

# NEWS TODAY

## MINISTRY OF CHEMICALS AND FERTILIZERS LAUNCHES POLICY AND SCHEME ON R&D AND INNOVATION FOR INDIA'S PHARMA-MEDTECH SECTOR

• **National Policy on Research and Development and Innovation in Pharma-MedTech Sector in India (NPRDIP)** and Scheme for promotion of Research and Innovation in Pharma MedTech Sector (**PRIP**) was launched.

### About NPRDIP

#### ➤ Objectives:

- To enhance **rapid drug discovery**.
- To **incentivise private sector investment** in Research and strengthening **R&D ecosystem**.
- To encourage **coordination** among existing policies & programmes.

➤ **Key Proposals:** Proposed to set up an **Indian Council of Pharmaceuticals and Med-tech Research and Development to facilitate**, and promote collaboration among industry, academia and research institutions etc.

### • PRIP scheme

➤ **Objective:** To transform Indian Pharma & MedTech sectors from a **cost-based to a value-based & innovation-based industry**.

#### ➤ Two components:

- **Component A:** Strengthening the research infrastructure by establishment of 7 Centre of Excellence at National Institute of Pharmaceutical Education & Research (NIPERs).
- **Component B:** Promoting research in pharmaceutical sector by encouraging research in 6 priority areas like New Chemical Entities, Complex generics including biosimilars, medical devices, stem cell therapy, orphan drugs, Anti-microbial resistance etc.

• Indian pharmaceutical industry is the **3rd largest pharmaceutical industry in the world** by volume with current market size of around USD 50 Billions.

## NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT (NABARD) RAISES ₹1,040 CRORE VIA SOCIAL IMPACT BONDS (SIBS)

• SIBs are **financing mechanisms** in which **governments** enter into **agreements** with **social service providers**, e.g., NGOs, etc., and investors to pay for the delivery of **pre-defined social outcomes**.

• NABARD SIB is **first externally certified AAA-rated** (highest rating by the credit rating agency) **Indian Rupee social bond** in the country.

➤ **Projects eligible for funding:** are **affordable** housing, food security, energy storage, smart grids, etc

### • How are SIBs different from other bonds

- All SIBs have **two important elements: accountability** and **up-front financing**.
- Financing is **provided upfront** rather than **when results are attained**.
- Projects financed are required to **report on outcomes basis** as **opposed to outputs** of projects.
- Improve **delivery of services** as **opposed to** building physical infrastructure only.

• **Advantages of SIBs:** Improve **efficiency of social program**, strengthen collaborative approach, boost responsible social investing.

• **Utkrisht Impact Bond** Launched by **United States Agency for International Development**, was the **world's first Impact Bond** in healthcare.

• **India's first SIB** was co-created by the **Pimpri-Chinchwad Municipal Corporation and UN Development Programme** in 2020.

### BENEFITS FOR PHARMA SECTOR

- Development of Research Infrastructure.
- Building an enabling ecosystem for sector to grow.
- Promote industry-academia linkages by promoting collaboration between Private sector and Govt. institutes.
- Help in launching of commercially viable products

### WORKING MECHANISM OF SIBS

Government contracts an intermediary to implement a social/environmental project in exchange for a promise of a payment contingent on the social outcomes.



Then intermediary will raise the capital for the project. It will then contract a service provider to deliver the project's outcomes



Usually, if the project fails to deliver, the Government does not pay and the investors will lose part or all of their capital. If the project is successful, the Government pays the intermediary and investors.



# PUNJAB SUBMITS PLAN AGAINST STUBBLE BURNING TO CAQM FOR THE CURRENT PADDY SEASON

● **Stubble Burning** is a process of **setting on fire straw stubble**, left after harvesting grains, like paddy, wheat, etc. in order to prepare it for the another season

● **Pollutants released:** carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), methane (CH<sub>4</sub>) and Particulate Matters (PM<sub>10</sub> and PM<sub>2.5</sub>).

● **Reason for stubble burning**

- **Farmers use less labor-intensive methods** such as the combine harvester leaving behind rice stubble.
- With **as little as 10 days gap** between rice **harvesting season** and **sowing** of wheat, farmers often turn to stubble burning.

● **Punjab's Action Plan:** Envisages approx. **50% reduction in fire counts in Punjab during 2023 compared to last year.**

➤ Implement both **In-situ Management i.e.,** (Bio Decomposer, etc.) and **ex-situ management** (Biomass-based power plants, CBG Plants).

● **The Commission for Air Quality Management (CAQM)** is a **statutory body constituted** under the CAQM in the National Capital Region and Adjoining Areas Act 2021.

➤ **Primary goal: to enhance coordination, conduct research,** and identify and address **issues related to air quality in the NCR** and its neighboring regions including Punjab, Haryana, Uttar Pradesh, and Rajasthan

➤ Releases **Statutory Directions for environmental pollution** to the **state government.**

## INITIATIVES AGAINST STUBBLE BURNING

● **Thermal power plants to co-fire biomass-based Pellets**

● **Graded Response Action Plan (GRAP)** for NCR, etc.

● **Crop diversification is being promoted** in the states of Punjab and Haryana

# INDIA IS RUNNING OUT OF PHOSPHORUS

● **Phosphorus** is one of the **macronutrients** essential for plant growth which is **required by plants for:**

- Photosynthesis process
- Energy transfer and nutrient movement within the plant
- Strong root development
- Transfer of genetic characteristics

● **India is the world's largest importer of Phosphorus**, most of it from the cadmium-laden deposits of West Africa.

➤ Phosphate rocks are majorly produced **only from two States** in India, namely **Rajasthan and Madhya Pradesh.**

➤ Some **deposits** are also present in the central part of peninsular **India, Lalitpur (Uttar Pradesh), Mussoorie syncline, and Cuddapah basin (Andhra Pradesh).**

● **Concerns with Phosphorus availability:**

➤ At most places, Phosphorus coexists with **Cadmium**, a heavy metal whose removal is expensive.

➤ **Handful of countries** such as Morocco, Western Sahara, China, Algeria etc **control most of the world's reserves of phosphorus** which is a major geopolitical concern.

● **Harmful effects of phosphorus**

➤ Much of phosphorus is **lost directly to water bodies** as agricultural run-off and through sewage which leads to **growth of toxic algal blooms.**

➤ **Cadmium-laden fertilizers** are often applied to the soil, absorbed by crops, and consumed, bioaccumulating in human bodies **accelerating heart disease.**

## WAYS TO REDUCE PHOSPHORUS PAUCITY

● Reduce use of chemical fertilizers through precision **agriculture.**

● Adoption of low input **agro-ecological approaches**

● **Mining urban sewage** to produce phosphorus

# INDIA'S EXPORT BAN ON NON-BASMATI RICE QUESTIONED AT WTO

● WTO members, including the US, Canada, Australia, and Japan, have questioned the prohibition on export of non-basmati white rice.

➤ Earlier, on July 20, 2023, **government amended export policy to prohibit the export of non-Basmati white rice,** with immediate effect.

● **Rationale for export ban:**

➤ The export ban aims **to allay the rise** in prices of this variety of rice **in the domestic market.**

➤ The domestic prices were rising on account of increased exports (**35% in FY 2023-24 (April-June) compared to FY 2022-23 (April-June)**) of this variety from India.

▪ This sharp increase in exports is on account of **high international prices, El Nino sentiments, extreme climatic conditions in other rice-producing countries,** etc.

➤ Further, according to the government estimates, during the Rabi season 2022-2023, **rice production was 13.8% less** as compared to Rabi season 2021-2022.

➤ In a move to **check domestic rice prices and ensure domestic food security,** the Indian government has prohibited the export of white rice

● **Export of rice from India**

➤ India commands around **40% share of the global rice trade.**

➤ Further, **parboiled Rice and Basmati Rice constitute around 55%** of total rice exports from India.

➤ **Share of non-Basmati rice** in India's total rice exports was **around 58% during April-December 2022.**

➤ Currently, India is the **second largest producer of rice after China.**



# BREAKTHROUGH AGENDA REPORT 2023

- Joint released by **International Energy Agency, International Renewable Energy Agency, and UN Climate Change High-Level Champions.**
- It is an **annual progress report**, requested at **UN Climate Change Conference COP26 2021** as part of launch of the **Breakthrough Agenda.**
- **Breakthrough Agenda is an action plan** that aims to align **actions and coordinate investment** across **5 key sectors viz.**
  - **Power, Road transport, Steel, Hydrogen, and Agriculture.**
- **Key findings**
  - Transition to **clean energy sustainable solutions** is **accelerating**
  - Country's **Nationally Determined Contributions** are not aligned with **global climate goals.**
  - **Power sector accounts for 23% of total emissions**, which has risen by around 10% since 2010.
- **Sector wise recommendations**
  - **Power sector: Prioritise R&D investments** in storage, and distributed operation of energy resources.
  - **Hydrogen: define regulatory frameworks for storage technology transfer** and increase concessional finance available for **well-targeted usages.**
  - **Road transport: agreed on a timeline for zero-emission and established standards for battery carbon footprint,**
  - **Steel: Establish a dialogue on steel decarbonization** policies, and make an emissions accounting methodology.
  - **Agriculture: Additional finance is needed for agroecology, reduction of food loss** and waste, reducing methane emissions, and crop and livestock breeding.

## ALSO IN NEWS



### Armed Forces (Special Powers) Act (AFSPA), 1958

- **Union Ministry of Home Affairs** has extended **AFSPA in parts of Nagaland and Arunachal Pradesh** by another 6 months.
- **About AFSPA**
  - It grants **special powers to the armed forces** to bring back order in **'disturbed areas.**
  - Disturbed areas **declared under Section 3 of AFSPA Act, 1958** when a **part or whole state/UT** is in such a condition that the use of armed forces in aid of civil power is necessary.
    - Declared by Governor of state and administrator of Union Territory or by Central government.
  - **AFSPA grants extraordinary powers under Section 4 of AFSPA Act and immunity (Section 6)** to the armed forces to bring back order in the "disturbed areas.



### Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP)

- **Ministry of Commerce & Industry** announced extension of RoDTEP support till **30th June 2024.**
- **About Scheme:**
  - **Introduced** as a **duty remission scheme on exports.**
  - It provides a **mechanism for reimbursement** of taxes, duties, and levies, **which are currently** not being refunded under any other mechanism.
  - **Based on:** the globally **accepted principle** that taxes and duties should **not be exported**, and **taxes and levies borne on exported products should** be either exempted or remitted to exporters.
  - It is **WTO-compatible** and is being implemented in an end-to-end IT environment.



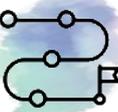
### Angel Tax

- Ministry of Finance has notified **changes to Rule 11UA of the Income Tax Rules** under the Income Tax Act 1961.
  - **Rule 11UA** is concerned with the **valuation of shares** for the purpose of **levying Angel Tax.**
- **Angel tax** is levied when an **unlisted company issue shares** to an investor at a **price higher than its fair market value.**
- Earlier, it was imposed only on investments made by a resident investor. But **Budget 2023-24 proposed to extend it to non-resident investors** from April 1, 2024.



### Avoid - Shift - Improve (ASI) Framework

- **World Bank Group** in its report titled **'Decarbonizing Urban Transport for Development'** recommended the ASI framework to decarbonize urban mass transport.
- **ASI framework:**
  - **Avoid:** Promote **access with fewer** or shorter trips to address overall **demand for transport activity.**
  - **Shift:** Promote a **SHIFT of passenger** or freight trips from more **carbon-intensive modes** to less carbon-intensive modes.
  - **Improve:** Improve **efficiency and quality** of vehicles, operations, and fuels.



### Net Zero Roadmap Report: A Global Pathway to Keep the 1.5 °C Goal in Reach

- **Released by:** International Energy Agency (IEA)
- **Key Highlights of the report:**
  - Limiting global warming to 1.5 °C is becoming harder but a narrow window remains because **clean energy infrastructure has grown around the world.**
  - **Clean energy** like solar power, electric car are among technologies which together deliver 1/3rd of the emissions reductions between today and 2030 in the pathway.
  - **Suggestions:** Tripling Renewables capacity by the end of the decade; using Carbon capture, utilisation and Storages, etc.

 <p><b>NHRC advisory on Transgender</b></p>	<ul style="list-style-type: none"> <li>● National Human Rights Commission (NHRC) <b>issued an advisory to the central and state governments to ensure the welfare of transgender persons.</b> <ul style="list-style-type: none"> <li>➤ The welfare measures include <b>provision of separate toilets, free sex reassignment surgery, pension rights, and inheritance rights.</b></li> <li>➤ It advised for the setting up of a <b>Transgender Welfare Board</b> under the <b>Transgender Persons (Protection of Rights) Rules, 2020.</b></li> <li>➤ It also asked for establishment of a <b>Transgender Protection Cell</b> under the Director General of Police to monitor cases of offenses against Transgender.</li> </ul> </li> </ul>
 <p><b>Women, Power and Cancer: a Lancet Commission</b></p>	<ul style="list-style-type: none"> <li>● <b>Key highlights of Lancet Commission Report:</b> <ul style="list-style-type: none"> <li>➤ Around <b>6.9 million cancer deaths (63%) among women in India</b> were preventable and 4.03 million (37%) were treatable.</li> <li>➤ <b>Infection</b> remains the <b>biggest risk factor for cancer in Indian women</b>, followed by Tobacco, Alcohol, and Obesity.</li> </ul> </li> <li>● <b>Recommendations:</b> <ul style="list-style-type: none"> <li>➤ <b>Inclusion of sex and gender</b> in all cancer related policies.</li> <li>➤ Implement gender transformative strategies for <b>equitable access to early detection and diagnosis.</b></li> <li>➤ <b>Ensure equitable</b> access to cancer research resources and funding opportunities for women.</li> </ul> </li> </ul>
 <p><b>Polyethylene Terephthalate degrading enzyme (PET46)</b></p>	<ul style="list-style-type: none"> <li>● Researchers have identified a <b>PET46 enzyme</b> from a <b>deep-sea microorganism</b> for the first time. <ul style="list-style-type: none"> <li>➤ PET is a <b>lightweight plastic that is widely used for packaging</b> foods and beverages e.g., soft drinks, water etc.</li> </ul> </li> <li>● <b>PET46 enzyme unique</b> is in its ability to <b>degrade both long-chain</b> and short-chain PET molecules, enabling continuous degradation.</li> <li>● <b>Significance:</b> <ul style="list-style-type: none"> <li>➤ potentially break <b>down PET waste in the ocean</b>, effectively contributing to efforts to combat plastic pollution.</li> <li>➤ contribute to <b>understanding of ecological role of deep-sea</b> archaea (marine organism).</li> </ul> </li> <li>● <b>Other PET degrading enzymes</b> - PETase, MHETase, THC_Cut1 etc.</li> </ul>
 <p><b>53rd Dadasaheb Phalke Lifetime Achievement Award</b></p>	<ul style="list-style-type: none"> <li>● Ms <b>Waheeda Rehman</b> will be honoured with this award for year 2021.</li> <li>● It is <b>India's highest award in the field of cinema</b> presented annually at the National Film Awards ceremony by the Directorate of Film Festivals (under Ministry of Information and Broadcasting.) <ul style="list-style-type: none"> <li>➤ Award was first introduced in <b>1969</b> and was bagged by actress Devika Rani.</li> <li>➤ Award is given <b>to commemorate Dadasaheb Phalke's contribution to Indian cinema</b> who directed India's first full-length feature film, <b>Raja Harishchandra in 1913.</b></li> <li>➤ The award comprises a <b>Swarna Kamal (Golden Lotus) medallion, a shawl, and a cash prize of ₹10 lakh.</b></li> </ul> </li> </ul>
 <p><b>Places in News</b></p>	<p><b>Nicaragua (Capital: Managua)</b></p> <ul style="list-style-type: none"> <li>● <b>Political Features:</b> <ul style="list-style-type: none"> <li>➤ <b>Largest country in Central America.</b></li> <li>➤ <b>Bordering Countries:</b> Honduras (north) and Costa Rica (South)</li> </ul> </li> <li>● <b>Geographical features</b> <ul style="list-style-type: none"> <li>➤ <b>Rivers:</b> San Juan, Coco, Río Grande de Matagalpa, etc.</li> <li>➤ <b>Lakes:</b> Lake Nicaragua, Lake Managua, Lake Tiscapa, etc.</li> <li>➤ <b>Volcanoes:</b> Masaya, Cerro Negro, Mombacho, etc.</li> <li>➤ <b>Highest peak:</b> Mogotón peak.</li> </ul> </li> </ul> 