Current Affairs 10th October 2023 by Saurabh Pandey

Scheduled area

India's 705 Scheduled Tribe (ST) communities making up 8.6% of the country's population live in 26 States and six Union Territories.

Article 244, pertaining to the administration of Scheduled and Tribal Areas, is the single most important constitutional provision for STs.

Article 244(1) provides for the application of Fifth Schedule provisions to Scheduled Areas notified in any State other than Assam, Meghalaya, Tripura, and Mizoram.

The Sixth Schedule applies to these States as per Article 244(2).

What are Scheduled Areas?

Scheduled Areas cover 11.3% of India's land area, and have been notified in 10 States: Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, and Himachal Pradesh

How are Scheduled Areas governed?

The President of India notifies India's Scheduled Areas. States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members.

They will advise the Governor on matters referred to them regarding ST welfare.The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.

The national government can give directions to the State regarding the administration of Scheduled Areas.

The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State.

The Governor can also make regulations for a Scheduled Area,

especially to prohibit or restrict the transfer of tribal land by or among members of the STs, and regulate the allotment of land to STs and money- lending to STs.

Panchayats (Extension to Scheduled Areas) Act, or PESA, in 1996 - PESA empowered the gram sabhas to exercise substantial authority through direct democracy, and stated that structures "at the higher level do not assume the powers and authority" of the gram Sabha.

Who decides a Scheduled Area?

The Fifth Schedule confers powers exclusively on the President to declare any area to be a Scheduled Area.

In 2006, the Supreme Court held that "the identification of Scheduled Areas is an executive function" and that it doesn't "possess the expertise … to scrutinise the empirical basis of the same".

In 2016, the Jharkhand High Court dismissed a challenge to the notification of a Scheduled Area because the ST population there was less than 50% in some blocks.

The court observed that the declaration of a Scheduled Area is "within the exclusive discretion of the President".

How are Scheduled Areas identified?

Neither the Constitution nor any law provides any criteria to identify Scheduled Areas. However, based on the 1961 Dhebar Commission Report, the guiding norms for declaring an area as a Scheduled area are preponderance of tribal population; compactness and reasonable size of the area; a viable administrative entity such as a district, block or taluk; and economic backwardness of the area relative to neighboring areas.

No law prescribes the minimum percentage of STs in such an area nor a cut-off date for its identification.

This said, the 2002 Scheduled Areas

and Scheduled Tribes Commission had recommended that "all revenue villages with 40% and more tribal population according to the 1951 Census may be considered as Scheduled Area (sic) on merit".

The Bhuria Committee recognized a face -to- face community, a hamlet or a group of hamlets managing its own affairs to be the basic unit of self-- governance in Scheduled Areas.

But it also noted that the most resource rich tribal- inhabited areas have been divided up by administrative boundaries, pushing them to the margins.

Therefore, determining the unit of the area to be considered whether a revenue village, panchayat, taluka or district, with an ST- majority population gave way to arbitrary politico- administrative decisions.

The Hindu

Multimode AI

On September 25, ChatGPT-maker OpenAI announced that it had enabled its GPT-3.5 and GPT-4 models to study images and analyse them in words, while its mobile apps will have speech synthesis so that people can have full-fledged conversations with the Chabot.

The Microsoft-backed company had promised multimodality in March, during the release of GPT-4 and kept the addition on the backburner.

Applications of multimodal AI Some of the earlier multimodal systems combined computer vision and natural language processing models or audio and text together to perform some of the simpler but rather important functions like automatic image caption generation etc.

And even if these multimodal systems weren't an all- powerful model like GPT-4 gunning for the ultimate dream of artificial general intelligence (AGI), they carried enough value to address very real -world problems

Meta announced a new open

-source AI multimodal system called Image Bind that had many modes text, visual data, audio, temperature and movement readings.

The Hindu

James web telescope

Since beginning operations last year, the James Webb Space Telescope has provided an astonishing glimpse of the early history of our universe, spotting a collection of galaxies dating to the enigmatic epoch called cosmic dawn.

James Webb Space Telescope (JWST)

The James Webb Space Telescope (JWST) is a space telescope designed primarily to conduct infrared astronomy.
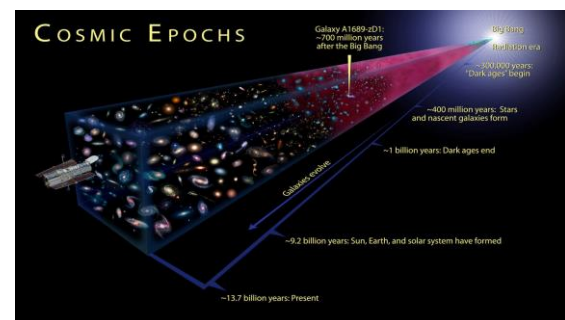
The U.S. National Aeronautics and Space Administration (NASA) led development of the telescope[] in collaboration with the European Space Agency (ESA), and the Canadian Space Agency (CSA).

The JWST was launched 25 December 2021 on an ESA Ariane 5 rocket from Kourou, French Guianaand is intended to succeed the Hubble Space Telescope as NASA's flagship mission in astrophysics.

The telescope is named after James E. Webb, who was the administrator of NASA from 1961 to 1968 during the Mercury, Gemini, and much of the Apollo programs.

It provides improved infrared resolution and sensitivity over Hubble, viewing objects up to 100 times fainter than the faintest detectable by Hubble.

The Hindu

Cosmic Dawn

One of the most important gaps in our understanding of our Universe's history is the "Cosmic Dawn."

Current Affairs 10th October 2023 by Saurabh Pandey

The period from about 50 million years to one billion years after the Big Bang when the first stars, black holes, and galaxies in the Universe formed.

One of the best ways to observe this era is with low-frequency radio telescopes, which can observe the "spin-flip" radiation from the hydrogen that pervades the Universe during the Cosmic Dawn.

Nobel prize in economics

The Nobel Prize for economics was awarded to Harvard University professor Claudia Goldin on Monday for her research that has advanced the understanding of the gender gap in the labour market.

Ms. Goldin is just the third woman to win the prize out of 93 economics laureates.

She has studied 200 years of women's participation in the workplace, showing that despite continued economic growth, women's pay did not continuously catch up to men's and a divide still exists despite women gaining higher levels of education than men. Goldin's research does not offer solutions, but it allows policymakers to tackle the entrenched problem.

What happens in people's homes reflects what happens in the workplace, with women often taking jobs that allow them to be on call at home work that often pays less. "Ways in which we can even things out or to create more couple equity also leads to more gender equality," she said.

In Ms. Goldin's analysis, a woman's role in the job market and the pay she receives aren't influenced just by broad social and economic changes. They also are determined partly by her individual decisions about, for example, how much education to get.

Often young girls make decisions about future work by looking at their own mother's participation, each generation "learning from the

successes and failures of the preceding generation.

The Hindu

Myanmar border

An advanced smart fencing system of 100 km along the Myanmar border is in the pipeline to strengthen the existing surveillance system, the 2022-23 annual report of the Ministry of Home Affairs (MHA)

Unfenced border and unregulated migration from Myanmar have been attributed as some of the factors responsible for the ethnic violence in Manipur. Manipur is affected by the activities of Meitei, Naga, Kuki, Zomi, Hmar insurgent groups.

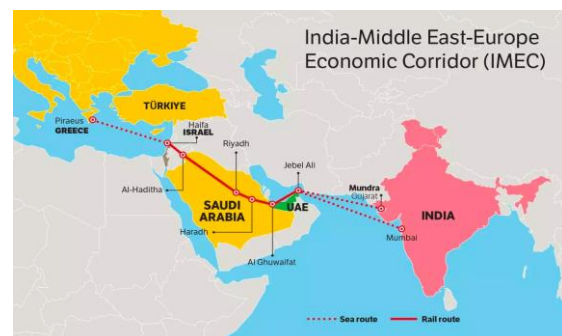A total of 23 UG [underground] outfits under two conglomerates [United Peoples' Front [UPF] -8 and Kuki National Organisation [KNO] -15] are under Suspension of Operation [SoO] pact with the Government of India since August 2008," the report said."

The MHA said that a Free Movement Regime (FMR) exists between India and Myanmar.

"Under the FMR, every member of the hill tribes, who is either a citizen of India or a citizen of Myanmar and who is resident of any area within 16 km on either side of the Indo-Myanmar border can cross the border on production of a border pass (one-year validity) issued by the competent authority and can stay up to two weeks per visit.

The Hindu

IMEC and Israel-Hamas conflict

Current Affairs 10th October 2023 by Saurabh Pandey

The extraordinary level of hostilities between Israel and Hamas is expected to cast a shadow on two of the major initiatives that the country has launched with India and other stakeholders.

A highly placed source here said that both the I2U2 (India, Israel, U.S. and United Arab Emirates) and IMEC (India Middle East EU Economic Corridor) that were aimed at creating new partnerships for India's post-COVID economic plans are expected to suffer because of the Hamas attack on Israel.

"Both I2U2 and IMEC are expected to be impacted,"

Hamas had placed a question mark on Israel's ability to provide stable conditions for mega infrastructure and financial initiatives.

I2U2 was started in October 2021 and it found concrete expression when leaders of the four participating countries issued

The I2U2 was planning to begin food parks in Gujarat and Madhya Pradesh and was expected to focus on a hybrid renewable energy project in Gujarat.

The July 2022 statement mentioned that the U.S. would invest $2 billion in Indian projects that are backed by Israeli technology.

The ambitious initiative was being viewed as an outcome of the Abraham Accords of September 15, 2020 that was aimed at creating conditions of cooperation between Israel and Arab states like the United Arab Emirates and Bahrain.

The Hindu