

Hydrogen from Urea Electrolysis

❖ Context

- Indian Scientists have designed an **electrocatalyst system** for energy-efficient hydrogen production with the help of electrolysis of urea.

❖ Key Highlights

- The **energy requirement** for production of hydrogen through water electrolysis can be **reduced by 70 %** through urea electrolysis.
- The energy-intensive counterpart of water splitting, **oxygen evolution**, can be **replaced with urea oxidation** in urea electrolysis.
- The low-cost, earth-abundant **Ni-based catalysts** are widely applied for this process. They have used **high-energy electron beams** to produce surface defective unsaturated Ni sites in NiO (**e-NiO**).
- e-NiO prefers direct mechanism of urea electro-oxidation due to **strong adsorption of urea molecule**, whereas NiO favours indirect mechanism with low activity.

- **India is one of the top countries by urea production**, and it produced 244.55 LMT of urea during 2019-20.
- The nitrogenous fertiliser industries generate a high concentration of ammonia and urea as effluents.
- The urea electrolysis is helpful towards urea-based **waste treatment** with low-cost hydrogen production which can be utilised for **energy production**.
- The **main challenge** associated with urea oxidation is retaining the prolonged activity of the catalyst as the strong adsorption of the reactive intermediate (COx) on the active site, referred to as **catalyst poisoning**, causes activity loss.



BBIN Motor Vehicles Agreement (MVA)

❖ Context

- Recently, **India, Bangladesh and Nepal** finalized an enabling memorandum of understanding (MoU) for implementing the long-gestating **Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement (MVA)** that is aimed at **boosting regional trade and connectivity**.

❖ Background

- India proposed a **SAARC Motor Vehicle Agreement** during the **18th SAARC summit in Kathmandu** in November 2014.
- Due to **objections from Pakistan**, an agreement could not be reached.
- India instead pursued a **similar motor vehicle agreement with the BBIN**.
- Due to some internal concerns, **Bhutan decided to opt-out of the Agreement** for the time-being.
- Bhutan has offered its consent to the other three to go ahead. It must be thanked for its flexibility.
- **Asian Development Bank** has supported the project as part of its South Asian Subregional Economic Cooperation programme.

❖ About MVA

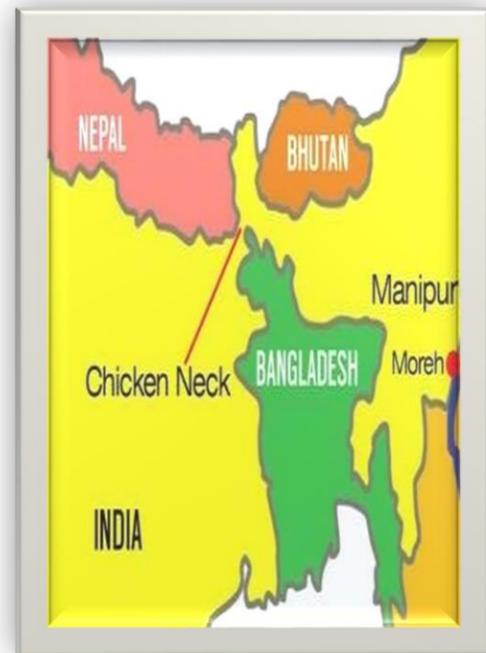
- The **BBIN Motor Vehicles Agreement (MVA)** was **signed on 15 June 2015** at the BBIN transport ministers meeting in **Thimpu, Bhutan**.
- The agreement will **permit the member states to ply their vehicles in each other's territory for transportation of cargo and passengers**, including **third country transport and personal vehicles**.
- Each vehicle would **require an electronic permit** to enter another country's territory.
- Border **security arrangements** between nations' borders will also remain intact

❖ Significance of MVA

- The BBIN MVA can be a **game-changer for neighborhood cooperation**.
- For the first time these countries have decided to **exchange their traffic rights and provide transit to cargo and passenger vehicles** within and across international borders.
- These economic corridors will be **strengthening existing value chains and creating new ones**.
- It will enable **seamless movement** between them for **facilitating trade and people-to-people contact**.

❖ About BBIN

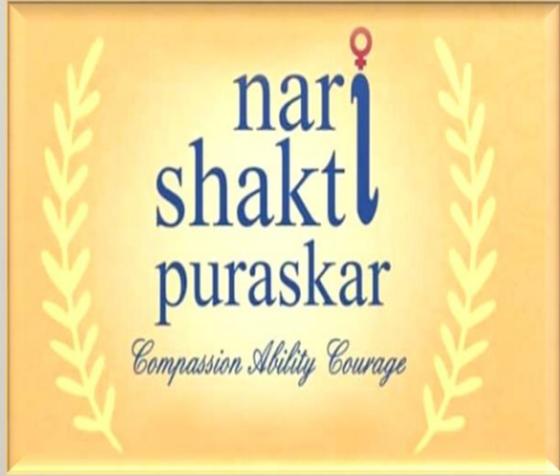
- The Bangladesh, Bhutan, India, Nepal (BBIN) Initiative is a **sub-regional architecture of countries in Eastern South Asia**.
- The group meets through the official representation of member states to **formulate, implement and review quadrilateral agreements** across areas such as water resources management, connectivity of power, transport, and infrastructure.



Face to Face Centres

News in Between the Lines

Nari Shakti Puraskar



❖ Context

- Recently, the President of India, Shri Ram Nath Kovind has conferred the 'Nari Shakti Puraskar' for the years 2020 and 2021 on the occasion of International Women's Day on March 08, 2022.
- Overall **29 women have been conferred the award** for the years 2020 and 2021 in recognition of their outstanding and exceptional work towards the **empowerment of women, especially the vulnerable and marginalized.**

❖ About Nari Shakti Puraskar

- Nari Shakti Puraskar (**Highest civilian honor for women in India**) is an annual award given by the **Ministry of Women and Child Development.**
- It is given to **individual women or to institutions** that work towards the cause of women empowerment.
- Award is **open to all** individuals and institutions.
- The awards are **presented by the President of India** on **International Women's Day** (8 March), at Rashtrapati Bhavan in New Delhi.
- The awards were **instituted in 1999** under the title of **Stree Shakti Puraskar** and were renamed and reorganized in 2015.
- These are given in six institutional and two individual categories, which carry a cash prize of rupees two-lakh and one-lakh, respectively.

Pal-Dadhvav Massacre



❖ Context

- Recently, the Gujarat government marked **100 years of the Pal-Dadhvav killings**, calling it a massacre "**bigger than the Jallianwala Bagh**".
- Before this, the incident had been **featured on the state's Republic Day tableau.**

❖ About the Incident

- The Pal-Dadhvav massacre took place on **March 7, 1922**, in the Pal-Chitariya and Dadhvaav villages of Sabarkantha district, then part of Idar state.
- The day was **Amalki Ekadashi**, which falls just before Holi, a major festival for tribals.
- Villagers from Pal, Dadhvav, and Chitariya had gathered on the banks of **river Heir** as part of the '**Eki movement**', led by one **Motilal Tejawat.**
- The movement was to protest against the land revenue tax (lagaan) imposed on the peasants by the British and feudal lords.
- Tejawat had been outlawed by the Udaipur state, which had announced a Rs-500 reward on his head.
- On a command from Tejawat, nearly 2000 Bhils raised their bows and arrows and shouted in unison- '**We will not pay the tax**'.
- The MBC commanding officer, HG Sutton, ordered his men to fire upon them.
- While the British claimed some 22 people were killed, the Bhils believe 1,200-1,500 of them died.

PARAM Ganga

❖ Context

- Recently, **National Supercomputing Mission (NSM)** has deployed "**PARAM Ganga**", a supercomputer at IIT Roorkee,

❖ About Param Ganga

- It has a supercomputing **capacity of 1.66 Petaflops.**
- The system is designed and commissioned by C-DAC under Phase 2 of the build approach of the NSM.
- **Substantial components** utilized to build this system are **manufactured and assembled within India** along with an indigenous software stack developed by C-DAC, which is a step towards the Make in India initiative of the Government.

Face to Face Centres





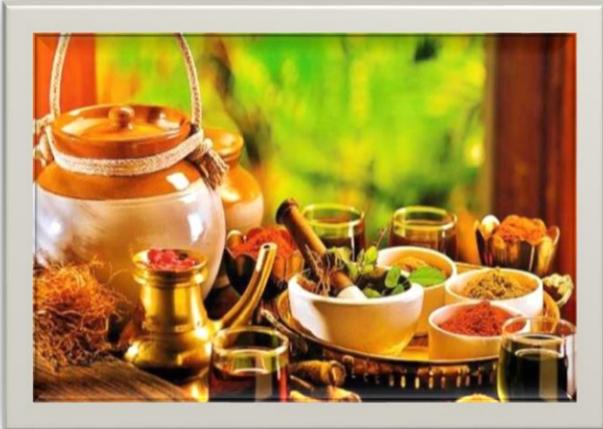
• **Significance:**

- Availability of such a supercomputer will accelerate the research and development activities in multidisciplinary domains of science and engineering with a focus to provide computational power to the user community.

❖ **About NSM**

- The mission was **announced in 2015**.
- NSM envisaged setting up a network of **70 high-performance computing facilities** with an aim to **connect national academic** and R&D institutions across India over a seven-year period at an estimated cost of Rs 4500 Crores.
- **Implementing Body:** Ministry of Electronics and IT (MeitY) and Department of Science and Technology (DST).
- **Nodal Agencies** of NSM– (C-DAC) and (IISc).

WHO Global centre for Traditional Medicine



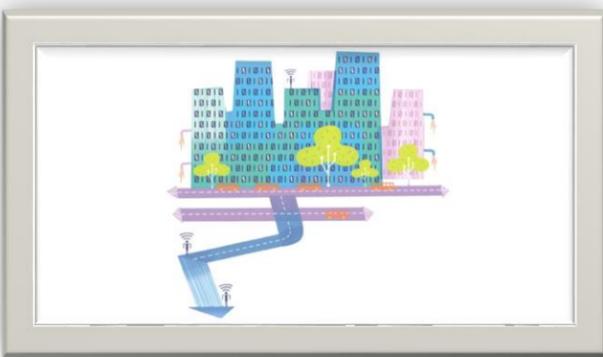
❖ **Context**

- The **Union Cabinet** has **approved the establishment** of the WHO Global Centre for Traditional Medicine (WHO GCTM) by signing a **Host Country agreement** between the Government of India and the World Health Organisation (WHO).

❖ **Key Highlights**

- The WHO GCTM will be established in **Jamnagar, Gujarat** under the Ministry of AYUSH. This would be the **first and only global outposted Centre** (office) for traditional medicine across the globe.
- The WHO GCTM would provide **leadership on all global health matters related to traditional medicine** as well as extend support to member countries in shaping various policies related to traditional medicine research, practices and public health.
- **WHO announced** the establishment of WHO GCTM in India on the occasion of 5th **Ayurveda Day on 13th November, 2020**.

Urban land pooling



❖ **Context**

- **Union Minister of Housing and Urban** affairs announced the steps that are being taken to resolve residual difficulties faced in implementation of land pooling scheme in Delhi.

❖ **Key Highlights**

- The land pooling policy means that **government agencies consolidates** parcels of land and designs or **develops** it with infrastructures like roads, schools, hospitals, community centres and sports facilities on part of the land and then **returns a portion to the original owners** who can **later sell it or execute housing projects with the help of private builders**.
- The land pooling policy for Delhi was notified in 2018.

Social Audit under MGNREGA

❖ **Context**

- Bihar government has been able to recover only Rs 36,73,483 (3.12 per cent) out of Rs 11.79 crore even as states such as Jharkhand, Tamil Nadu and Karnataka have shown better recovery than Bihar, data shows.

❖ **Key Highlights**

- Social Audit is the **examination and assessment** of a programme/scheme conducted with the active involvement of people and **comparing official records with actual ground realities**.
- **Section 17** of the MGNREGA has mandated **Social audit** of all Works executed under the MGNREGA.
- **As per section 17 (2) of the Act, the Gram Sabha shall conduct Social Audit of all the projects under the Scheme.**

10 March, 2022



- **District Social Audit Unit (SAU)** prepares the social audit calendar for the Gram Panchayat in the State.
- The **Village Resource Persons** are identified & trained by the Social Audit Unit in each state. The VRPs should be drawn from the following groups:
 - Members of SHGs (preferably women members).
 - Worked under MGNREGA or have family members who have worked under the MGNREGA.
 - Preferably women or persons belonging to the SC, ST, Notified Tribes, Denotified Tribes/other marginalised groups.
 - Youth from Rural Groups, Nehru Yuva Kendra, Bharat Nirman Volunteers.
- The **VRP team prepares a social audit report which is presented before the Social Audit Gram Sabha.** The officials from the implementing agencies need to be present and respond to the social audit findings, as well as the queries raised by people in the **public hearing.**

Centre Administrative Tribunal



❖ Context

- Delhi HC dismissed the former WB chief secretary's petition challenging the transfer of a case against him from CAT's Kolkata bench to Principal Bench, New Delhi.

❖ Key Highlights

- The Delhi HC said that the **tribunal chair has the administrative power to transfer the case to another bench albeit for sound reasons.**
- It had been established under **Article 323 -A** of the Constitution.
- The article provides for setting up **separate tribunals for centre and states**
- The **power** to set up tribunals have been conferred upon by the **Parliament.** Accordingly, Parliament had enacted **Administrative Tribunals Act 1985.**
- There are **17 Benches** and **21 Circuit Benches** in the CAT all over India. In addition to the Ministries and Departments of Central Government, the Government of India has notified about **214 organisations under section 14 (2) of the Administrative Tribunals Act, 1985** to bring them within the jurisdiction of the CAT.
- It is composed of **judicial members and administrative members.** Each bench consists of one judicial member and one administrative member. **A person is not qualified for appointment as Chairman unless he is or has been an HC judge.**
- **Chairman and member of CAT is appointed by President after consultation with CJI.**
- **Chairman and member of SAT is appointed by President after consultation with CJI & Governor** of the state.
- The term of office is **five years.** The age limit for Chairman is **68 years** while for members is **65 years.** He can be **removed by President on ground of misbehaviour or incapacity after an inquiry by an SC judge**
- The **conditions of service** of Chairman and Members are the **same** as applicable to a **Judge of High Court** as per the Administrative Tribunals (Amendment) Act, 2006.
- **Salaries and Allowances** and Conditions of Service of the **officers and other employees** of the CAT are **specified by the Central Government**
- **The Administrative Tribunal is distinguishable from the ordinary courts with regard to its jurisdiction and procedure.** The procedural simplicity of the Act can be appreciated from the fact that an aggrieved government employee can also appear personally before the Tribunal.
- Initially the decision of the Tribunal could be challenged before SC by filing a Special Leave Petition. However, after the SC decision in **L.Chandra Kumar's case,** the **orders of CAT are now being challenged** by way of Writ Petition under Article 226/227 of the Constitution **before respective HC** in whose territorial jurisdiction the Bench of the Tribunal is situated.

[Daily Pre PARE](#)

[Daily MCQ Quiz](#) [Daily Current Affairs](#)

Face to Face Centres

DELHI MUKHERJEE NAGAR: 9205274741, 42 | LAXMI NAGAR : 9205212500, 9205962002 | RAJENDRA NAGAR: 9205274743 | UTTAR PRADESH PRAYAGRAJ: 0532-2260189, 8853467068 | LUCKNOW (ALIGANJ): 0522-4025825, 9506256789 | LUCKNOW (GOMTI NAGAR): 7234000501, 7234000502 | GREATER NOIDA: 9205336037, 38 | KANPUR: 7887003962, 7897003962 | GORAKHPUR : 7080847474, 9161947474 | ODISHA BHUBANESWAR: 9818244644/7656949029



dhyeyaias.com