



News Analysis (08 Mar, 2019)

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Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016

In order to strengthen the **implementation of environmentally sound management** of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has **amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016**.

Salient features of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019:

- **Solid plastic waste** has been **prohibited from import into the country** including in Special Economic Zones (SEZ) and by Export Oriented Units (EOU).
- **Exporters of silk waste have now been given exemption** from requiring permission from the Ministry of Environment, Forest and Climate Change.
- **Electrical and electronic assemblies and components** manufactured in and exported from India, if found defective can now be imported back into the country, within a year of export, without obtaining permission from the Ministry of Environment, Forest and Climate Change.
- Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

Background

- India's imports of solid plastic waste **quadrupled (increased fourfold)** from 12,000 tonnes in the fiscal year 2016-17 to 48,000 tonnes in FY 2017-18.
- India **banned the import of plastic waste** – particularly PET bottles – in 2015 because

of an **inability to recycle them.**

Experts suggest that most of the plastic waste does not make it to the recycling centres due to lack of an **efficient waste segregation and inadequate collection.**

- However, the **Centre allowed agencies** in special economic zones (SEZ) to **import them in 2016.** This was the legal loophole which led to an influx of PET bottles into the country.

PET Bottles

- PET, which stands for **polyethylene terephthalate, is a form of polyester** (just like the clothing fabric). It is extruded or molded into plastic bottles and containers for packaging foods and beverages, etc.
- It is highly **valued packaging material** because it is strong yet lightweight, non-reactive, economical, and shatterproof.
- Moreover, China, which was once a major global importer of plastic waste for recycling, had **recently banned imports** and therefore plastic wastes could be **making their way to India instead.**
- Plastic **unsuitable for recycling is burnt, which releases toxic chemicals** into the atmosphere. Or it ends up in landfill, potentially **contaminating soil and water sources.**

India's Plastic Waste Industry

- Before China banned the import of plastic waste, **India was the 10th largest importer of plastic scrap.** However, there was a **“substantial increase” in import** which shows that India has emerged as one of the alternatives for recycling plastic waste.
- India recycles a **higher percentage of plastic waste internally than other, richer countries.**
 - A 2012 study found that 56% of plastic waste produced in India is recycled.
 - The process of collecting and separating plastic waste is largely an **informal sector activity, providing employment to many.**
 - However, concerns remain **regarding the widespread usage of plastic.** Experts say while recycling is a good practice, the focus **must remain on reducing usage.**
- While several states have indeed banned the usage of plastic bags, the regulations soon come undone.

Maharashtra's ban on plastic items failed because of **intense lobbying, lack of alternatives and also damage to the livelihood of those depending on manufacturing plastic and collecting plastic waste.**

India-Russia Nuclear Attack Submarine Deal

India and Russia have inked a \$3 billion nuclear submarine deal.

- The Indian Navy will get the submarine— **re-christened as Chakra III**— on lease from Russia and is expected to serve the Indian Navy for at least a decade
- Chakra III is the Russian Navy's **K-322 Kashalot (Akula II-class) SSN** (Submarine Nuclear).
- The SSN will be fitted with the indigenously-developed USHUS integrated sonar system as well as the Panchendriya sonar, a unified submarine sonar, and tactical control system.
- The Akula II-class, the 8,140-ton Chakra III will have a submerged speed of 30 knots and an operating depth of 530 meters. It will hold a crew of 73.
- The submarine could be delivered to the Indian Navy by 2025.

Significance of Leasing

- The main purpose behind leasing the Russian nuclear-powered submarines is to **train Indian naval personnel in manning the country's own fleet of nuclear-powered ballistic missile submarines.**
- The Chakra-III is expected to give **India an edge over its rivals in the Indian Ocean region** given one of the major strengths of a nuclear submarine is its ability to remain underwater for months, making detection difficult.
- The addition of this submarine will be a **major boost to India's role as the net security provider in the Indian Ocean region**, which has some of the busiest shipping lanes.

History of Leasing

- In **1988**, the Indian Navy leased for three years a nuclear-powered cruise missile submarine that was christened **INS Chakra.**
- In **2012**, Indian Navy took on lease for 10 years, a second submarine christened **Chakra II**, which currently serves with the Eastern Naval Command.

India's own SSBN fleet

- India is also developing the Ship Submersible Ballistic Nuclear (SSBN) fleet under the **Advanced Technology Vehicle (ATV) project.**
- India's first indigenously-built nuclear-powered ballistic missile submarine, **the INS Arihant**, entered service in 2016. A second, **the INS Arighat**, was launched in 2017 and is undergoing sea trials.

India-Russia Defense Cooperation

- Recently, India and Russia have also signed a deal for the **S-400 Triumf air defense missile system for over \$5 billion**
- India and Russia have also signed agreements for **construction of frigates under Project 1135.6** and formation of joint venture to manufacture **Ka-226T helicopters in India.**
- Russia is also establishing a manufacturing unit for **AK-203 assault rifles under a joint venture in Amethi, Uttar Pradesh.**

India-Russia Relations

India's Nuclear Triad Complete

National Mission on Transformative Mobility and Battery Storage

Union Cabinet has approved setting up of a **National Mission on Transformative Mobility and Battery Storage.**

The objective is to **promote clean, connected, shared, sustainable and holistic mobility initiatives;** Phased Manufacturing Programme (PMP) valid for 5 years until 2024.

Composition

The multi-disciplinary “National Mission on Transformative Mobility and Battery Storage” with an Inter-Ministerial Steering Committee will be chaired by CEO NITI Aayog.

Role

- The Mission will **recommend and drive the strategies for transformative mobility and Phased Manufacturing Programmes for Electric Vehicles,** EV Components and Batteries.
- A **Phased Manufacturing Program (PMP)** will be launched to localize production across the entire EV value chain.
- The National Mission on Transformative Mobility and Battery Storage will determine the PMP and will finalize the details of such a program.
- The **details of the value addition that can be achieved with each phase of localization** will be finalized by the Mission with a clear Make in India strategy for the electric vehicle components as well as battery.

- The **Mission will coordinate with key stakeholders in Ministries/ Departments** and the states to integrate various initiatives to transform mobility in India.

Roadmaps

- A **phased roadmap to implement battery manufacturing at Giga-scale** will be considered with an initial focus on the large-scale module and pack assembly plants by 2019-20, followed by integrated cell manufacturing by 2021-22.
- **Details of the PMP for Batteries shall be formulated by the Mission.** The Mission will ensure holistic and comprehensive growth of the battery manufacturing industry in India.
- The Mission will prepare the roadmap that will enable India to leverage upon its size and scale to produce innovative, competitive multi-modal mobility solutions that can be deployed globally in diverse contexts.
- The Mission will define the roadmap for transformative mobility in “New India” by introducing a sustainable mobility ecosystem and fostering Make-in-India to boost domestic manufacturing and employment generation in the country.

Impact

- The **Mission will drive mobility solutions that will bring in significant benefits to the industry, economy, and country.**
- These solutions will help improve air quality in cities along with reducing India’s oil import dependence and enhance the uptake of renewable energy and storage solutions.
- The Mission will lay down the strategy and roadmap which will enable India to leverage upon its size and scale to develop a competitive domestic manufacturing ecosystem for electric mobility.
- The **actions in this regard will benefit all citizens as the aim is to promote ‘Ease of Living’ and enhance the quality of life of our citizens and also provide employment opportunities through ‘Make-in-India’ across a range of skillsets.**

Background

- Mobility has the potential to drive the economy forward and positively impact the lives of citizens both in urban and rural areas.
- Affordable, accessible, inclusive and safe mobility solutions are primary strategic levers for rapid economic development and improving ‘Ease of Living’.
- Given its commitment to climate goals, India needs to adopt effective strategies to place itself as a key driver of the mobility revolution in the world.

Need for EVs in India

- Rapid urbanization has increased the demand for energy and transport infrastructure.
- India's commitment to addressing the issue of climate change necessitates the adoption of alternative fuels for environmental sustainability.
- The shift towards renewable energy sources has led to cost reduction from better electricity generating technologies.
- Advances in battery technology have led to higher energy densities, faster charging and reduced battery degradation from charging.
- High expenses on oil import in the changing geopolitical conditions require India to ensure its energy security by moving towards alternative energy sources.

Factors that hinder the development of the EV industry in India

- **Lack of a stable policy for EV production:** Profit determination becomes uncertain considering the high capital costs and the uncertainty in policies related to EV production. This discourages investment in the industry.
 - **Lack of associated infrastructural support:** The lack of clarity over AC versus DC charging stations, grid stability and range anxiety (fear that battery will soon run out of power) are other factors that hinder the growth of EV industry.
 - **Domestic factors affecting EV production:** India does not have any known reserve of lithium and cobalt, it is dependent on countries like Japan and China for the import of lithium-ion batteries. Rupee depreciation has also negatively affected such imports.
 - **Lack of skilled workers:** EVs have higher servicing costs and higher levels of skills is needed for servicing. India lacks dedicated training courses for such skill development.
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Flood Management and Border Areas Programme (FMBAP)

The Union Cabinet has approved the "**Flood Management and Border Areas Programme (FMBAP)**" for Flood Management Works in entire country and **River Management Activities and works related to Border Areas (RMBA)** for the period 2017-18 to 2019-20.

- The FMBAP Scheme will be implemented throughout the country for effective flood management, erosion control and anti-sea erosion.
- The proposal will benefit towns, villages, industrial establishments, communication links, agricultural fields, infrastructure etc. from floods and erosion in the country.
- The catchment area treatment works will help in reduction of sediment load into rivers.

Funding Pattern

- The **funding pattern for general category States will be 50% (Centre) : 50% (State)** and for projects of **North Eastern States, Sikkim, J&K, Himachal Pradesh and**

Uttarakhand, the funding pattern will to be 70% (Centre) : 30% (State).

- RMBA is funded as **100% grant-in-aid / central assistance, i.e. by the Central Government.**

Salient features

- The Scheme "FMBAP" has been framed by **merging the components of two continuing XII Plan schemes** titled "**Flood Management Programme (FMP)**" and "**River Management Activities and Works related to Border Areas (RMBA)**".
- The aim of the Scheme is to assist the State Governments to provide reasonable degree of protection against floods in critical areas by adopting optimum combination of structural and non-structural measures and enhancing capabilities of State/Central Government officials in related fields.
- The works under the scheme will **protect valuable land from erosion and flooding and help in maintaining peace along the border.**
- The Scheme aims at completion of the on-going projects already approved under FMP. Further, the scheme also caters to Hydro-meteorological observations and Flood Forecasting on common rivers with the neighbouring countries.
- The Scheme also includes survey and investigations of water resources projects on the common rivers with neighbouring countries like Pancheshwar Multipurpose Project, Sapta Kosi-Sun Kosi Projects in Nepal which would benefit both countries.

International Women's Day 2019

On the occasion of International Women's Day, the **International Labor Organisation** releases a **report- A Quantum leap for gender equality: For a better future of work for all.**

Key Findings

- **Women's employment rates are declining** due to the rapid transition from agriculture to industrial sectors and the lack of care services and infrastructure.
- **Under-representation of women at top management level** in companies, globally less than one-third managers are women.
- Globally the **difference in the employment rates** for men and women, has shrunk by less than two percentage points in last 27 years.
- Women **spend more time in unpaid care work** at home contrast to man who spend just 8 minutes per day.
- Women do not receive the same dividends for education as men.
- Between 2005 and 2015, **the motherhood employment penalty**- the difference in the proportion of adult women with children under six years in employment and

women without young children increased significantly by 38%.

International Women's Day

- International Women's Day (**March 8**) is a global day celebrating the social, economic, cultural and political achievements of women. The day also marks a call to action for accelerating gender parity.
- The **theme** for this year Women's Day is – **“Think Equal, Build Smart, Innovate for Change”**, it puts innovation by women and girls, for women and girls, at the heart of efforts to achieve gender equality.
- International Women's Day (IWD) has occurred for well over a century, with the **first IWD gathering in 1911** supported by over a million people in Austria, Denmark, Germany and Switzerland.
- Prior to this the **Socialist Party of America, United Kingdom's Suffragists** and Suffragettes, and further groups campaigned for women's equality.

Important Fact For Prelims (8th March 2019)

I-STEM

- The web portal **“Indian Science, Technology and Engineering Facilities Map (I-STEM)”** has been developed by the **Centre for Nano Science and Engineering (CeNSE)** at the **Indian Institute of Science, Bengaluru**.
- I-STEM portal will enable **easy and timely access of resources** to researchers working anywhere in the country.
- The portal is funded by **Office of Principal Scientific Advisor to the Prime Minister Office** also gives access to monitoring agencies including the Department of Science and Technology to evaluate how much the equipment funded by them are being used.
- In the future, private laboratories and universities will also be included in the database, which could also benefit start-ups.

Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC)

- The **PM-STIAC (Science, Technology, Innovation Advisory Committee)**, was **constituted in August, 2018** to advise the Prime Minister on all matters related to S&T, innovation and monitor the implementation as well.
- It is a **21-member committee, chaired by Principal Scientific Advisor (PSA) to the Government, presently K Vijay Raghavan**.
 - **Dr. A. P. J. Abdul Kalam** was the first **PSA from 1999—2001 and Dr. R.**

Chidambaram from 2001-2018.

- Professor K. VijayRaghavan succeeded Dr. Chidambaram on April 3, 2018.
- **PM-STIAC replaced the Scientific Advisory Committee (SAC) to PM and Cabinet.**

GI Tag for Erode Turmeric

- The Geographical Indication Registry of India has granted **GI Tag to Erode manjal (Turmeric) under Spices Category (Class 30 of GI Classification).**
- Erode Turmeric has been granted tag because of its **uniqueness in terms of its size, color, quality and its resistance to pests after boiling.**
- With the GI Tag, turmeric cultivated in some districts of Erode, parts of Coimbatore and whole of Tirupur (Tamil Nadu) will be recognised for its unique qualities derived from its place of origin.
- Erode turmeric is a **rhizome, both finger and bulb obtained from the Erode local cultivar.** It is grown in **hot moist conditions with temperature ranging from 20 degrees to 37.9 degrees Celsius** with an average of 600 to 800 mm rainfall in a year.
- It is a commercial spice crop which is sown in the months of June-July and is harvested in the months from January to March.

Renewable Status For Large Hydro Power Projects

- The government, under **New Hydroelectricity Policy**, has approved 'renewable energy status' for large hydel projects. **Earlier, only smaller projects of less than 25 MW** in capacity were **categorised as renewable energy.**
- Large hydro projects will now be included as a separate category **under the non-solar renewable purchase obligation policy**, mandating power purchasers to source a portion of electricity from such projects.
- The debt repayment period for hydro projects has been increased to 18 years from current 12 years with the provision to introduce an escalating tariff of 2%.
- The policy also provides for additional funds separately for infrastructure development as well as separate funds for the costs of flood moderation.
- These measures have been taken to **reduce hydro power tariff** and make the sector more competitive.
- According to the government, India has a hydro-power potential of 1,45,320 MW, of which only about 45,400 MW has been utilised so far. Only about 10,000 MW of hydro-power has been added in the last 10 years.
- Also, the share of hydro-power in the total generation capacity has declined from 50.36% in the 1960s to around 13% in 2018-19.

Renewable Purchase Obligation

- Renewable Purchase Obligation refers to the **obligation imposed by law** on some

entities to either buy electricity generated by specified 'green' sources, or buy, in lieu of that, '**renewable energy certificates (RECs)**' from the market.

- The 'obligated entities' are mostly electricity distribution companies and large consumers of power. RECs are issued to companies that produce green power, who opt not to sell it at a preferable tariff to distribution companies.

Rebate on Embedded taxes for Garments Exports

- The Union Cabinet has approved a scheme to **rebate State and Central Embedded Taxes** for **apparels** and **made-ups exports**.
- **At present**, apparel and made-ups segments are supported under the **Scheme for Rebate of State Levies (RoSL)**.
- However, certain State, as well as Central Taxes, continued to be present in the cost of exports. Cabinet decision provides for a scheme to rebate all embedded State and Central Taxes/levies for apparel and made-ups which have a combined share of around 56% in India's textile export basket.
- It is applicable for apparel and made-ups now and will be extended to yarn in the future.

Benefits

- The proposed measures are expected to **make the textile sector competitive**.
- Rebate of all Embedded State and Central taxes/levies for apparel and made-ups segments **would make exports zero-rated, thereby boosting India's competitiveness in export markets** and ensure equitable and inclusive growth of textile and apparel sector.

RoSL

- It is to **offset indirect taxes levied by states such as stamp duty, petroleum tax, electricity duty and mandi tax** that were **embedded in exports**,
- It is provided to **textiles exporters**.

Made-ups

These are articles manufactured or stitched from any type of cloth, other than a garment such as bed-sheets, cushion covers, lamp-shades etc.

Divestment of CPSEs

- The Union Cabinet has decided to authorize the **Finance Minister-led Alternative Mechanism (AM)** to decide on strategic disinvestments.
- Cabinet Committee on Economic Affairs (CCEA) has **empowered the AM — set up in 2017** to look into the strategic sale of Central Public Sector Enterprises (CPSEs).

- AM has to decide on:
 - The
 - The mode of sale and the final pricing of the transaction, or lay down the principles/guidelines for such pricing,
 - Selection of strategic partner/buyer, and the terms and conditions of sale,
 - It can also decide on the timing of the sale and any other related issue regarding the transaction.

Disinvestment

- Disinvestment **means selling of assets**. In the case of Public Sector Undertakings, disinvestment means Government selling/ diluting its stake (share) in PSUs in which it has a majority holding.
 - Disinvestment is **carried out as a budgetary exercise**, under which the government announces yearly targets for disinvestment for selected PSUs.
-