

Strategic Interventions for Green Hydrogen Transition (SIGHT)

Solar Energy Corporation of India (SECI) has issued Request for Selection (RfS) for Selection of Green Ammonia Producers for the production of Green Ammonia in India through cost based competitive bidding under Mode 2A of Strategic Interventions for Green Hydrogen Transition (SIGHT) programme.



- It is a subcomponent of the National Green Hydrogen Mission (under Ministry of New & Renewable Energy (MNRE)), aimed at bolstering domestic electrolyser manufacturing and green hydrogen production.
- **Financial commitment:** The programme has an outlay of ₹ 17,490 crore until 2029-30.
- **Dual incentive mechanisms:** Incentive for Electrolyser Manufacturing
- **Implementation:** The Solar Energy Corporation of India (SECI) is responsible for executing the scheme.

National Green Hydrogen Mission

- It was launched on **4th January 2023** with an outlay of Rs. 19,744 crores up to FY 2029-30.
 - It will contribute to **India's goal to become Aatmanirbhar** (self-reliant) through clean energy and serve as an inspiration for the global clean energy transition.
 - The Mission will lead to significant decarbonization of the economy, reduced dependence on fossil fuel imports, and enable India to assume technology and market leadership in Green Hydrogen.
-

NATIONAL HEALTH CLAIM EXCHANGE

The Health Ministry along with the IRDAI are launching the National Health Claim Exchange (NHCE), a digital platform which will bring together insurance companies, healthcare sector service providers and government insurance scheme administrators.



- National Health Claim Exchange (NHCX), a **digital platform** which will bring together **insurance companies, healthcare sector service providers and government insurance scheme administrators.**
- It aims to **enhance efficiency, transparency, and accuracy** in claims processing by facilitating the exchange of health insurance claims data among various stakeholders, including payers, providers, beneficiaries, regulators, and observers.
- The integration with NHCX is expected to **enable seamless interoperability of health claims processing**, enhancing efficiency and transparency in the insurance industry, benefiting policyholders and patients
- The NHCX **aligns with the goals of the Ayushman Bharat Digital Mission**, which aims to simplify the health insurance claims procedure and create a unified digital platform for healthcare services

HIGH SEAS TREATY

Grethel Aguilar, the director general of the International Union for Conservation of Nature (IUCN), urged countries worldwide “to strive for a fully functional High Seas Biodiversity Treaty” on World Oceans Day 2024.



- It is also known as the agreement on **Biodiversity Beyond National Jurisdiction (BBNJ)**. It is a landmark legally binding treaty adopted by the United Nations in June **2023**.
- The treaty aims to **protect and sustainably use marine biodiversity** in areas beyond national jurisdiction, which cover nearly two-thirds of the world's oceans.
- The high seas are those areas of the world's oceans that are **outside national jurisdictions**.
 - They constitute a huge chunk of the world's oceans and are home to a wide variety of biodiversity. Despite this, less than two per cent of the world's high seas are protected by law.

- So far **only 7 countries** — Belize, Chile, Mauritius, Federated States of Micronesia, Monaco, Palau and the Seychelles — have ratified the treaty.
- The treaty will become international law only when it is signed and ratified by at least 60 countries. **India has neither signed nor ratified the treaty.**

Key Features

- Establishing large-scale marine protected areas to conserve **30% of land and sea by 2030**
- Creating a framework for sharing benefits from marine genetic resources and technology transfer
- Implementing clear rules for **environmental impact assessments**
- Requiring free, prior, and informed consent from **indigenous communities** for accessing marine resources
- Setting up a clearing-house mechanism to share information and best practices among parties

CHILD NUTRITION REPORT 2024

One in four children under age 5 around the world is experiencing severe food poverty, according to the recently released Child Nutrition Report 2024.



It was released by UNICEF.

- This global report examines the **status, trends, inequities and drivers of child food poverty** in early childhood, including the impact of global and local food and nutrition crises.
- The report **focuses on low and middle-income countries**, where most children living in child food poverty reside and on the implications of child food poverty for undernutrition and poor development.
- UNICEF defines child food poverty as children's **inability to access and consume a nutritious and diverse diet** in early childhood (i.e., the first five years of life).

Highlights of the 2024 Report:

- **One in four children under age 5** around the world (some 27% of children under age 5—or 181 million) is experiencing severe food poverty and is vulnerable to life-threatening malnutrition.
- Over two-thirds of the 181 million young children living in severe food poverty live in **South Asia and sub-Saharan Africa**, with 20 countries accounting for 65% of the children living in **severe food poverty**.
 - These countries are **Afghanistan, Bangladesh, China, Côte d'Ivoire**, the Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, **India**, Indonesia, **Myanmar**, Niger, **Nigeria, Pakistan**, the Philippines, **Somalia**, South Africa, Uganda, the United Republic of Tanzania and Yemen.
- The report also found that **children in both poor and non-poor households face severe food poverty**.
- About half (97 million) of the children in severe food poverty **live in middle- and upper-income households**.

WHAT IS BIOPHARMACEUTICAL ALLIANCE?

The Biopharmaceutical Alliance was recently inaugurated in San Diego during the Bio International Convention 2024, the world's largest biopharmaceutical exhibition.



- It is an alliance of **India, South Korea, Japan, the United States of America (USA) and the European Union** to put joint efforts into building a resilient supply chain in the biopharmaceutical sector.
- The participants emphasised the importance of a reliable and sustainable supply chain and agreed to coordinate the respective countries' **biopolicies, regulations and research and development support measures**.
- They acknowledged that the production of essential raw materials and ingredients is concentrated in a few countries and agreed to work together to **build a detailed pharmaceutical supply chain map**.

- The alliance was launched in response to the **drug supply shortages experienced during the Covid-19** pandemic.
 - The alliance was inaugurated in San Diego during the Bio International Convention 2024.
 - The **Bio International Convention** is the premier event for the biotechnology industry, bringing together over 20,000 leaders from around the world.
 - It represents the entire biotech ecosystem, from public pharmaceutical companies and biotech startups to academia, non-profits, and government agencies.
-

WHAT ARE LARGE ACTION MODELS (LAMs)?



Enterprises globally are adopting Large Action Models (LAMs) that understand complex goals communicated with natural language and they follow up with autonomous actions to achieve them.

LAMs are **advanced Artificial Intelligence (AI) models**.

- LAMs are designed to **understand and execute complex tasks**, based on what users want.
- Unlike large language models (LLMs), a LAM **combines language understanding with logic** and reasoning to execute various tasks.
- LAMs learn from **massive datasets of user action information** and use this data for strategic planning and proactive action in real-time.
- These models utilise advanced **machine learning techniques**, including deep learning and reinforcement learning, which enables them to learn from vast datasets and improve their decision-making capabilities over time.
- By analysing past and present actions, LAMs can **make educated predictions about future outcomes**, thereby assisting in planning, strategy, and real-time decision-making in complex environments.
- Their application ranges across numerous fields, from personal assistants, autonomous vehicles, and robotics to healthcare as well as financial modelling.

What are Large Language Models (LLMs)?

- A LLM is a type of AI program that can **recognize and generate text**, among other tasks.
 - LLMs are **trained on huge sets of data** hence the name "large."
 - LLMs use a type of machine learning called **deep learning** in order to understand how characters, words, and sentences function together.
 - They have the ability to **infer from context**, generate coherent and contextually relevant responses, translate to languages other than English, summarize text, answer questions (general conversation and FAQs), and even assist in creative writing or code generation tasks.
-

NEIGHBORHOOD FIRST POLICY

Background:

As Prime Minister-elect Narendra Modi prepares to take oath for his third term, the focus is once again back on India's foreign policy and how it will take shape over the next five years.

The country's Neighborhood First Policy determines its engagement with neighboring nations.

About Neighborhood First Policy:

- India's 'Neighbourhood First policy' guides its approach towards the management of relations with countries in its immediate neighbourhood, that is, **Afghanistan, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, Pakistan and Sri Lanka**.
- **Objective:** To enhance physical, digital and people to people connectivity across the region, as well as augmenting trade and commerce.
- The policy prioritises improving physical, digital, and people-to-people connectivity within the region, while also boosting trade and commerce.

- Over time, the Neighborhood First Policy has become a key institutional focus across various government departments responsible for managing relations and policies with our neighbours.
- The policy officially came to being in **2008**.

Significance of the Policy:

- **Countering Chinese influence:** By collaborating closely with neighboring countries, India can counterbalance Chinese influence in the Indian Ocean region
- **Support in multilateral forums:** Working with neighboring partners strengthens India's leadership role in representing the interests of the Global South at international forums. This fosters better understanding and cooperation on global issues.
- **Ensuring territorial integrity:** Collaboration with neighboring countries is essential for India to protect its territorial integrity and tackle separatist threats effectively.
- **Increasing maritime security:** Effective cooperation with neighbours is key to bolstering maritime security, which enables India to tackle transnational security challenges more effectively.
- **Addressing energy security:** Close cooperation with neighboring countries is critical for India's energy security, particularly concerning the import of oil and gas through sea routes.
- **Bridging development deficits:** Actively engaging with neighboring countries helps in the development of India's northeastern states, thus narrowing development disparities in the region.
- **Leveraging soft power diplomacy:** India's deep cultural and historical connections with its neighbours strengthen people-to-people ties, solidifying India's influence in the region through soft power diplomacy.

Challenges Associated with the Policy:

- **Geopolitical tensions:** Issues like border disputes and political disagreements can complicate relationships.

- **Implementation issues:** Difficulties in executing cross-border projects due to logistical and bureaucratic challenges.
 - **Economic differences:** Different levels of economic development among neighboring countries can affect the balance and effectiveness of cooperation.
-

PAKISTAN AND CHINA AGREE TO UPGRADE CPEC

China-Pakistan Economic Corridor (CPEC)



During an April 2015 visit to Islamabad, Chinese President Xi Jinping and then Pakistani PM Nawaz Sharif unveiled the \$46 billion China-Pakistan Economic Corridor (CPEC).

- CPEC quickly ballooned to \$62 billion in pledges—one-fifth of Pakistan’s GDP—covering dozens of envisioned high-profile projects.
- The corridor links Kashgar (Xinjiang region) with Gwadar, and also passes through Pakistan-occupied Kashmir (PoK) where China is investing in a number of projects.
- Often described as a flagship project of the Belt and Road Initiative, the stated goal of CPEC is:
 - to transform Pakistan’s economy by modernizing its road, rail, air, and energy transportation systems; and
 - to connect the deep-sea Pakistani ports of Gwadar and Karachi to China’s Xinjiang province and beyond by overland routes.

Reasons behind the stalled project

- **Chinese concerns:** Over corruption, bureaucratic delays, and political instability in Pakistan.
- **Security situation in Gwadar**
 - The security situation in Balochistan, where Gwadar is located, is particularly problematic. Numerous Chinese nationals have been killed in terrorist attacks by Baloch militants since 2018.

- The Baloch people view Gwadar as a symbol of economic injustice, as CPEC has not generated quality jobs or economic benefits for the local population.
- Pakistan's security issues as a major concern for future Chinese investments.
- **Chinese approach of not partnering with local companies**
 - This limits job creation for Pakistani youth. While the CPEC was expected to create over 2 million jobs for Pakistanis, government data shows that fewer than 250,000 jobs have been generated so far.
 - Since Chinese companies are tax-exempt and bring their own labor from China, they do not rely on Pakistani businesses, further reducing local employment opportunities.

India & CPEC

- **CPEC and the Sovereignty & territorial integrity of India**
 - It passes through Gilgit-Baltistan area of Kashmir which is occupied by Pakistan.
 - This area is a part of the erstwhile princely state of Jammu and Kashmir and claimed by India.
- **CPEC and Security threat to India**
 - Ever since the construction of the corridor is started, the Chinese military presence in the area is also embarked.
 - In 2017, Chinese troops marched in the parade of Pakistan's day in Islamabad.
 - This was the first time when Chinese military took part in any parade outside its country
 - Apart from the naval vessels deployed in Pakistan, eight submarines are also delivered to it by China.
 - China is planning to build its second a naval base in Gwadar port after Djibouti in 2017.
 - China is encircling India into the Indian Ocean.