution and transmission grids.
- Setting Rural microgrids with diversified loads or stand-alone systems.
- Developing Storage component of electric mobility plans.

**Draft National Energy Storage Mission (NESM):**

The draft expects to kick-start grid-connected energy storage in India, set up a regulatory framework, and encourage indigenous manufacture of batteries.

The draft sets a “realistic target” of 15-20 gigawatt hours (GWh) of grid-connected storage within the next five years. Power grids do not currently use storage options that would help in smoothly integrating renewable energy sources.

The mission will focus on seven verticals: indigenous manufacturing; an assessment of technology and cost trends; a policy and regulatory framework; financing, business models and market creation; research and development; standards and testing; and grid planning for energy storage.

**Significance and the need for energy storage:**

Energy Storage is one of the most crucial & critical components of India’s energy infrastructure strategy and also for supporting India’s sustained thrust to renewables.

Renewable energy sources now make up almost one-fifth of India’s total installed power capacity. However, as power grids increase their share of solar and wind energy, the problem remains that the peak supply of renewable sources does not always meet peak demand. For instance, solar energy generation may be at its peak at noon, but unless stored, it will not be available when needed to light up homes at night. Moreover, renewable sources are inherently intermittent: there are days when the wind doesn’t blow or the sky is cloudy.

**ADDITIONAL BATTALIONS OF NDRF**

Union Cabinet has given approval for raising of four additional battalions of National Disaster Response Force (NDRF) to strengthen the India’s disaster response set up.

The objective of raising four additional battalions is to reduce response time keeping in view vast geographic area of the country.

These battalions will be placed in Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Delhi National Capital Region based on their disaster vulnerability profile.

**NDRF:**

The Disaster Management Act has made the statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters.

Two national calamities in quick succession in the form of Orissa Super Cyclone (1999) and Gujarat Earthquake (2001) brought about the realization of the need of having a specialist response mechanism at National Level to effectively respond to disasters. This realization led to the enactment of the DM Act on 26 Dec 2005.

**ROLE AND MANDATE OF NDRF:**

- Specialized response during disasters.
- Proactive deployment during impending disaster situations.
- Acquire and continually upgrade its own training and skills.
- Liaison, Reconnaissance, Rehearsals and Mock Drills.
- Impart basic and operational level training to State Response Forces (Police, Civil Defence and Home Guards).
- Community Capacity Building Programme.
- Organize Public Awareness Campaigns.

**NITI AAYOG TO JOIN HANDS WITH CII TO DEVELOP A ROADMAP FOR GLOBAL INNOVATION INDEX**

The India Innovation Index was launched by NITI Aayog, Confederation of Indian Industry (CII) along with the World Intellectual Property Organization (WIPO), in collaboration with the Department of Industrial Policy and Promotion (DIPP).

India’s rank on the Global Innovation Index (GII) has improved from 60 in 2017 to 57 in 2018

India has been consistently climbing the GI ranking for the past two years.

It provided an opportunity to look at examples from similar economies from across the world and understand how they effected change in their countries.

We can also draw a distinction between Innovation and Invention and emphasized the role of pure science in building scientific temper in the country.

Ratan Watal, Principal Adviser of NITI Aayog underlined the need to-

Transform India's Innovation Ecosystem by formulating a New Innovation Policy to attract R&D investment into cutting edge technologies and build appropriate infrastructure and institutions

Tap Global hotspots of Innovation in latest technologies like AI, Blockchain and Robotics etc.

Connect Tinkering labs in schools with start-ups, business and high end educational institutions

Target efficient, productive and outcome driven R&D in the Government Sector

**Global Innovation Index:**

The Global Innovation Index (GII) is an annual ranking of countries by their capacity for, and success in, innovation.

It is published by Cornell University, INSEAD, and the World Intellectual Property Organization, in partnership with other organizations and institutions.

It is based on both subjective and objective data derived from several sources, including the International Telecommunication Union, the World Bank and the World Economic Forum.

The index was started in 2007 by INSEAD and World Business, a British magazine.

The GIi is commonly used by corporate and government officials to compare countries by their level of innovation.

**ONE DISTRICT ONE PRODUCT (EK ZILA – EK UT PADAN) SCHEME**

Uttar Pradesh government had recently organized 'One District One Product' Summit to promote traditional industries in every district of the state.

The ODOP Summit is stated to be the first of its kind in the country and is expected to give a big boost to the MSME and handicraft in the state.

The summit, which aims to give boost to micro, small and medium enterprises (MSME), will be a corollary of the UP Investors Summit held in the state capital in February this year, followed by the groundbreaking ceremony for the launch of 81 projects in July.

**ODOP:**

ODOP is aimed at giving a major push to traditional industries synonymous with the respective districts of the state.

The objective of the ODOP is to optimise production, productivity and income, preservation and development of local crafts, promotion of art, improvement in product quality and skill development.

Under this, one product indigenous to every district would be showcased at the three-day UP Diwas event. This will boost economic development of the state, and also help in generation of five lakh new jobs annually.

ODOP is basically a Japanese business development concept, which gained prominence in 1979. It is aimed at promoting a competitive and staple product from a specific area to push sales and improve the standard of living of the local population. Over time, it has been replicated in other Asian countries as well.

**DECODING THE DNA BILL**

Helen Wallace, Director, GeneWatch UK, analyzed the pros and cons of the recently introduced DNA technology (Use and Application) Regulation Bill 2018 and also suggested futuristic course of action for the Bill.

**Important facts:**

1. Recently, the Bill was introduced in Parliament.
2. The purpose was to create a national DNA database for use by the police in solving crimes and identifying missing persons.

**However the Bill was criticized on various grounds such as:**

- For creating large databases because these databases is often not a cost-effective way to solve more crimes.
- The DNA Regulatory Board proposed by the Bill is not transparent and accountable.
- The Forensic Genetics Policy Initiative published its report, “Establishing Best Practice for Forensic DNA Databases”, last year.

**DNA Bill reveals the following issues:**

1. Using DNA during criminal investigations requires proper crimes scene examination, trained and reliable policing, proper use of expert evidence on court.
2. Without these prerequisites, a DNA database will exacerbate rather than solve problems in the criminal justice system.
3. A number of other privacy protections are also missing from the Bill.
4. The Bill includes provisions for the destruction of DNA samples and removal of innocent people’s DNA profiles from the database.
5. These provisions are inadequate because it is unclear how they will operate in practice.
6. To set up these databases involved huge expenditure.
7. Important safeguards and a cost-benefit analysis are still lacking for this Bill.
8. A number of other privacy protections are also missing.
9. The Bill includes provisions for the destruction of DNA profiles from the database. However, these provisions are inadequate.

10. Recently, the Home Ministry provides guidelines to States on how to search crime scenes and collect, store and transport DNA samples in criminal cases.

**Way forward:**

- Separate the databases for missing persons and for criminals set up by the Bill, so that people who volunteer their DNA to help find their missing relatives are not treated as suspects for criminal offences
- Conflict-of-interest should be published for each board member when appointed.
- Board proceedings should be published.
- The Board need to review the ethics of its own behaviour
- An independent ethics board should be set up.
- Provisions which give the government or the Board the power to amend aspects of the safeguards in the Bill, and to avoid accountability in court, should be deleted.
- The Boards responsibilities for privacy protections need an independent regulator. This is important after the Supreme Court’s Right to privacy judgment.
- Need to restrict DNA profiling so that it uses only non-coding DNA.
- Any international sharing of DNA profiles should be covered by a privacy or data protection law, and meet international human rights standards.
- Separate the databases for missing persons and for criminals set up by the Bill. Provisions allowing the use of these databases for civil cases, for example to test paternity, should be deleted from the Bill.

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