

Mains Master

Drug war

Context

The article delves into antimicrobial resistance (AMR) in India, exploring survey revelations (Covered in THS), the drivers of antibiotic misuse, broader contextual factors beyond healthcare, proposed solutions, and a call for collective action. It emphasizes the prevalence of broad-spectrum antibiotics, regional variations, and misuse drivers like patient pressure and economic incentives. It highlights the need for interventions in healthcare education, stricter regulations, alternative therapies, and community engagement to combat AMR effectively. The goal is to promote responsible practices and research while involving multiple stakeholders for a concerted effort in addressing this global health challenge.

A Deeper Dive into Antimicrobial Resistance in India:

1. Expanding on the Survey's Revelations:

- **Types of antibiotics:** The survey didn't just reveal high overall antibiotic use, but also highlighted the prevalence of broad-spectrum antibiotics with high AMR potential. This is particularly concerning because it increases the selection pressure for resistant bacteria.

- **Regional variations:** The survey covered 15 states and 2 UTs, but data suggests regional variations in antibiotic use patterns. Understanding these variations can help tailor interventions to specific regions.

- **Hospital types:** The survey focused on tertiary care hospitals, but AMR is also a concern in primary care and community settings. Investigating antibiotic use across different healthcare levels is crucial.

2. Unpacking the Drivers of Misuse:

- **Knowledge gaps:** Many healthcare providers, especially in private settings, may lack adequate knowledge or training on appropriate antibiotic use and AMR risks.

- **Patient pressure:** Patients often demand antibiotics, even for self-diagnosed conditions or viral infections. This pressure can influence doctors' prescribing decisions.

- **Economic incentives:** In private healthcare, financial incentives may encourage prescribing unnecessary antibiotics or broad-spectrum drugs.

- **Availability and affordability:** Easy access to and affordability of antibiotics, even without prescriptions, contributes to misuse in communities.

3. Beyond Healthcare: Addressing the Wider Context:

- **Antibiotic use in agriculture and animal husbandry:** Use of antibiotics as growth promoters in livestock contributes to AMR development and transfer to humans through food and the environment.

- **Environmental pollution:** Improper disposal of pharmaceutical waste from healthcare and animal farms contaminates water and soil, further promoting the spread of resistant bacteria.

- **Lack of public awareness:** Many people still don't understand AMR's threat and continue misusing antibiotics. Public education campaigns are crucial to change behavior.

4. Tackling AMR: A Multi-pronged Approach:

- **Strengthening regulations:** Governments need to enforce stricter regulations on antibiotic sales, distribution, and prescribing practices.

- **Improving healthcare education:** Investing in training and education for healthcare professionals on AMR and rational antibiotic use is essential.

- **Promoting alternative therapies:** Supporting research and development of non-antibiotic therapies for common infections can reduce reliance on antibiotics.

- **Strengthening surveillance and research:** Continuously monitoring AMR trends and investing in research on new antibiotics and diagnostic tools are crucial.

- **Community engagement:** Public awareness campaigns and education programs are needed to promote proper antibiotic use and responsible hygiene practices.

Bringing back the faith in India's politics

Context

The article navigates India's democracy crisis, advocating for issue-centric politics over blind loyalty, proposing the abolition of anti-defection laws, emphasizing responsible journalism, and calling for unity among diverse stakeholders to strengthen democracy, positioning India as a global model of unity in diversity for a just society.

Eroding Trust: A Crisis at the Crossroads

India, the world's largest democracy, stands at a critical juncture. While its size and influence command respect on the global stage, its domestic political landscape is marred by a crisis of trust. Partisan tactics have replaced constructive dialogue, and the very foundations of democracy tremble under the weight of mistrust. This erosion of trust manifests in multiple ways. The ruling government exhibits an impatience with democratic niceties, wielding state power to silence dissent and disregarding established norms. On the other side, sections of the opposition prioritize embarrassing the government over engaging in meaningful dialogue. This relentless negativity fuels cynicism and threatens to unravel the tapestry of Indian democracy.

Restoring Faith: A Multi-Pronged Approach

However, amidst this bleak scenario, hope persists. The article proposes a multi-pronged approach to navigate this crisis and rekindle trust in Indian democracy.

Party Members as Agents of Change:

The onus first lies with party members across the political spectrum. They must reject the blind tribalism that demands unquestioning loyalty and instead push their parties towards a focus on substantive issues. This requires resisting the pressure to defend the indefensible and prioritizing dialogue and finding common ground for the public good.

Reforming the System: Abolishing the Anti-Defection Law

Individuals concerned about the health of democracy, regardless of their political leanings, can advocate for the removal of the controversial anti-defection law. This law, while aiming to prevent party hopping, ironically hinders internal party democracy and discourages issue-based collaboration across party lines. Its abolition would pave the way for a more fluid political landscape where compromise and cooperation can flourish.

Media as a Force for Good: Rebuilding Trust Through Responsible Journalism

Finally, the media must play its part in rebuilding trust. Journalists and media institutions have a crucial responsibility to promote responsible reporting that prioritizes public interest over sensationalism. Only through a conscious shift towards ethical journalism can the media regain its role as a vital pillar of a healthy democracy.

Drawing Inspiration: Lessons from Israel

This article draws inspiration from recent events in Israel, where diverse stakeholders united in large-scale protests against government overreach. This provides a glimmer of hope for India, suggesting that concerned citizens from across the ideological spectrum can come together to preserve their fragile democracy.

A Call to Action: For a Collective Reclaiming of Democracy

The message is clear: India's future as a beacon of hope for global democracy hinges on a collective effort. Party members must break free from blind loyalty, advocates must challenge harmful laws, and the media must uphold its ethical responsibility. Only through such concerted action can India reclaim its democratic ideals and inspire others to do the same. The challenge is immense, but the potential rewards are equally vast. If India can navigate this crisis and emerge as a vibrant and trustworthy democracy, it will not only serve its own citizens but also offer a powerful example to the world of how diverse people can come together to create a just and equitable society.

- Dedicated forest staff protect and manage the reserve, facing dangers like stalking tigers and rogue elephants.

- **Improved practices:** timely wages, rations, weapons, medical help for staff; engagement with senior officials for experience sharing and policy shaping.

- Multi-pronged approach to forest and wildlife management:

- Grassland management for prey animals like cheetal and sambhar.

- Strategic placement of solar-pump fed water holes for wildlife needs.

- Development of wildlife corridors for gene pool exchange and sustainable management.

- Robust poaching control through intensive patrolling and digital surveillance.

Challenges:

- **Human-wildlife conflict:**

- Rise in tiger population leads to attacks on

livestock and villagers venturing into buffer zones.

- Privately owned land and construction activities limit animal movement.

- **Need for community benefit:**

- Villagers around the reserve face risks and crop raids but also depend on ecotourism for employment.

- Forest department needs to be collaborative and socio-culturally sensitive to gain "willing cooperation" from villagers.

Initiatives:

- **Beehive-fencing project:** strategically placed beehives deter elephants from raiding crops.

- **"Living with Tigers" initiative:** educates villagers and school children about human-wildlife conflict and safety measures.

Overall:

- Corbett Tiger Reserve is a success story in wildlife conservation but faces challenges like human-wildlife conflict and the need for community benefit.

- Collaborative efforts and public initiatives are crucial for the future of the reserve, its wildlife, and its people.

Prelims Booster

The revival of the tiger, Corbett Tiger Reserve: A Story of Conservation Success and Challenges

Context

The article focuses on the increase in tiger count at Jim Corbett National Park, the vital role of forest staff, management strategies for wildlife and habitats, and initiatives engaging local communities in conservation efforts. Success of the conservation effort can be quoted in essay and GS answers.

Conservation Success:

- Tiger population increased: 231 in 2018 to 260 in 2022, highest density in the world.
- Richly forested and biodiverse landscape attracts researchers, tourists, and conservationists.

Cabinet gives nod to 'Prithvi' programme for earth observation

🔍 Initiative Name: Prithvi Vigyan (PRITHVI)

💰 Total Funds Allocated: Rs 4,797 crore over five years


🎯 Purpose: Integrating research efforts across different sub-schemes related to Earth Sciences under the Ministry of Earth Sciences (MoES)


🌐 Sub-schemes Covered:


- Atmosphere and Climate Research-Modelling Observing Systems and Services
- Ocean Services, Modelling Application, Resources, and Technology


Zuari Farmhub launches nano fertilizers

Nanofertilizers are specialized nutrients encapsulated or coated within nanomaterials, allowing for controlled release and slow diffusion of nutrients into the soil.


 **Controlled Release:** Nanofertilizers gradually release nutrients, reducing leaching, degradation, and nutrient loss by runoff.


 **Enhanced Efficiency:** High surface area to volume ratio allows efficient delivery of nutrients to plants.


 **Environmental Benefits:** Minimize environmental hazards by reducing leaching and runoff.

 **Agronomic Advantages:** Stimulate plant growth processes and stress tolerance, potentially increasing crop yield and quality.

India to set up 'specific trade zone' in UAE


 **Purpose:** Bharat Park in the UAE serves as an India-specific trade zone to showcase and store goods made in India for global audiences.

 **Objective:** Facilitate global sales of Indian goods with secured payments in the UAE.

 **Quality Assurance Initiatives:**

- Bureau of Indian Standard (BIS): Allocating ₹40 crore to establish 21 testing laboratories across India.

- Emphasis on Quality: Encouraging the industry to maintain high-quality standards for exported goods.

 **Textile Industry Focus:**

- Man Made Fibre Textiles: Highlighting the potential of the synthetic and rayon textile industry due to limitations in cotton supply.

- Export Concerns: Reports a 9% decline in man-made fiber textile exports but a marginal improvement in technical textile exports.


- Optimistic Outlook: Aims to surpass \$6 billion in textile exports and \$3 billion in technical textile shipments in this fiscal year.


 **Trade Agreements and Future Goals:**


- Encouraging Utilization: Urging the industry to leverage free trade agreements with Japan, Australia, UAE, and South Korea.

- Export Targets: Aiming to achieve government targets of \$11 billion in man-made fiber and \$10 billion in technical textiles exports by 2030.

Corbett National Park

 **Establishment:** Formed in 1936 during the British Raj as Hailey National Park, named after William Malcolm Hailey, the United Provinces' governor. 1st National Park of India

 **Renaming:** In 1956, after India gained independence, it was renamed Corbett National Park in honor of Jim Corbett, a renowned hunter and naturalist, who played a pivotal role in the park's establishment.

 **Project Tiger:** The first national park to be included in the Project Tiger initiative, emphasizing the conservation of tigers and their habitats.

- Polar Science and Cryosphere Research
- Seismology and Geosciences
- Research, Education, Training, and Outreach

Key Highlights:

- **Holistic Approach:** Focuses on earth system sciences as one integrated unit
- **Cross-disciplinary Projects:** Enables combined research efforts
- **Facilitation of Research:** Aims to streamline and simplify research processes


Objectives:


- Long-term observation and recording of vital signs of the earth system and changes
- Development of modeling systems for weather, ocean, and climate hazard prediction
- Exploration of polar and high seas regions for new phenomena and resources
- Technology development for sustainable harnessing of oceanic resources


Implementation:


- Involves collaboration among 10 research institutes under MoES
- Utilization of oceanographic and coastal research vessels for required research support


India's GDP is estimated to grow by 7.3%, says NSO


 **GDP Growth Estimate:** Predicted at 7.3% for 2023-24, slightly surpassing the RBI's projection of 7%


 **Concerns:** Weak consumption growth at 4.4%, potential fiscal deficit breach


 **Sectoral Insights:** Agriculture and certain service sectors show a slowdown, while manufacturing and construction maintain robust growth


 **Expert Opinions:** Economists caution that some estimates might be overly optimistic, especially regarding agricultural output and consumption spends

 **NSO's Caution:** Estimates are preliminary and subject to revisions based on improved data coverage and subsequent economic indicators

 **Establishment:** Ministry of Statistics and Programme Implementation formed on 15.10.1999 after the merger of the Department of Statistics and the Department of Programme Implementation

 **Structure:** Two wings - Statistics and Programme Implementation

 **Statistics Wing:** Includes the National Statistical Office (NSO) comprising the Central Statistical Office (CSO), the Computer center, and the National Sample Survey Office (NSSO)

 **Programme Implementation Wing:** Comprises the Twenty Point Programme, Infrastructure Monitoring and Project Monitoring, and Member of Parliament Local Area Development Scheme divisions

