

BJP keeps Haryana, NC-led alliance bags J&K

POLITY & GOVERNANCE

The BJP won a clear mandate in Haryana as did the National Conference-led alliance in Jammu & Kashmir, as the Assembly election results were announced on Tuesday.



FIGURE: Pie chart representation comparing the seats won in Assembly elections. (a) Haryana Assembly Elections 2019 vs 2024. (b) Jammu & Kashmir Assembly Elections 2014 vs 2024.



FIGURE: Pie chart representation comparing the vote share of political parties in Assembly elections. (a) Haryana Assembly Elections 2019 vs 2024. (b) Jammu & Kashmir Assembly Elections 2014 vs 2024.

REGIONAL PARTIES ROUTED

BJP won 48 seats in Haryana, two above the majority mark in the 90-member Assembly. The Congress won 37 seats. The poll results in Haryana are also a major setback for the State's regional parties. Dushyant Chautala's Jannayak Janata Party, which had made a stunning debut in the 2019 election by winning nearly 15% of the vote share and 10 Assembly seats, was wiped out. The Indian National Lok Dal was also pushed to the margins, winning only two seats. AAP, which had failed to strike an alliance with the Congress despite a few rounds of negotiations, drew a blank.

GOVERNANCE CHALLENGES

In J&K, the National Conference-led alliance won 49 seats, of which the NC alone got 42. The Congress won only six of the 32 seats it contested; of the six, only one was in Jammu. In contrast, while the BJP failed to open its account in the Kashmir Valley, it swept through Jammu, winning 29 seats.

Under the Jammu and Kashmir Reorganisation Act, 2019 that split the former State into the Union Territories of J&K and Ladakh, the J&K Legislative Assembly may enact laws with respect to any of the matters on the Concurrent List and State List, excluding police and public order, in the Seventh Schedule to the Constitution.

The Transaction of Business Rules pertaining to the 2019 Act notified in 2020 and 2024 excluded the scope of the J & K Assembly in subjects such as education, marriages, taxes, property transfer, forests, trade unions, labour welfare, charitable organisations, trade and commerce.

Subjects such as municipal corporations, public health, hospitals, sale of liquor, construction of roads and bridges, agriculture, water, land, regulation of mines, industries, salaries and allowances of members of the legislature, land revenue, taxes, tolls, taxes on professions, trades, employment and luxuries, however, remain under the purview of the Legislative Assembly.

The Union Home Ministry on July 12 amended the Transaction of Business Rules, giving more powers to the L-G in matters pertaining to the police, public order and the All India Services (AIS), including their transfers and postings. Any proposal regarding the appointment of Advocate-General and Law Officers and proposals regarding the grant or refusal of prosecution sanction or filing of appeal will have to be placed before the L-G first, according to the rules.

Hopfield and Hinton win Nobel Prize in Physics

SCIENCE AND TECHNOLOGY



allow flow and weight of information with no preference.

Professor John Hopfield of Princeton University in the U.S. and Professor Geoffrey Hinton of the University of Toronto were jointly awarded Nobel Prize in Physics in 2024 "for foundational discoveries and inventions that enable machine learning with artificial neural networks". The laureates laid the theoretical foundations of machines that can learn without humans teaching them and can use their knowledge to answer questions. Artificial Neural Networks (ANNs) are recurrent neural network - collections of neurons, or more broadly nodes capable of processing data, connected in specific ways to

Professor Hopfield is credited with developing the Hopfield network, a type of recurrent neural network or Artificial Neural Networks (ANNs), where neurons learn and process information based on Hebbian learning — an idea in neuropsychology that if one neuron repeatedly triggers a second, the connection between the two becomes stronger. Each neuron in this network is connected to all the others. The network as a whole was programmed to be analogous to a group of atoms, each with some magnetic energy. When 'activated', the ANN could receive, for instance, a noisy image and dynamically denoise it by minimising the analogous magnetic energy of the system. The processes the network performs to complete an incomplete pattern or to denoise an image are the same ones that, by analogy, would reduce the total energy of the magnetic atoms.

Professor Hinton, of the University of Toronto adapted another network called the Boltzmann machine, an earlier model for a spin glass — a material in which roughly half of atom pairs have their quantum spins aligned while the other half have them anti-aligned to perform cognitive tasks. This disorder causes the material to be frustrated and minimise its energy

through more configurations than if the disorder was absent. Professor Hinton made a breakthrough in the 2000s by developing a learning algorithm for a modified ANN called a restricted Boltzmann machine (RBM). A layer of neurons could be trained as an RBM and multiple layers could be stacked, creating the first ANNs capable of deep learning.

Upper stage of rocket returns to earth after 7 years

SCIENCE AND TECHNOLOGY

The upper stage of the Polar Satellite Launch Vehicle C-37 re-entered the earth's atmosphere on October 6. The Indian Space Research Organisation (ISRO) launched PSLV-C37 mission from Sriharikota on February 15, 2017, with Cartosat-2D as the main payload, and another 103 satellites as co-passengers.



PSLV-C37 MISSION

The Indian Space Research Organisation (ISRO) launched the PSLV-C37 mission on February 15, 2017, with Cartosat-2D as the main payload along with another 103 satellites as co-passengers, namely INS-1A, INS-1B, Al-Farabi 1, BGUSAT, DIDO-2, Nayif 1, PEASS, 88 Flock-3p satellites, and 8 Lemur-2 satellites. The space agency created history as it was the first mission to launch 104 satellites with a single vehicle. After injecting the satellites and passivation, the upper stage (PS4) was left at an orbit of approximately 470x494 km.

The U.S. Space Command (USSPACECOM) that regularly tracked the upper stage (PS4) as an object with NORAD id 42052 observed orbital altitude slowly decayed, primarily due to atmospheric drag effects. The

ISRO System for Safe and Sustainable Space Operations Management (IS4OM) regularly monitored the orbital decay as part of its regular activities and predicted re-entry into the atmosphere in the first week of October. The orbit had decayed to a size of 134x148 km, as of October 6, 2024. As per USSPACECOM prediction, the re-entry took place on October 6 at 15:49 UTC (+/-1 minute of uncertainty) while IS4OM prediction also showed that re-entry would occur on October 6 at 15:48:25 UTC. The corresponding impact point is in the North Atlantic Ocean.

The atmospheric re-entry of the rocket body is fully compliant with the international debris mitigation guidelines, in particular, the guideline of Inter-Agency Space Debris Coordination Committee (IADC) that recommends limiting the post-mission orbital life of a defunct object in Low-Earth orbit to 25 years.

Global Digital Compact



POLITY & GOVERNANCE

The United Nations members adopted the 'Global Digital Compact' (GDC) organised the recently concluded 'Summit of the Future'. During the 'Summit of the Future', the 'Global Compact, a voluntary initiative based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals and the 'Global Compact for Safe, Orderly, and Regular Migration' covering all dimensions of international migration in a holistic and comprehensive manner were also adopted.

GLOBAL DIGITAL COMPACT (GDC)

The Global Digital Compact, a non- binding law but a diplomatic instrument with a set of shared goals for governments, institutions, firms, and other stakeholders is perhaps the first global agreement that focus on the potential of digital technologies, with the specific intention to harness and regulate them for the common good. The GDC rests on the idea that digital technologies dramatically changing our world offer potential benefits for societies and for our planet — by enabling Sustainable Development Goals (SDGs) also pose serious challenges and concerns.

Realising the GDC

The GDC is a collaborative project with the objective of ensuring human oversight of technologies in ways that advance sustainable development. Building on the norms of international law, the Universal Declaration of Human rights, and the UN 2030 Agenda, among others, the GDC proposes global cooperation in the governance of data and digital technologies

UN member countries have committed to establish two panels — an 'Independent International Scientific Panel on AI [Artificial Intelligence]' and a panel for 'Global Dialogue on AI Governance' to meet the Compact's goals.

These goals include closing the digital divide, including everyone in the digital economy, improving access to data, and advancing responsible and equable data governance. In the same vein, the Compact's principles are based on inclusive participation, access to data and digital technologies, sustainability, and trustworthy technologies that function within a free and competitive market.

Digital goods and services

The GDC proposes "digital public goods" to include open-source software, open data, and open AI models, plus adherence to privacy and best practices to address the digital divide. This is an acknowledgment of digital public goods' ability to drive social change as elements of a "digital public infrastructure" that delivers services. Such infrastructure involves the development and use of shared digital systems according to specific priorities and needs of stakeholders. To this end, the GDC envisions partnerships, including with private entities.

What are the GDC's lacunae?

The openness in the context of the digital public infrastructure are often limited by contractual requirements such as non-disclosure, confidentiality, and protection of intellectual property as understood from the extensive European experience with public-private partnerships vis-à-vis digital projects suggests openness within such partnerships is restricted between 'as open as is required' and 'as closed as is essential'.

The Global Digital Compact (GDC) calls for digital technology companies to self-regulate to keep their users safe and their users' trust. Self-regulation is not an optimum solution because self-regulation has already proved to be ineffective in practice.

The Global Digital Compact (GDC) recognises interoperable data governance as essential to foster innovation and promote economic growth. An increasing collection, sharing, and processing of data — particularly for AI — may amplify risks in the absence of effective personal data protection and privacy laws.

The Compact proposes to give corporate entities more power in data and internet governance for achieving SDGs within a paradigm where governments and private entities track, collect, and analyse data to measure progress, while underscoring the importance of governing data in the public interest.

The GDC and the UN

The GDC does bat for "data flow with trust" but many countries have refused to accept this idea because it goes against the spirit of digital sovereignty. Some even have specific laws that require data about their citizens to remain within their borders.

Finally, the GDC links various objectives and proposed actions with the relevant SDGs. This is a welcome move because it reflects the view that digitisation should play a prominent role in realising the SDGs. At the same time, when the SDGs were adopted in 2015, the current AI revolution hadn't started. Given the unimpressive record of nations in realising the SDGs, it is doubtful whether an add-on Compact like the GDC could make a difference.

The UN's member states are striving to find ways to work with and regulate Big Tech while also asserting their digital sovereignty. The global governance of digital technologies thus is too complex to be captured or 'fixed' by a singular entity like the GDC. We need multilateral as well as regional negotiations to go with it to address jurisdictional, regional, and/or local needs. By appealing to existing modes of digital governance as well as by combining SDGs with digitalisation, the GDC is positioning itself as an instrument of brainstorming rather than as a provider of roadmaps. Still, the GDC can help with capacity building and with South-South and North-South collaborations in the development of digital public goods.

USCIRF report on India

POLITY & GOVERNANCE

The Washington DC-based United States Commission on International Religious Freedom (USCIRF) on October 2 released a country update on India, flagging "collapsing religious freedom conditions". The report highlighted killings of individuals from minority communities, lynching by vigilante groups, and arbitrary arrest of religious leaders and demolition of places of worship throughout 2024.

What is the USCIRF?

The USCIRF is an independent, bipartisan U.S. federal government agency constituted under the International Religious Freedom Act (IRFA), 1998 to monitor the universal right to Freedom of Religion or Belief (FoRB) in countries other than the U.S. Its assessments of countries are based on international human rights standards, and in particular, Article 18 of the Universal Declaration of Human Rights.

The USCIRF monitors religious freedom conditions across the world through travel, research and meetings with representatives of international human rights groups, NGOs, victims of persecution, and foreign officials with the aim of putting out a report every year, listing the countries that meet the threshold for designation by the U.S. State Department.

The U.S. State Department designate countries that "commit systematic, ongoing, and egregious violations of religious freedom" as a "Country of Particular concern" (CPC). It also shares another list of countries that, in its assessment, ought to be included in The State Department would designate countries "whose governments engage or tolerate in severe religious freedom violations, but do not rise to the CPC standard of "systematic, ongoing, and egregious" as 'Special Watch List' (SWL).

The USCIRF designated India as a "Country of Particular concern" (CPC) in it's the 2024 annual report noting the "deteriorating and concerning trajectory" of religious freedom in India in 2024. The USCIRF cited legislations such as the Citizenship (Amendment) Act, 2019 and enforcement of discriminatory legislation like anti-conversion laws, cow slaughter laws, and antiterrorism laws", continue to "repress and restrict" religious minorities. The report cited Indian officials having repeatedly employed hateful and derogatory rhetoric and misinformation to perpetuate false narratives about religious minorities, inciting widespread violence, lynchings, and demolition of places of worship.

The Office of International Religious Freedom (IRF), a part of the U.S. State Department also releases annual reports on religious freedom. While the USCIRF's reports could have a bearing on a country's image, the IRF's stance is more consequential for bilateral relations. India considers USCIRF a biased organisation with a political agenda that continues to misrepresent facts and peddles a motivated narrative about India.





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