Daily News Juice

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1. What is Art 244A, the constitutional promise of autonomy that is driving the election narrative at a tribal seat in Assam?

Why in News?

In Assam's tribal-majority Diphu Lok Sabha constituency, candidates of all parties have promised the implementation of Article 244A of the Constitution to create an autonomous 'state within a state'.

This, in fact, has been the primary election promise in Diphu for decades. What is Article 244A of the Constitution, and why is it important in this constituency?

Where is Diphu, and what is the social profile of this Lok Sabha constituency?

Diphu is the most sparsely populated of Assam's 14 Lok Sabha constituencies, with just 8.9 lakh voters. It is reserved for Scheduled Tribes (STs), and covers six legislative Assembly segments in three tribal-majority hill districts of Assam: Karbi Anglong, West Karbi Anglong, and Dima Hasao.



These three districts are administered under the provisions of the Sixth Schedule of the Constitution, which describes the "Provisions as to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram".

These areas come under two autonomous councils: the Karbi Anglong Autonomous Council (KAAC) and the North Cachar Hills Autonomous Council. Voters at the seat belong to various communities: Karbi, the third largest tribe in the state, Dimasa, Hmar, Kuki, Rengma Naga, Zeme Naga, Bodo, Garo, Assamese, Bengali, Bihari, Gorkha, etc.

However, the seat has been represented by members of the Karbi community since 1977. Currently, all Assembly segments under the Diphu seat are with the BJP.

What is Article 244 A of the Constitution?

Article 244 A was inserted by The Constitution (Twenty-second Amendment) Act, 1969, which enabled Parliament to pass an Act to "form within the State of Assam an autonomous State comprising (whether wholly or in part) all or any of... [certain specified] tribal areas", including Karbi Anglong.

This autonomous state would have its own Legislature or Council of Ministers or both. This provision goes a step further than the provisions under the Sixth Schedule, which are already in place in these areas.

The autonomous councils under the Sixth Schedule have elected representatives for more decentralised governance of these tribal areas, but they have limited legislative powers, do not have control over law and order, and have only limited financial powers.

244A. Formation of an autonomous State comprising certain tribal areas in Assam and creation of local Legislature or Council of Ministers or both therefor

(1) Notwithstanding anything in this Constitution, Parliament may, by law, form within the State of Assam an autonomous State comprising (whether wholly or in part) all or any of the tribal areas and create therefor—

(a) a body, whether elected or partly nominated and partly elected, to function as a Legislature for the autonomous Stale, or

(b) a Council of Ministers, or both with such constitution, powers and functions, in each case, as may be specified in the law.

Relevance: GS Prelims & Mains Paper II; Governance Source: Indian express

2. TRAI Advocates Both Passive and Active Infrastructure Sharing in Telecom



Why in News?

Telecom Regulatory Authority of India (TRAI) has released recommendations on Telecommunication Infrastructure Sharing, Spectrum Sharing, and Spectrum Leasing. The recommendations, released by the TRAI recently, address several critical aspects of telecom operations in India.

Telecom Infrastructure Sharing

TRAI noted that the newly enacted Telecommunications Act of 2023 provides that the Central Government may permit the sharing, trading, leasing, and surrender of assigned spectrum, subject to the terms and conditions, including applicable fees or charges, as may be prescribed.

Salient features of TRAI Recommendations:

1. Infrastructure Sharing: TRAI proposes allowing telecom service providers to share both passive and active infrastructure elements, including towers, electrical equipment, dark fiber, and duct space. This move aims to enhance efficiency and reduce costs across the industry.

What are Active and Passive Telecom Infrastructure Networks?

Active networks are those that are constantly sending and receiving data, while passive networks are those that only receive data. Passive networks are used for applications where data does not need to be sent immediately, such as downloading files or streaming video.

2. Universal Service Obligation Fund (USOF) Projects: TRAI suggests mandating the sharing of passive infrastructure laid under USOF projects with at least two other telecom service providers. This step aims to extend telecommunication coverage in underserved areas and ensure more effective use of government-funded infrastructure.

What is Universal Service Obligation Fund (USOF)?

Theodore Vail, the President of AT&T, first used the term 'Universal Service' in the company annual report in 1990. He described 'Universal Service' by writing that the telephone system should be universal, interdependent and intercommunicating, affording opportunity for any subscriber to any exchange to communicate with any other subscriber of any other exchange.

In India, the New Telecom Policy 1999, provided that the resources for meeting the Universal Service Obligation (USO) would be raised through a 'Universal Access Levy' (UAL), which would be a percentage of the revenue earned by the operators under various licences.

The Universal Service Obligation (USO) Fund was established with fundamental objective of providing access to "Basic" telegraph services (including mobile services, broadband connectivity and ICT infrastructure creation) to people in remote and rural areas at affordable and reasonable prices.

The Universal Service Obligation (USO) Fund is headed by the Administrator, USO Fund who is appointed by the Central Government, for the administration of the fund. It is an attached office of the Department of Telecommunications (DoT), Ministry of Communications.

3. Roaming Mandate in Remote Areas: Telecom operators receiving government funding (full or partial) under USOF (or Digital Bharat Nidhi) for network infrastructure in remote areas are required to allow roaming to other operators in those areas initially for a period of three years. This measure aims to improve connectivity in remote and far-flung regions.

4. Inter-Band Spectrum Sharing: TRAI recommends permitting inter-band spectrum sharing among access service providers, potentially through common radio access networks. This move seeks to optimize spectrum usage and enhance service quality.

5. Leasing of Access Spectrum: TRAI suggests permitting the leasing of access spectrum among service providers, enabling more flexible and efficient use of spectrum resources. Conclusion

These recommendations aim to promote efficient resource utilization, enhance service quality, and extend coverage to underserved areas. By allowing spectrum leasing, inter-band spectrum sharing, and infrastructure sharing, TRAI seeks to foster a more competitive and robust telecom ecosystem in India.

Relevance: GS Prelims & Mains Paper II; Governance Source: PIB

3. Microsoft unveils Phi-3-mini based on Small Language Model

Why in News?

A few days after Meta unveiled its Llama 3 Large Language Model (LLM), Microsoft recently unveiled the latest version of its 'lightweight' AI model – the Phi-3-Mini. Microsoft has described the Phi-3 as a family of open AI models that are the most capable and cost-effective small language models (SLMs) available.

What exactly are language models, and how does an SLM differ from an LLM? Are there any benefits of employing an SLM for developing AI applications? We explain.

What is Phi-3-mini?

Phi-3-Mini is believed to be first among the three small models that Microsoft is planning to release. It has reportedly outperformed models of the same size and the next size up across a variety of benchmarks, in areas like language, reasoning, coding, and maths.

Language Models

Essentially, language models are the backbone of AI applications like ChatGPT, Claude, Gemini, etc. These models are trained on existing data to solve common language problems such as text classification, answering questions, text generation, document summarisation, etc.

The 'Large' in LLMs has two meanings — the enormous size of training data; and the parameter count. In the field of Machine Learning, where machines are equipped to learn things themselves without being instructed, parameters are the memories and knowledge that a machine has learned during its model training. They define the skill of the model in solving a specific problem.

What's new in Microsoft's Phi-3-mini?

The latest model from Microsoft expands the selection of high-quality language models available to customers, offering more practical choices as they build generative AI applications. Phi-3-mini, a 3.8B language model, is available on AI development platforms such as Microsoft Azure AI Studio, HuggingFace, and Ollama.

The amount of conversation that an AI can read and write at any given time is called the context window, and is measured in something called tokens. According to Microsoft, Phi-3-mini is available in two variants, one with 4K context-length, and another with 128K tokens.

How is Phi-3-mini different from LLMs?

Phi-3-mini is an SLM. Simply, SLMs are more streamlined versions of large language models. When compared to LLMs, smaller AI models are also cost-effective to develop and operate, and they perform better on smaller devices like laptops and smartphones.



While LLMs are trained on massive general data, SLMs stand out with their specialisation. Through fine-tuning, SLMs can be customised for specific tasks and achieve accuracy and efficiency in doing them. Most SLMs undergo targeted training, demanding considerably less computing power and energy compared to LLMs.

SLMs also differ when it comes to inference speed and latency. Their compact size allows for quicker processing. Their cost makes them appealing to smaller organisations and research groups.

Relevance: GS Prelims & Mains Paper III; Science & Technology Source: Indian Express