



2 June, 2023

Startup20 Engagement Group

Context: Startup20 Engagement Group, under India's G20 presidency, is hosting its **third meeting in Goa**.

What is it?

Startup20 is the first of its **kind official engagement group** initiated under the Indian presidency of the G20 2023. The engagement group would act as the voice of the global Startup ecosystem bringing together varied stakeholders on a common platform.

The Startup20 Engagement Group's **inception meeting was held Hyderabad in January 2023** has launched the Startup20.

Features:

- It is a platform to **equip business owners with useful information and link them with possible investors**.
- **Aims:** Foster global collaboration, exchange ideas, and shape the future of Startups and entrepreneurship.
- Delegates from G20 nations and India attending from 3rd June onward.
- **Focus:** Build consensus on the Draft Policy Communique recently published.
- **Features:** Startup showcase, Startup20 talks, cultural experiences, and discussions on implementation.
- Dignitaries from state, central, and international levels expected to attend.
- **Sessions:** Taskforce presentations, closed group huddles, and HoD meetings.
- Platform for engaging discussions, collaboration, and advancing initiatives.

Recognizes Startups' role in economic growth and addresses global challenges.



What is a Start up?

To qualify as a Startup:

- **Company Age:** Operations should not exceed 10 years from the date of incorporation.
- **Company Type:** Registered as a Private Limited Company, Partnership Firm, or Limited Liability Partnership in India.
- **Annual Turnover:** Annual turnover should not exceed Rs. 100 crores since incorporation/registration.
- **Focus:** Working on innovation, product/process/service development or improvement, or having a scalable business model with potential for employment generation or wealth creation.
- **Exclusion:** Entities formed through splitting or reconstruction of existing businesses are not considered Startups.
- **Ceasing of Startup Status:** Completion of 10 years from incorporation/registration or turnover exceeding Rs. 100 crores in any previous year.

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New Study Reveals 62 Desiccation-Tolerant Plant Species in India's Western Ghats

Context: A recent study by **Agharkar Research Institute** identified 62 DT species in the Western Ghats, expanding the knowledge from the previous nine species.

- The Western Ghats in India is a biodiversity hotspot with 62 Desiccation-Tolerant (DT) Vascular Plant Species.
- DT plants can **survive extreme dehydration** and revive themselves when water is available again.
- These plants have potential applications in agriculture, particularly in water-scarce areas.
- The study highlights the importance of the Western Ghats as a global DT hotspot, with 16 endemic species and 12 are exclusive to the region.
- The plants include ***Tripogon capillatus* and *Corallodiscus lanuginosus***.
- **Tree trunks in partially shaded forests** were also found to be important habitats for DT species.
- The researchers used field observations and estimation protocols to study the DT properties of the species, identifying new genera and recording the hydration process of certain plants.
- Collaboration with experts from **Rostock University, Germany, contributed** to the research.

Significance

- The findings enhance our **understanding of the Western Ghats' biodiversity** and ecology and can aid in the conservation of DT plant species.
- The study may also contribute to the development of drought-resistant crops and **water-efficient agriculture**.

Western Ghats:

- Western Ghats are called "Ghats" as they **act as a mountain pass** for the Deccan plateau.
- They are important for **hydrological and watershed functions**, supplying water to millions of people in peninsular Indian states.
- The Western Ghats cover **six Indian states**: Gujarat, Maharashtra, Goa, Karnataka, Tamil Nadu, and Kerala.
- They are known by different local names such as **Sahyadri, Nilgiri hills, Anaimalai hills, and Cardamom hills**.
- The Western Ghats form a **continuous** range of mountains.
- High biodiversity and endemism are special features of the Western Ghats.
- The forests in the Western Ghats include **evergreen forests, moist deciduous forests, scrub jungles, sholas, and savannas**.
- The Western Ghats were **formed through erosion of the Gondwana** supercontinent and the Deccan plateau.
- **Anamudi is the highest peak** in the Western Ghats.
- The Western Ghats are **older than the Himalayas**.

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India Nepal Energy Pact

Context: On his visit to India, the Prime Minister of Nepal has inked pacts on energy and transport with India.

- Prime Minister Narendra Modi emphasizes that the India-Nepal border should not be a barrier and calls for fast-tracking projects related to the Ramayana circuit.
- The two sides sign agreements on energy and transport, including the export of Nepal's hydropower to Bangladesh through Indian territory.
- A Transit Agreement is signed to facilitate Nepal's population accessing India's inland waterways.
- India and Nepal sign a long-term **Power Trade Agreement** with a target of **importing 10,000 MW of electricity from Nepal** in the coming years.
- The construction of a **new pipeline from Siliguri to Jhapa in eastern Nepal** is announced to enhance energy cooperation.
- Agreements are signed for the development of the **Phukot Karnali Hydroelectric Project** and the **Lower Arun Hydroelectric Project**.
- The two prime ministers participate in the groundbreaking ceremony of the **Gorakhpur-Bhutwal Transmission Line** via video link.
- Nepal gains access to India's inland waterways through the **revised Treaty of Transit**.
- A **cargo train from Bathnaha in India to Nepal Customs Yard** is inaugurated, along with integrated checkposts at Nepalgunj and Rupaidiha.
- The leaders participate in the groundbreaking ceremony of **integrated checkposts at Bhairahawa and Sonauli**, as well as Phase-II facilities of the Motihari-Amlekhgunj Petroleum Pipeline.
- Prime Minister Dahal will visit the Mahakaleshwar temple in Ujjain, highlighting the cultural ties between India and Nepal.

Indo-Nepal relations

- **Strong historical, cultural, and geographical ties** characterize Indo-Nepal relations.
- **Bilateral trade, energy cooperation, and infrastructure projects** are key areas of collaboration.
- **India is Nepal's largest trading partner**, with growing trade relations.
- Tourism and **people-to-people contacts**, like Madhesis, contribute to the strong bond between the two countries.
- **Developmental assistance** and diplomatic dialogue enhance bilateral ties.
- Shared aspirations for regional stability and development drive the relationship.
- **Conflicts:**
 - The Indo-Nepal ties face challenges due to territorial disputes, particularly the **Kalapani boundary issue**.
 - The **1950 Treaty of Peace and Friendship** is viewed as unequal and in need of revision.
 - **Demonetization in India** created difficulties for Nepali nationals holding Indian currency.
 - **China's increasing influence** in Nepal poses a challenge to India's traditional relationship with Nepal.
 - The **open and lightly policed Indo-Nepal border** raises concerns about internal security and cross-border activities.
 - **Trust deficit and ethnic differences** have widened the gap between India and Nepal, affecting their bilateral relations.

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NEWS IN BETWEEN THE LINES

Mekedatu Project: A tussle for water



Context: The new Dy. CM of Karnataka, D.K. Shivkumar has said that Mekedatu Drinking Water Project will not impact Tamil Nadu.

- The Mekedatu project aims to create a **multipurpose reservoir** for electricity generation and drinking water supply in Karnataka on **River Cauvery**.
- The project was **initially planned in 1996** and a detailed project report was submitted in 2019.
- The proposed reservoir would be located in the **Ramanagara district**, about 90km from Bengaluru.
- The estimated budget for the project is Rs 9,000 crore, with a planned capacity of 66,000 million cubic feet of water and the ability to **generate 400MW of hydroelectric power**.
- The main point of contention is the demand for **drinking water for Bengaluru** and demand for **agricultural water in Tamil Nadu**.
- The Tamil Nadu government opposes the project, citing the need for its consent as the **lower riparian state** and concerns about **water hoarding** and **unfair sharing** of Cauvery water.
- Tamil Nadu argues that Karnataka should release water from various sources, and the Mekedatu dam could **potentially block the free flow of water into Tamil Nadu**.

Lithium



- Lithium is a **highly reactive alkali metal** with the **atomic number 3** and symbol **Li** on the periodic table.
- The primary sources of lithium are **lithium-rich minerals** like **spodumene, petalite, and lepidolite**, as well as **brine deposits** found in salt flats.
- **Australia, Chile, and China** are the largest producers of lithium in the world, accounting for a significant portion of global lithium production.
- Lithium is widely used in the production of **rechargeable batteries**, particularly in **electric vehicles (EVs), smartphones, laptops, and other portable electronic devices**.
- It possesses unique chemical properties, including a **high electrochemical potential, low atomic weight**, and the ability to store and release electrical energy efficiently.
- Lithium batteries are preferred due to their **high energy density, longer lifespan, and lighter weight** compared to other battery types.
- Apart from batteries, lithium finds applications in various industries, including **ceramics, glass manufacturing, lubricants, and pharmaceuticals**.

International Criminal Court (ICC)



Context: South Africa is looking for legal options about the pressure to arrest Vladimir Putin due to ICC Warrant.

- The International Criminal Court (ICC) has **issued arrest warrants for Russian President Vladimir Putin** and Russia's commissioner for children's rights, Maria Alekseyevna Lvova-Belova.
- **What is ICC?**
- The International Criminal Court (ICC) is an international tribunal established by the **Rome Statute**, a treaty **adopted in 1998**.
- The ICC is headquartered in The **Hague, Netherlands**, and started its **operations in 2002**.
- Its primary function is to **prosecute individuals accused of genocide, war crimes, crimes against humanity, and the crime of aggression**.
- The ICC has jurisdiction over these crimes when they are committed by individuals **from member states or on the territory of member states**.
- The court's jurisdiction is **complementary to national jurisdictions**, meaning it steps in only when national courts are unwilling or unable to prosecute the crimes.
- The ICC is **governed by the Assembly of States Parties**, which is composed of representatives from member states.

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	<ul style="list-style-type: none"> ➤ The court's work involves investigations, prosecutions, and trials of individuals accused of the most serious international crimes, aiming to ensure justice and accountability for the perpetrators and promote the rule of law at the international level. ➤ India is not a member of ICC.
<p>Virtual autism</p>	<ul style="list-style-type: none"> ➤ "Virtual autism" refers to the effects of excessive screen time on children aged 0-3 years. ➤ It leads to sensory-motor and socio-affective deprivation, resembling behaviours found in autism spectrum disorder (ASD). ➤ Autism affects speech, sociability, play, and skill development. ➤ Excessive screen time replaces important levels of learning. ➤ Therapies like play therapy and language stimulation can reverse the effects. ➤ Professionals should guide the reset, and the home environment should be more stimulating. <p>Autism</p> <ul style="list-style-type: none"> ➤ Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain. ➤ Some people with ASD have a known difference, such as a genetic condition. Other causes are not yet known. ➤ Scientists believe there are multiple causes of ASD that act together to change the most common ways people develop.
<p>Purchasing Managers Index</p>	<p>Context: According to S&P Global Survey, manufacturing PMI in May has hit a 31-month high.</p> <ul style="list-style-type: none"> ➤ PMI is a survey-based measure that assesses changes in business perception compared to the previous month. ➤ It provides information on current and future business conditions to decision-makers, analysts, and investors. ➤ PMI is calculated separately for manufacturing and services sectors and a composite index is constructed. ➤ It ranges from 0 to 100, with above 50 indicating expansion, below 50 denoting contraction. ➤ PMI is released monthly and serves as a leading indicator of economic activity. ➤ IHS Markit compiles PMI for 40+ economies worldwide. ➤ IHS Markit is part of S&P Global. <div data-bbox="847 1039 1493 1496"> <p style="text-align: center;">5 Key Indicators Under Purchasing Managers' Index (PMI)</p> </div>

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