Mains Master

Beleaguered Indian media: Quo Vadis?

This article dives deep into the current state of Indian media, painting a concerning picture of sensationalism, misinformation, and compromised integrity.

Transformations Since 1991 Liberalization:

- Audiovisual media in India has undergone significant changes since liberalization in 1991.
- Economic growth, freedom from government control, and the internet have led to an explosion in media quantity but not necessarily quality.
- **News over Substance:** Driven by the "breaking news" obsession and TRP race, television news prioritizes sensation over accuracy, often blurring the lines between fact and speculation. This "trial by media" can have devastating consequences for reputations.
- **Social Media Amplifies the Problem**: Unverified "facts" and viral opinions on social media further fuel the fire, finding platforms in traditional media that lack proper fact-checking.
- **Print Media Falters Too**: Though better equipped for depth and analysis, print media also suffers from pressure to compete in the 24/7 cycle, leading to rushed publications and compromised standards.
- **Consequences for Democracy**: This freefall in journalistic ethics threatens the very foundation of democracy. Misinformed citizens make poor choices, and government accountability suffers when the media abdicates its watchdog role.

Media's Impact on Public Discourse:

- Rush to judgment by the media has become a weapon of mass distraction, trivializing public discourse.
- Distinctions among fact, opinion, and speculation have blurred, raising concerns about accountability in governance.

Role of Free Media in Democracy:

- Free media is essential for democracy, providing information for citizens to make informed choices and holding those in power accountable.
- The media's obsession with the superficial undermines its watchdog responsibility.

Concerns and Criticisms:

- Despite concerns, there is a strong commitment to a free press as a crucial component of democracy.
- Calls for better journalism rather than censorship or controls on the press.

The author, **Shashi Tharoor**, remains a strong advocate for a free press, but emphasizes the need for reform:

- **Fact-Checking and Accuracy:** Journalism schools and media organizations must prioritize fact-checking and accuracy. Breaking the news should not come at the cost of truth.
- **Better Training and Ethical Standards:** Accredited media institutes and newsrooms must instill values of accuracy, integrity, and fairness in journalists.
- **Diverse Perspectives:** Echo chambers must be broken. Newsrooms should welcome diverse viewpoints and present alternative perspectives.
- **Audience Engagement:** Fostering trust and engagement with viewers/readers is crucial. The Hindu's ombudsman model serves as a good example.
- **Limited Media Ownership:** Laws and regulations must prevent single entities (political or business) from controlling multiple media outlets to ensure a robust and independent press.
- **Independent Oversight:** A single independent body for print and television news, as recommended by various committees, could limit corporate and political influence and promote media standards.

Despite the challenges, the author remains optimistic about the future:

- India's growing literacy rate holds promise for a more informed and media-savvy public.
- An ethical and responsible media can contribute to a more informed, educated, and politically aware India, ready to hold its leaders accountable and its citizens empowered.

In conclusion, the article calls for a collective effort to revive Indian media's integrity and fulfill its democratic responsibility. Only then can India truly take its place as a responsible global player and a model democracy for the 21st century.

Smaller citizens

India's Education System: Progress and Challenges Revealed by ASER 2023

The Annual Status of Education Report (ASER) 2023, titled "Beyond Basics," highlights both successes and shortcomings in India's educational landscape, particularly for rural youth aged 14-18. Here's a comprehensive breakdown:

Key Findings:

- Learning Deficits: Over half struggle with basic math, acquired in grades 3-4, indicating foundational gaps. 25% can't read a Class 2 level text in their mother tongue.
- Enrollment Trends: Overall enrollment (86.8%) is positive, but drops significantly with age (3.9% at 14 vs. 32.6% at 18).
- Stream Choices: Humanities dominate higher grades, with girls lagging in science (28.1% vs. 36.3% boys) and vocational training (5.6%).
- Digital Access: Smartphone use is high (90%), but online safety awareness is lacking.

Concerns and Implications:

- Learning Gaps: The struggles in basic skills like reading and math point to potential deficiencies in the early primary grades.
- High School Dropouts: Rising dropout rates after Class 8 indicate challenges with the higher secondary curriculum, potentially needing adjustments.
- Gender Disparity: Girls' underrepresentation in Science and vocational training raises questions about equal access and opportunity.
- Digital Literacy Concerns: High smartphone usage coupled with low online safety awareness poses potential risks.

Policy and Solutions:

- NIPUN Bharat Mission: The government's focus on foundational literacy and numeracy under this mission shows promise, but requires further attention to bridge the gaps.
- Curriculum Review: Aligning the higher secondary curriculum with students' abilities and interests could reduce dropouts and improve engagement.
- Equity and Inclusion: Addressing gender disparities and providing additional support for vulnerable groups are crucial for equitable access and outcomes.
- Digital Safety Education: Integrating online safety education into the curriculum is essential to empower youth in the digital age.

Overall, ASER 2023 paints a mixed picture. While rising enrollment and digital access are positive, learning deficits, high dropouts, and gender disparities demand urgent attention. By prioritizing foundational skills, adapting curricula, promoting equity, and integrating digital safety education, India can create a more effective and inclusive education system for its youth.

How satellites track the weather

Understanding Weather Maps and Indian Satellites

This article delves into how Indian satellites track weather and explains the meaning behind the colors on weather maps. Here's a comprehensive breakdown:

Decoding Colors on Weather Maps:

- INSAT 3D and 3DR satellites: These use sensors to capture data in different wavelengths, influencing the image colors.
- Day Microphysics:
  - Visible radiation (0.5 µm) determines green intensity.
  - Shortwave infrared (1.6 µm) determines red intensity.
  - Thermal infrared (10.8 µm) determines blue intensity.
- Night Microphysics:
  - Thermal infrared differences (12 µm - 10 µm) determine red intensity.
  - Thermal infrared and middle infrared differences (10.8 µm - 3.9 µm) determine green intensity.
  - Thermal infrared (10.8 µm) determines blue intensity.
- Color Interpretation:
  - Red: Strong in mature storm clouds, weak in snow due to high absorption.
  - Green: Indicates lower clouds.
  - Blue: Represents cold objects like high clouds and snow.

Tracking Specific Weather Phenomena:

- Snow: Identified by weak red (due to high solar reflectance) and strong green (due to low shortwave infrared absorption).
- Clouds: Different types can be distinguished based on color combinations. High, heavy cloud systems appear mixed with lower clouds as different color shades.
- Thunderstorms: Proposed day/night microphysics data combinations may indicate impending storms.

Satellite Data Collection:

- Radiometers: Measure radiation properties like temperature and electrical activity.
- Atmospheric Sounders: Measure temperature, humidity, and water vapor distribution.
- Combined Data: Provides insights into various atmospheric characteristics.

Evolution of Indian Weather Satellites:

- Kalpana 1 (2002): Carried an early VHRR and data-relay transponder.
- INSAT 3A (2003): Improved VHRR with higher resolution.
- INSAT 3D (2016): Significant advancements in radiometer and additional sounder, data-relay, and search-and-rescue transponders.
- INSAT 3DR (2016): Further refinements over 3D.
- Upcoming INSAT 3DS (2024): Expected launch with enhanced capabilities.

Prelims Booster

GM crops will make edible oil cheaper: govt.

- ⚖️ Supreme Court Hearing on GM Mustard: The Supreme Court listened to the government's arguments on growing Genetically Modified (GM) crops, particularly mustard, emphasizing the potential benefits for India's food security and reducing foreign dependency.
- 🌾 Government's Argument: The government asserts that cultivating GM crops, like mustard, will make quality edible oil more affordable, aiming to enhance food security and reduce foreign dependence, with statistics indicating a growing demand for edible oil due to the increasing population.
- 🛢️ Edible Oil Demand and Import Statistics: India's total edible oil demand, met significantly through imports, highlights the need for domestic production to reduce dependency on foreign sources.
- 🌱 Open Field Testing and Environmental Concerns: The government defended open field testing of GM crops, highlighting controlled circumstances and expert guidance, while petitioners raised concerns about environmental damage.
- 🌾 Benefits of GM Mustard: The government claims that GM mustard has shown increased yield and could address economic losses due to weeds in India.
- 🚦 Challenges to Regulatory System: Petitioners challenge the commercial release of GM mustard, citing concerns about the regulatory system's conflict of interest, particularly regarding the Genetic Engineering Appraisal Committee (GEAC).
- 🌍 Global Context: The government points out India's existing import of Canola oil largely from GM canola seeds and a significant amount of soybean oil, highlighting the prevalence of GM soybean cultivation globally.

Subcategorisation of SCs: panel to look into even distribution of benefits

- 🪵 Formation of Committee for SC Sub-Categorization: The Union government has constituted a five-member committee of Secretaries, chaired by the Cabinet Secretary, to assess and devise a method for the fair distribution of benefits, schemes, and initiatives among over 1,200 Scheduled Castes (SCs) in India, in response to the demand for sub-categorization of SCs, particularly raised by the Madiga community in Telangana.
- 📚 Context of the Committee's Formation: The Madiga community's advocacy for sub-categorization, the ongoing Supreme Court hearing on the constitutionality of sub-categorization, and the committee's focus on addressing grievances through strategies like special initiatives without delving into questions of reservation.
- 📋 Committee's Mandate and Composition: The committee, formed earlier this month, includes Secretaries from the Home Ministry, Law Ministry, Tribal Affairs Ministry, and Social Justice Ministry, with explicit instructions not to discuss reservation matters and to focus on alternative strategies to address grievances within the SC community.
- ⚖️ Historical Attempts at Sub-Categorization: Historical attempts at sub-categorization in states and at the Union level, along with the challenges and requirements for sub-categorization, including the need for empirical evidence and a 100% caste census.
- ⚖️ Ongoing Supreme Court Hearing: The ongoing seven-judge Supreme Court Bench's examination of the constitutionality of sub-categorization in relation to SCs and STs, and the government's committee's aim to explore solutions to address grievances within SC communities without infringing on ongoing legal proceedings.

The importance of periodic testing for human pappilomavirus

- 🩺 Cervical Cancer in India: Cervical cancer is the second-most common cancer among women in India, accounting for nearly a quarter of global cervical cancer deaths, with around 1.25 lakh new cases and 75,000 deaths annually.
- 🎯 WHO's 2022 Strategy: The World Health Organisation's strategy aims to eliminate cervical cancer globally by 2030, focusing on HPV vaccination coverage, screening, and treatment for women with cervical disease.
- 📈 India's Progress and Challenges: India has seen a decline in cervical cancer incidence, attributed to factors such as sexual hygiene, age of pregnancy, contraception use, and individuals' immune status, with a need for awareness programs, vaccination, and regular screening.
- 💉 Government's Plans and Vaccination Programs: India has two available vaccines, with plans to include the HPV vaccine in the Universal Immunisation Programme (UIP), targeting girls aged nine to 14, and a phased rollout over three years.
- 🌍 Global Context and Paediatrician Recommendations: Globally, 100 countries have introduced the HPV vaccine, with paediatricians recommending early dosing for maximum efficacy and protection, emphasizing the vaccine's benefits for adults up to the age of 45.