

CENTRAL WATER COMMISSION

According to recent data water levels in 110 out of the 146 reservoirs that are monitored by the Central Water Commission (CWC) are 40% or below their capacities.



Key findings:

- Till July 4, around 33% of 717 districts for which data are available received deficient rains, while for another 10%, it was even worse, according to India Meteorological Department (IMD).
- As on June 30, water levels in the reservoirs of 10 states are lower than the normal levels based on their 30-year average.
- The deficiency ranges from 11% to 80% in Bihar, West Bengal, Odisha, Jharkhand, Uttar Pradesh, Uttarakhand, Kerala, Karnataka, Tripura and Nagaland.
- However, the water level was better than the last 10-year average.

About Central Water Commission:

- It is a premier Technical Organization of India in the field of Water Resources.
- It is presently functioning as an **attached office of the Ministry of Jal Shakti**, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India.
- **Functions**
 - The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.
- It is headed by a Chairman, with the status of **Ex-Officio Secretary** to the Government of India.
- The work of the Commission is divided among 3 wings namely, **Designs and Research (D&R) Wing**, **River Management (RM) Wing** and **Water Planning and Projects (WP&P) Wing**.
- Each wing is placed under the charge of a full-time Member with the status of Ex-Officio Additional Secretary to the Government of India.

23rd SHANGHAI COOPERATION ORGANISATION (SCO) SUMMIT

Why in news?

- Under India's first-ever Chairmanship, the 23rd Summit of the SCO Council of Heads of State was held in the virtual format.
 - At the end of summit, India handed over the presidency of the bloc to Kazakhstan at the summit.
- President Xi of China, PM Sharif of Pakistan and President Vladimir Putin of Russia attended the summit.
- India, as a chair of the summit, welcomed Iran as the newest member of the SCO.

Iran in the SCO

- The case for Iran's full membership of the SCO has been made for several years.
- After Iran signed the nuclear deal (called JCPOA) with Western powers led by the United States, Russia's President Putin had made a strong case for Iran's membership in the SCO.

Why Russia and China wanted the inclusion of Iran in SCO?

- **China**
 - For China, having Iran, with its abundant energy supplies, in the SCO is reassuring as it escalates the tussle with the US.
 - In 2021, China and Iran signed a 25-year deal for cooperation in areas including oil.
 - A Bloomberg report this year noted that private refiners in China are now buying more Iranian oil as competition for supplies from Russia rises in Asia.
- **Russia**
 - Russia has every reason to have more allies on the platform.
 - Iran and Russia are strategic allies and form an axis in the Caucasus alongside Armenia.
 - Iran and Russia are also military allies in the conflicts in Syria and Iraq and partners in Afghanistan and post-Soviet Central Asia.
 - Belarus, Russia's close regional ally, is likely to sign a memorandum of obligations, which will subsequently lead to full membership.

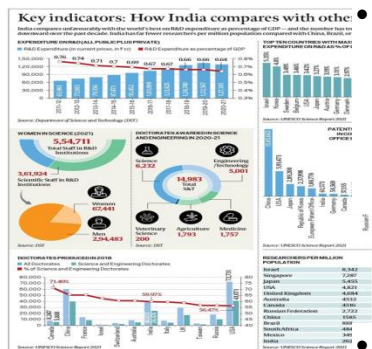
Tightrope walk for India

- India faces the task of maintaining a delicate balance as the dynamics of the SCO change.
- India and the US have elevated their partnership to unprecedented levels of cooperation and trust.
 - PM Modi has recently returned from an Official State Visit to the US during which the two countries signed important technology and defence agreements.
- India has also had historical ties with Iran. Commercial ties between India and Iran have been traditionally dominated by Indian imports of Iranian crude oil.
 - Iran was among India’s top energy suppliers until May 2019.
 - Following the end of the US waiver on sanctions in May, 2019, India suspended the import of crude from Iran.
 - India and Iran are working towards maximising the utilisation of the **Chabahar port**.
 - India and Iran are important players in the **International North-South Transport Corridor**.
 - The corridor can serve as a secure and efficient route for landlocked countries in Central Asia to access the Indian Ocean.

STATE OF SCIENCE RESEARCH IN INDIA

Why in News?

- The government’s approval for a **National Research Foundation (NRF)** is being widely welcomed by the scientific community as an effort to improve the state of science research in India.



• The Union Cabinet approved the **National Research Foundation (NRF) Bill 2023**, which will establish NRF as an apex body to provide high-level strategic direction to scientific research in the country.

State of Science Research in India:

- **Leading country with deep scientific abilities:** A huge pool of science and engineering graduates, a large network of laboratories and research institutions and

active involvement in some of the frontline areas of scientific research (supercomputer, quantum).

- **In comparative terms: India lags behind several countries**, on a variety of research indicators. Primary among these -
 - **The money** India spends on research and development (R&D) activities.
 - **Women** comprise only 18% of total scientific researchers in India, while globally this number was 33%.

Expenditure on R&D:

- For more than two decades now, the Centre's stated objective has been **to allocate at least 2% of the national GDP on R&D**.
- Not only has this objective not been met, **the expenditure on research as a proportion of GDP has gone down**, from about 0.8% to 0.65% between 2000 and now.
- **This does not mean that money for research has not increased**. It has more than tripled in the last 15 years, from Rs 39,437 to over 1.27 lakh crores between 2007-08 and 2020-21.
 - But India's GDP has grown faster, and so the share of research has gone down.
- **Comparative study:**
 - India's total expenditure on R&D in purchasing power parity (PPP) terms in 2018 - about **US\$ 68 billion**, was the sixth highest in the world, after the US, China, Japan, Germany and South Korea.
 - However, **India is far behind** as the US and China both spent more than US\$ 500 billion that year.

Research in Universities:

- India has nearly 40,000 institutions of higher education and over **1,200** of these are full-fledged universities. **Only 1% of these engage in active research**.
- According to the DST, **there were 7,888 R&D institutions in the country in 2021**, including more than 5,200 units in the private sector and industries, which engage mainly in industry-specific research.

- The count of private sector units even includes 921 industries with potential to undertake research activities.

Research Output:

- India produced 25,550 doctorates in 2020-21, of which 14,983 were in science and engineering disciplines.
- **This 59% proportion** in the overall doctorates compares well with other countries, putting India in the **seventh rank overall**.
- **But because of India's large population**, this is not impressive in proportional terms.
- The number of researchers per million population in India, **262**, is extremely low compared with even developing countries like Brazil (888), South Africa (484) or Mexico (349).

Publications and Patents:

- Indian researchers published 149,213 articles in science and engineering journals across the world in 2020, almost two and a half times more than a decade earlier.
- However, **it still constituted only 5% of all the articles**. Chinese researchers contributed 23%, while US researchers accounted for 15.5%.
- In 2021, a total of **61,573 patents** were filed in India, making it the **sixth largest in the world**. But this was nowhere close to the nearly 16 lakh patents filed in China, and about six lakhs in the US that year.

WHAT IS KANWAR YATRA?

Millions of devotees called Kanwariyas or kriyas started their journey for the Kanwar Yatra 2023 which commenced recently.



About Kanwar Yatra:

- It is an annual Hindu pilgrimage observed every year by Lord Shiva devotees.
- It usually starts in the month of July or August, commonly known as the month of Sawan, according to the Hindu calendar.

What happens at Kanwar Yatra?

- The yatra derives its name from the word ‘kanwar’, meaning a bamboo pole to which containers of holy water are tied at opposite ends.
- Millions of devotees called **Kanwariyas** or **kriyas** travel to **pilgrimage places** like Haridwar, Gaumukh, Gangotri in Uttarakhand, Sultanganj in Bihar, Prayagraj, Ayodhya and Varanasi in Uttar Pradesh, and return by carrying Ganga water in kanwars to seek the blessings of Shiva.
- The water is then offered to Shiva temples, including the 13 Jyotirlingas across India. The ritual is known as Jal Abhishek.
- During the whole journey, **Kanwars** have to make sure that the earthen pots do not touch the ground.
- While carrying the water, devotees walk barefoot, and some complete the pilgrimage by lying flat on the ground.
- They are clad in saffron clothing while undertaking the journey. Many observe fasts during the pilgrimage and restrict consumption of food, water and salt.

CHABAHAR PORT

Prime Minister recently said the members of Shanghai Cooperation Organisation (SCO) can work towards maximizing the utilization of the Chabahar Port following Iran's membership of the world's largest regional organization.



About Chabahar Port:

- It is a seaport in the Sistan-Balochistan province of Iran, on the Gulf of Oman, at the mouth of the Strait of Hormuz.
- Chabahar is a **deep-water port** with direct access to the Indian Ocean that is outside the Hormuz Strait.
- It is Iran's only seaport and consists of two separate ports called Shahid Beheshti and Shahid Kalantari.

- It's **geographic proximity to countries such as Afghanistan, Pakistan, and India**, as well as its **status as a key transit center on the burgeoning International North-South Transport Corridor**, gives it the potential to develop into one of the most important commercial hubs in the region.

Chabahar Project:

- In **May 2016, India signed a tripartite agreement with Iran and Afghanistan to develop the Shahid Beheshti Terminal at Chabahar.**
- It is **India's first foreign port project.**
- The deal agreement **aims to establish an International Transport and Transit Corridor in Chabahar.**
- The construction of the Chabahar Port and the **construction of a rail line from Chabahar Port to Zahedan** are the major highlights of this project.
- The idea was that the port would **enable India to bypass Pakistan and access Afghanistan, and ultimately Central Asia.**
- Moreover, the port could serve as a **hub for transit trade between India, Iran, and Afghanistan** and provide an **alternative route to the traditional Silk Road** that passes through China.

International North-South Transport Corridor (INSTC):

- INSTC is a **multi-modal transportation route linking the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran and onward to northern Europe via St. Petersburg in Russia.**
- The corridor **includes seaports on the Persian Gulf and in the Caspian region, as well as road and rail routes.**
- **Aim:** The main purpose of the corridor was **to reduce carriage costs and transit time between India and Russia.** The transit time is expected to reduce to almost half, once the corridor becomes fully functional.

WHAT IS BHASHINI PLATFORM?

Prime Minister recently pitched for sharing India's AI-based language platform, Bhashini, with SCO member countries to remove language barriers within the international grouping.

About Bhashini Platform :



- Digital India BHASHINI, is India's Artificial Intelligence (AI)-led language translation platform.
- It seeks to enable easy access to the internet and digital services in Indian languages, including voice-based access, and help the creation of content in Indian languages.
- It aims to make Artificial Intelligence and Natural Language Processing (NLP) resources available in the public domain to be used by -- Indian MSMEs, startups and individual innovators.
- This will help developers to offer all Indians easy access to the internet and digital services in their native languages.
- This online platform also has a separate 'Bhasadaan' section which allows individuals to contribute to multiple crowdsourcing initiatives, and it is also accessible via respective Android and iOS apps.

How does it work?

- The project is available on this website: <https://www.bhashini.gov.in/en/> and it is aimed to build and develop an ecosystem where various stakeholders like institutions, industry players, research groups, academia and individuals can unite to maintain an 'ever-evolving repository of data, training and benchmark datasets, open models, tools and technologies.
- The contribution can be done in four ways -- Suno India, Likho India, Bolo India and Dekho India -- where users have to type what they hear or have to validate texts transcribed by others.

ASIAN DEVELOPMENT BANK (ADB)

The Asian Development Bank (ADB) recently approved USD 200 million additional financing for the Rajasthan secondary towns development sector project.



About Asian Development Bank (ADB):

It is a **multilateral development bank** established on 19th December 1966. Its primary mission is to "foster economic growth and cooperation" among countries in the Asia-Pacific Region.

• **Functions:**

- ADB assists members and partners by providing loans, technical assistance, grants, and equity investments to promote social and economic development.
- It also provides financing to certain private sector projects as well as public-private partnerships.
- The ADB regularly facilitates policy dialogues and provides advisory services.
- They also use co-financing operations that tap official, commercial, and export credit sources while providing assistance.
- **Headquarters:** Manila, Philippines.
- **Members:** From 31 members at its establishment in 1966, ADB has grown to encompass 68 members—of which 49 are from within Asia and the Pacific and 19 outside.

Control:

- ADB is run by a board of governors, which represents the member countries of the ADB.
- The ADB was modelled closely on the World Bank and has a similar weighted voting system where votes are distributed in proportion to members' capital subscriptions.
- As of 2022, ADB's five largest shareholders are Japan and the United States (each with 15.6% of total shares), the People's Republic of China (6.4%), India (6.3%), and Australia (5.8%).
- **Source of Funding:** It relies on member contributions, retained earnings from lending, and the repayment of loans for the funding of the organization.