Press mud

Sugarcane byproduct press mud can help generate 460,000 tonnes of compressed biogas (CBG) valued at Rs 2,484 crore.

About Press Mud:

It is often known as filter cake or press cake.

It is the agricultural waste obtained when cane juice is repeatedly filtered before being sent for sugar extraction.

The filters are cleaned periodically, and the waste is deposited in the yard of the mill.

Nearly 3 to 4 percent of press mud is obtained when one tonne of cane is crushed.

At present, mills recycle this agricultural waste as manure by composting it and supplying it to the farmers in the area.

Benefits

It can be utilised as a feedstock for biogas production through anaerobic digestion and subsequent purification to create compressed biogas (CBG).

It is very useful for crops and horticulture because of its richness in various micronutrients.

It has been acknowledged as a valuable resource for green energy production.

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Issue with press mud: Storing press mud proves challenging as it undergoes gradual decomposition, resulting in the breakdown of organic compounds.

What is compressed biogas (CBG)?

It is produced naturally through a process of anaerobic decomposition from waste / bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.

After purification, it is compressed and called CBG, which has a pure methane content of over 95%.

It is exactly similar to commercially available natural gas in its composition and energy potential. With calorific value (~52,000 KJ/kg) and other properties similar to CNG

Broadcast Regulation 3.0, Commissions and Omissions

The Ministry of Information and Broadcasting (MIB) released the Broadcasting Services (Regulation) Bill 2023, marking a significant step in the regulation of broadcasting.

The bill is part of a series of endeavours to regulate broadcasting in an integrated manner.

A Timeline of Regulatory Measures

The last significant initiative for such regulation occurred in 2007 with the Broadcasting Services Regulation Bill.

In 1997, during the early stages of cable and satellite broadcasting, the sector witnessed its first attempt at an integrated regulatory framework through the Broadcasting Bill.

Key Highlights of Draft of Broadcasting Services (Regulation) Bill 2023

Consolidation and Modernisation

It addresses a long-standing need of consolidating and updating the regulatory provisions for various broadcasting services under a single legislative framework.

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This move streamlines the regulatory process, making it more efficient and contemporary.

It extends its regulatory purview to encompass broadcasting over-the-top (OTT) content and digital news and current affairs - currently regulated through IT Act 2000 and regulations made there under.

Contemporary Definitions and Future-Ready Provisions: To keep pace with the evolving technologies and services, the bill introduces comprehensive definitions for contemporary broadcasting terms and incorporates provisions for emerging broadcasting technologies

Strengthens the Self-Regulation Regime:

It enhances self-regulation with the introduction of 'Content evaluation committees' and evolves the existing Inter-Departmental Committee into a more participative and broader 'Broadcast Advisory Council'.

Accessibility for Persons with Disabilities:

The bill addresses the specific needs of persons with disabilities by providing for enabling provisions for issue of comprehensive accessibility guidelines.

Positive Provisions in the Bill

Provision of Subscriber Data Maintenance and Audits: The bill mandates broadcasting network operators and broadcasters to maintain records of subscriber data, and subject this to periodic external audits, as is the international norm.

Proposal for a Methodology for Audience Measurement

The bill aims to establish a framework for audience measurement and the sale of ratings data.

Both measures are designed to introduce essential transparency into the previously obscure value chain of the cable and satellite television industry in our nation.

Terrestrial Broadcasting and Competition

The provision to permit private actors in terrestrial broadcasting will encourage competition to Doordarshan, the state broadcaster, as is in many G-20 countries.

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In 2016, TRAI had initiated consultations on this and at that time, there was an opinion about terrestrial broadcasting proving viable only for large players, which diminishes the diversity of suppliers in broadcasting as a whole.

This problem can be addressed if the Bill allows terrestrial broadcasting to those not involved in other forms of broadcasting.

Concerns Surrounding the Bill

Absence of Privacy Protection: The Bill completely lacks any guardrails to shield the privacy of subscribers and audiences in practices of data collection.

Inclusion of OTT Content Suppliers as Broadcasting Services: A major concern is the Bill including OTT content suppliers in the definition of broadcasting services. It has also been proposed in TRAI's 'National Broadcasting Policy'.

Impact on News Media and Journalists

For the news media and their audience, there is a different concern.

The Bill's expanded definition of broadcasting narrows the conditions in which journalists and news outlets that are not a part of large, multi-lingual television networks can continue their professional pursuits.

Questionable Directions and Oversight: Content Evaluation Committee

While it is fruitful for a news outlet to have an oversight body, warranting a Content Evaluation Committee takes the Bill in a questionable direction.

Since the role of an internal oversight mechanism is to maintain the accuracy of news and quality of journalism, its design is best left to individual news outlets.

They could decide whether to design this along the lines of an ombudsperson, as some newspapers attempted in the past, or akin to a Readers' Editor, as practised by few online news outlets.

Leeway to the Government in the Name of Public Interest

The Bill empowers the government to inspect broadcasters without intimating them in advance, and to impound their equipment, presumably including those issued to their employees.

Moreover, breaches of the Programme Code and Advertisement Code result in the removal or alteration of content, supplementing existing actions such as halting transmissions for specific periods.

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Lastly, the Bill provides significant authority to the government to restrict broadcasting and distribution in the name of 'public interest', a term alarmingly left undefined.

These intrusive mechanisms heighten the susceptibility of professional news providers to external pressure groups.

This should be a cause for concern for those deliberating on legislating the Bill, regardless of their parliamentary affiliations.

Significant Omissions in the Bill

Lack of Regulation on Ownership

The bill fails to address issues of ownership in the media landscape, similar to the TRAI paper.

Despite an emphasis on audience measurement methodologies, there is a noticeable absence of provisions to regulate cross-media and vertical ownership.

Cross-media ownership, as previously identified by TRAI, poses a threat to diversity by consolidating media power.

The interconnected interests of cable and DTH distributors, news broadcasters, and telecom companies contribute to vertical integration, potentially limiting the range of news sources available to the audience.

Absence of an Independent Broadcast Regulator

The bill is equally silent on the establishment of an independent broadcast regulator.

The idea of an independent regulator was previously suggested in the 'airwaves' judgment of 1995, the 1997 Broadcasting Bill, and reiterated in the 2007 iteration of the Bill.

Instead of an independent regulator, the Bill proposes a 'Broadcast Advisory Council' to handle viewer grievances and violations of the Programme Code and Advertisement Code.

This raises concerns about the Council's capacity to address grievances from a vast audience and questions its autonomy.

Way Forward: A Regulation on Conflict of Interest is the Need of the Hour

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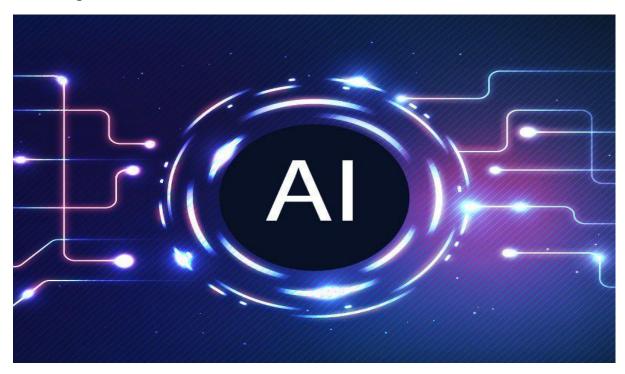rvta@rvei.edu.in

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The Indian government has not effectively managed conflicts of interest in the media industry, especially the connections between MSOs (Multi-Service Operators), politicians, and vertical integration.

As this has led to a loss of trust, a regulation on conflicts of interest is the need of the hour.

SOVEREIGN ARTIFICIAL INTELLIGENCE

India's endeavor to establish its own 'sovereign AI' entails the nation's commitment to develop, control, and utilize artificial intelligence (AI) technologies on a national scale.

This initiative aims to create a comprehensive AI ecosystem under the governance of the Indian government, focusing on various real-life applications across sectors such as healthcare, agriculture, governance, language translation, and more.

Details

Components of India's Sovereign AI Initiative

Digital Public Infrastructure (DPI):

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India's successful examples, like Aadhaar (biometric identity program) and Unified Payments Interface (UPI), form the foundation of the Digital Public Infrastructure (DPI).

DPI involves the government sanctioning underlying technology, later extended to private entities to develop diverse use cases.

India's Plan for Controlling its AI

National Data Governance Framework Policy:

Proposal for an India Datasets platform housing non-personal and anonymized datasets from Central government entities.

Accessibility of this data to startups, Indian researchers, and stakeholders to spur data-led research and innovation.

Unified National Data Sharing Platform:

A unified platform to facilitate data sharing and exchange among various stakeholders including government bodies, private companies, academia, startups, and more.

Provision for monetizing non-personal data held by the Indian datasets platform.

Regulatory Framework and Approach

Regulation of AI:

India plans to introduce laws and regulations governing AI, considering its significant impact on the digital economy.

The approach involves a hybrid model combining elements from Europe (focused on citizens' rights) and the US (market-oriented regulation).

Potential Regulation for Big Tech Companies:

Consideration of directives to big tech companies like Facebook, Google, and Amazon to share anonymized personal data with a government-backed database.

Drafting of the Digital India Bill aiming to mandate tech giants to deposit non-personal data they possess into the India datasets platform.

Implementation and Future Considerations

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India's strategy to harness economic benefits from aggregated non-personal datasets aligns with recommendations from committees focusing on encouraging innovation while ensuring national security.

The Digital India Bill, including directives on AI regulation and data sharing, is expected to come into effect after the 2024 general election.

About Sovereign Artificial Intelligence

Definition and Significance:

Sovereignty in AI: Refers to a nation's capability to exercise control and authority over AI technologies developed, utilized, or deployed within its jurisdiction.

Significance: Sovereign AI emphasizes a nation's desire to protect its interests, ensure ethical AI usage, promote national security, drive economic growth, and maintain control over critical AI infrastructure and applications.

Components of Sovereign AI:

Regulatory Frameworks:

Governments create policies, laws, and regulations governing AI research, development, and deployment to ensure compliance with ethical standards, data privacy, security, and accountability.

National AI Strategies:

Nations formulate comprehensive strategies outlining AI development goals, investment plans, skill development, and ethical guidelines to drive innovation and competitiveness.

Data Sovereignty:

Emphasizes the control and ownership of data generated within a nation's borders, ensuring protection against unauthorized access, and regulating cross-border data flow.

Security and Defense:

Sovereign AI involves efforts to develop AI technologies for national security, defense, and surveillance while safeguarding against potential threats and vulnerabilities.

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Ethical AI Principles:

Incorporating ethical considerations into AI development and deployment to ensure fairness, transparency, accountability, and non-discrimination in AI systems.

Global Perspectives on Sovereign AI:

National Approaches: Various nations adopt unique strategies and policies:

China emphasizes "AI sovereignty" to control technology development and reduce dependency on foreign AI.

European Union's focus on "European AI" aims for ethical AI, data protection, and technological sovereignty.

India's "National AI Strategy" focuses on AI for social empowerment, economic growth, and addressing societal challenges.

Challenges and Considerations:

Ethical Dilemmas: Balancing sovereignty with global ethical standards and ensuring responsible AI use.

Data Privacy and Security: Safeguarding citizen data while enabling innovation and research.

AI Talent and Innovation: Developing skilled workforce and fostering innovation without stifling international collaboration.

Regulatory Harmonization: Achieving compatibility and consistency in AI regulations across borders for seamless global cooperation.

UAPA

Context: The arrest of students at an agriculture university in central Kashmir's Ganderbal district under the Unlawful Activities Prevention Act (UAPA) has sparked outrage and concerns about the misuse of the law.

Key Highlights

The UAPA is India's primary law dealing with offences of terrorism and subversive activities. However, it has been criticized for being broad and

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draconian, as it empowers the government to detain individuals for long periods without trial.

The use of UAPA against students for allegedly raising pro-Pakistan slogans has raised concerns about the misuse of the law to stifle dissent and freedom of expression.

The arrest has been condemned by various human rights groups and political parties. They have called for the release of the students and urged the government to repeal the UAPA.

Many have expressed concern that the use of UAPA against students will create an atmosphere of fear and intimidation on campuses.

While the allegations against the students are serious, it is important to note that they have not yet been proven in court. A thorough and impartial investigation is needed to determine the facts of the case. Due process must be followed, and the students should be given a fair trial.

This incident highlights the need for a review of the UAPA. The law should be amended to ensure that it is not used to target individuals for their political beliefs or expressions. There must be safeguards in place to prevent the misuse of the law and protect fundamental rights.

Unlawful Activities (Prevention) Act (UAPA)

The Unlawful Activities (Prevention) Act (UAPA) aims to prevent unlawful activities that threaten the sovereignty, integrity and security of India. The law was enacted in 1967 and has been amended several times since then, most recently in 2019.

It empowers the central government to designate any individual or association as unlawful or terrorist if they are involved in any activities that support or incite cession or secession of any part of India, or question or deny its territorial integrity.

It criminalizes the raising, receiving or providing of funds for terrorist acts, the membership or support of terrorist organizations, and the possession or transfer of proceeds of terrorism.

It provides for special courts to try offences under the act, and allows for prolonged detention of suspects without bail or charge.

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It presumes the accused to be guilty unless proven innocent and makes it difficult for them to challenge the evidence against them.

UNLF PEACE DEAL

The United National Liberation Front (UNLF), Manipur's oldest valley-based armed group, has signed a peace agreement with the central and state governments.

Details

On November 29, 2023, the Government of India, the Government of Manipur, and the UNLF signed a peace agreement in New Delhi. The agreement is a significant milestone in the pursuit of peace in the Northeast region of India.

The UNLF Peace Agreement is a significant milestone in the pursuit of peace in Manipur and the broader Northeast region. It represents the commitment of the UNLF to embrace peace, the government's dedication to conflict resolution, and the establishment of mechanisms to ensure sustainable peace and development.

Historical Background

The UNLF is a prominent insurgent group that emerged in 1964 as a result of the political and social grievances of the Manipuri people.

The group has been involved in armed resistance against the Indian state, both within and across the borders. The prolonged conflict has caused human rights violations, violence and instability, affecting the lives of the people in the region.

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The UNLF claims to represent the aspirations of the Manipuri people for self-determination and sovereignty.

Government's Approach

The North East region of India has witnessed several conflicts and insurgencies over the years, which have hampered its development and security. The Indian government has been committed to resolving these issues through dialogue and development.

The government has adopted a holistic approach that involves engaging with various armed groups, addressing their grievances and aspirations, and providing them with opportunities to join the national mainstream.

The government has also launched several schemes and projects to boost the region's infrastructure, connectivity, education, health, tourism, and culture, thereby creating a conducive environment for peace and prosperity.

Key Points of the Peace Agreement

Renunciation of Violence

The UNLF has agreed to abandon violence and join the mainstream.

This signifies a major shift from their militant past and marks a commitment to peaceful resolution.

The UNLF will honour the Constitution of India and the laws of the land, embracing democratic processes.

Conflict Resolution and Development

The agreement aims to end hostilities that have claimed lives on both sides for over 50 years.

It provides an opportunity to address the longstanding concerns of the Manipuri community.

This opens doors for development, socio-political progress, and addressing grievances.

Government's Role

Senior officials from the Union Home Ministry and the Government of Manipur actively participated in reaching this agreement.

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This demonstrates the government's commitment to facilitating peace processes and conflict resolution in the region.

Their involvement ensures coordinated efforts and support for the peace initiative.

Peace Monitoring Committee (PMC)

A PMC will be established to oversee the implementation of the agreement and enforce agreed-upon ground rules.

This ensures accountability and compliance from all parties involved.

The PMC will aim to maintain peace and order, fostering trust and transparency.

Impact and Future Prospects

Restoration of Peace: The agreement is expected to contribute significantly to restoring peace and normalcy in Manipur, reducing hostilities between armed groups and security forces.

- **Encouraging Participation:** The UNLF's return to the mainstream may encourage other valley-based armed groups to consider participating in peace processes, potentially leading to broader conflict resolution initiatives in the future.

- **Development Opportunities:** With reduced conflicts, there's a possibility of enhanced development initiatives, economic growth, and improved living conditions for the people in Manipur.

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