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छह देशों के राजदूतों ने राष्ट्रपति को अपने प्रत्यय पत्र सौंपे



- छह देशों के राजदूतों ने राष्ट्रपति को अपने प्रत्यय पत्र सौंपे।
- संबंधित देशों: दक्षिण कोरिया, त्रिनिदाद और टोबैगो, वेलारूस, युगांडा, कंबोडिया, अज़रबैजान।
- औपचारिक रूप से राजनयिक कार्यकाल की शुरुआत का प्रतीक।
- भारत के द्विपक्षीय संबंधों को सुदृढ़ करता है।
- शिष्टाचार के अनुसार राज्यघटन में समारोह।

मूल्य संवर्धन: यह प्रक्रिया वियना अभिसमय (1961) द्वारा शासित है।

कीवर्ड्स: प्रत्यय पत्र, कूटनीति, द्विपक्षीय संबंध, वियना अभिसमय

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भारत-EFTA TEPA: भारत के समुद्री खाद्य क्षेत्र के लिए अवसर



- भाणिज्य विभाग द्वारा चिंतन शिविर का आयोजन।
- विषय: भारत-EFTA TEPA के तहत समुद्री खाद्य क्षेत्र के अवसर।
- EFTA सदस्य: स्विटजरलैंड, नॉर्वे, आइसलैंड, लिश्टेनस्टीन।
- बेहतर बाजार पहुंच और निर्यात अवसर।
- तटीय आजीविका, ब्लू इकॉनॉमी और मूल्य संवर्धन को बढ़ावा।

मूल्य संवर्धन: TEPA व्यापार, निवेश, प्रौद्योगिकी और रोजगार सृजन को बढ़ाएगा।

कीवर्ड्स: EFTA, TEPA, समुद्री खाद्य, ब्लू इकॉनॉमी, व्यापार साझेदारी

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INS महेंद्रगिरी: छठा प्रोजेक्ट 17A स्वदेशी स्टेल्थ फ्रिगेट



- भारतीय नौसेना में INS महेंद्रगिरी का कमीशन किया जाएगा।
- प्रोजेक्ट 17A का छठा स्वदेशी स्टेल्थ फ्रिगेट।
- निर्मित: गार्डन रीच शिपविल्डर्स एंड इंजीनियर्स (GRSE), कोलकाता।
- उन्नत स्टेल्थ डिजाइन, सेंसर और हथियार।
- मल्टी-रोल: एंटी-एयर, एंटी-सर्फेस और एंटी-सबमरीन युद्ध।
- आत्मनिर्भर भारत और समुद्री सुरक्षा को मजबूती।

मूल्य संवर्धन: प्रोजेक्ट 17A 'मेक इन इंडिया' का प्रमुख रक्षा प्रोजेक्ट।

कीवर्ड्स: प्रोजेक्ट 17A, स्टेल्थ फ्रिगेट, नौसेना, आत्मनिर्भर भारत

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CAQM ने NCR में प्रवर्तन कार्रवाइयों की समीक्षा की



- NCR में प्रवर्तन कार्रवाइयों की समीक्षा की।
- 17 दिनों में 173 निरीक्षण किए गए।
- अनुपालन स्थिति और क्षेत्र-विशेष जांच पर ध्यान।
- वायु प्रदूषण नियंत्रण और शमन को लक्ष्य।
- CAQM अधिनियम, 2021 के तहत स्थापित।
- क्षेत्राधिकार: दिल्ली, हरियाणा, पंजाब, राजस्थान, यूपी (NCR क्षेत्र)।

मूल्य संवर्धन: GRAP लागू करने और वायु गुणवत्ता प्रबंधन में प्रमुख भूमिका।

कीवर्ड्स: CAQM, NCR, वायु प्रदूषण, अनुपालन, GRAP

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उच्च-रिजॉल्यूशन रेडियो अध्ययन से व्यापक ब्लैक होल गतिविधि का खुलासा



- निकटवर्ती आकाशगंगाओं में मंद ब्लैक होल गतिविधि का पता चला।
- उच्च-रिजॉल्यूशन रेडियो अवलोकन किए गए।
- आकाशगंगा विकास और सुपरमैसिव ब्लैक होल को समझने में मदद।
- सक्रिय गैलेक्टिक न्यूक्लियस (AGN) की जानकारी मिलती है।
- भारत की अंतरिक्ष एवं खगोल विज्ञान में बढ़ती क्षमता को दर्शाता है।
- भविष्य की अंतरिक्ष मिशनों और वेधशालाओं के लिए महत्वपूर्ण।

मूल्य संवर्धन: ब्लैक होल के अध्ययन से ब्रह्मांड की उत्पत्ति और विकास की समझ गहरी होती है।

कीवर्ड्स: ब्लैक होल, रेडियो खगोल विज्ञान, galaxy evolution, AGN, अंतरिक्ष अनुसंधान

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BRICS महिला कार्य समूह बैठक कोच्चि में प्रारंभ



- BRICS महिला कार्य समूह बैठक कोच्चि में शुरू हुई।
- ध्यान: महिला सशक्तिकरण, लैंगिक समानता, वित्तीय समावेशन और नेतृत्व।
- समावेशी विकास और सामाजिक उन्नति को बढ़ावा।
- BRICS देशों के बीच सहयोग को सशक्त बनाना।
- वैश्विक मंचों पर भारत का नेतृत्व सुदृढ़।

मूल्य संवर्धन: SDG-5 (लैंगिक समानता) के लक्ष्य के अनुरूप।

कीवर्ड्स: BRICS, महिला सशक्तिकरण, लैंगिक समानता, SDG-5

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सॉकर से समृद्धि (PIB बैकग्राउंडर) भारत के चीनी क्षेत्र का रूपांतरण



- चीनी क्षेत्र और किसानों की आय बढ़ाने का विजन।
- उत्पादकता, मूल्य संवर्धन और स्थिरता पर जोर।
- इथेनॉल उत्पादन, को-जनरेशन और उप-उत्पादों को बढ़ावा।
- इथेनॉल ब्लेंडिंग और ऊर्जा सुरक्षा में योगदान।
- सहकारी चीनी मिलों और ग्रामीण अर्थव्यवस्था को सशक्त बनाना।
- जैव ईंधन और परिपत्र अर्थव्यवस्था के अनुरूप।

मूल्य संवर्धन: EBP कार्यक्रम, राष्ट्रीय जैव ईंधन नीति, 2018, PM-JI-VAN योजना से जुड़ा।

कीवर्ड्स: चीनी क्षेत्र, इथेनॉल, जैव ईंधन, को-जनरेशन, ग्रामीण अर्थव्यवस्था

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आयुष्मान भारत डिजिटल मिशन (PIB बैकग्राउंडर)



- समेकित डिजिटल स्वास्थ्य पारिस्थितिकी तंत्र का निर्माण।
- घटक: ABHA ID, हेल्थ फॅसिलिटी रजिस्ट्री, हेल्थ प्रोफेशनल रजिस्ट्री, पर्सनल हेल्थ रिकॉर्ड्स, DigiDoctor।
- स्वास्थ्य सेवाओं की निरंतरता और डिजिटल इंटरऑपरेबिलिटी।
- पोर्टेबिलिटी, पहुंच, पारदर्शिता और दक्षता में वृद्धि।
- डिजिटल इंडिया और यूनिवर्सल हेल्थ कवरेज को समर्थन।

मूल्य संवर्धन: 2021 में लॉन्च; MoHFW की प्रमुख डिजिटल हेल्थ पहल।

कीवर्ड्स: ABDM, ABHA ID, डिजिटल हेल्थ, इंटरऑपरेबिलिटी, UHC

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इंडियनहैंडमेड: भारत की शिल्प विरासत के लिए डिजिटल प्लेटफॉर्म (PIB बैकग्राउंडर)



- कारीगरों और शिल्पकारों के लिए राष्ट्रीय डिजिटल मार्केटप्लेस।
- पारंपरिक शिल्प, हस्तशिल्प और GI उत्पादों को बढ़ावा।
- बाजार पहुंच, आजीविका और निर्यात को बढ़ाना।
- MSMEs और ग्रामीण उद्यमिता को समर्थन।
- 'वोकल फॉर लोकल' और 'मेक इन इंडिया' को सशक्त बनाना।

मूल्य संवर्धन: संस्कृति, अर्थव्यवस्था और डिजिटल सशक्तिकरण का संगम।

कीवर्ड्स: हस्तशिल्प, GI उत्पाद, डिजिटल प्लेटफॉर्म, MSME, डिजिटल इंडिया

अन्य महत्वपूर्ण एक-लाइनर



प्रधानमंत्री ने दलाई लामा को जन्मदिन की शुभकामनाएं दी और दीर्घायु की कामना की।



लोकसभा अध्यक्ष ने डॉ. श्यामा प्रसाद मुखर्जी की जयंती पर श्रद्धांजलि अर्पित की।



सहकारिता मंत्रालय ने 5वां सहकारिता दिवस मनाया।



केंद्रीय मंत्री अमित शाह ने 5वां सहकारिता दिवस समारोह को संबोधित किया।



इस्पात क्षेत्र ने वित्त वर्ष 2026 की पहली तिमाही में रिकॉर्ड वृद्धि दर्ज की।

1 Six Envoys Present Credentials to the President of India



- Six envoys presented credentials to President of India.
- Countries: Republic of Korea, Trinidad & Tobago, Belarus, Uganda, Cambodia, Azerbaijan.
- Marks the formal start of diplomatic tenure.
- Strengthens India's bilateral engagement and cooperation.
- Ceremony held as per diplomatic protocol.
- Reflects India's active global diplomacy.

Value Add: Governed by Vienna Convention on Diplomatic Relations, 1961.

Keywords: Credentials, Diplomacy, Bilateral Ties, Vienna Convention

2 India-EFTA TEPA: Opportunities for India's Seafood Sector



- Chintan Shivir organised by Dept. of Commerce.
- Focus on opportunities under India-EFTA TEPA.
- EFTA members: Switzerland, Norway, Iceland, Liechtenstein.
- Better market access for seafood exports.
- Supports coastal livelihoods & Blue Economy.
- Promotes sustainable fisheries & value addition.

Value Add: TEPA will boost trade, investment, technology & job creation.

Keywords: EFTA, TEPA, Seafood, Blue Economy, Trade Partnership

3 INS Mahendragiri: Sixth Project 17A Indigenous Stealth Frigate



- Indian Navy to commission INS Mahendragiri.
- Sixth ship of Project 17A indigenous stealth frigate.
- Built by Garden Reach Shipbuilders & Engineers.
- Equipped with advanced weapons, sensors & stealth features.
- Multi-role: anti-air, anti-surface, anti-submarine.
- Boosts Aatmanirbhar Bharat & maritime security.

Value Add: Enhances blue-water capability & self-reliance in shipbuilding.

Keywords: Project 17A, Stealth Frigate, Indigenous, Maritime Security

4 CAQM Reviews Enforcement Across NCR



- CAQM reviewed enforcement actions across NCR.
- 173 inspections conducted in 17 days.
- Focus on compliance status & sector-specific checks.
- Targets air pollution mitigation & compliance.
- Established under CAQM Act, 2021.
- Jurisdiction: Delhi, Haryana, Punjab, Rajasthan, UP (NCR areas).

Value Add: Key role in implementing air quality plans & GRAP in NCR.

Keywords: CAQM, NCR, Inspections, Air Pollution, Compliance

5 High-resolution Radio Study Reveals Widespread Black Hole Activity



- Study reveals widespread faint black hole activity in nearby galaxies.
- Detected using high-resolution radio observations.
- Provides insights into galaxy evolution & supermassive black holes.
- Strengthens India's contribution to global astronomy research.
- Supports future space missions & observatories.

Value Add: Helps understand Active Galactic Nuclei (AGN) & cosmic evolution.

Keywords: Black Holes, Radio Astronomy, Galaxy Evolution, AGN

6 BRICS Women's Working Group Meeting Begins in Kochi



- BRICS Women's Working Group Meeting begins in Kochi.
- Focus on women empowerment, gender equality, financial inclusion & leadership.
- Strengthens cooperation among BRICS nations.
- Promotes inclusive growth & social development.
- Supports India's leadership in global forums.

Value Add: Aligns with SDG-5 (Gender Equality) & Nari Shakti initiatives.

Keywords: BRICS, Women Empowerment, Gender Equality, SDG-5

7 Sakhar Se Samridhi (PIB Backgrounder) Transforming India's Sugar Sector



- Vision to transform sugar sector & farmer income.
- Focus on productivity, value addition & sustainability.
- Promotes ethanol production, cogeneration & by-product utilisation.
- Supports ethanol blending & energy security.
- Strengthens cooperatives & rural economy.
- Aligns with biofuel & circular economy goals.

Value Add: Supports EBP Programme, National Biofuel Policy & rural growth.

Keywords: Sugar Sector, Ethanol, Biofuel, Cooperatives, Circular Economy

8 Ayushman Bharat Digital Mission (PIB Backgrounder)



- Creates interoperable digital health ecosystem.
- Key components: ABHA ID, Health Facility Registry, DigiDoctor, Personal Health Records.
- Enables continuity of care & data-driven services.
- Improves accessibility, portability & efficiency.
- Supports Digital India & Universal Health Coverage.

Value Add: Launched in 2021; under MoHFW; key pillar of digital health.

Keywords: ABDM, ABHA ID, Digital Health, Interoperability, UHC

9 Indianhandmade: A Digital Platform for India's Craft Heritage (PIB Backgrounder)



- National digital marketplace for artisans & crafts.
- Promotes traditional crafts, handlooms & GI products.
- Enhances market access, livelihoods & exports.
- Supports MSMEs, self-reliance & cultural heritage.
- Part of Digital India & Vocal for Local vision.

Value Add: Empowers artisans; preserves heritage; promotes rural economy.

Keywords: Handicrafts, Artisans, Digital Platform, MSMEs, GI Products

Other Important One-Liners



PM extended greetings to Dalai Lama on his birthday.



Lok Sabha Speaker paid floral tributes to Dr. Syama Prasad Mookerjee on his birth anniversary.



Ministry of Cooperation celebrated 5th Foundation Day of the Ministry of Cooperation.



Union Minister of State reviews progress of NHMLM projects.



India's Steel Sector records growth in Q1 FY 2026.

India needs a second home for Asiatic lions

India's conservation of the Asiatic lion is widely celebrated as a remarkable success story. From a population which was reduced to just a few dozen in the early 20th century, the number of Asiatic lions has increased to approx. 891 today. Yet, behind this achievement lies a persistent policy failure: the inability to establish a second, geographically separate population. Scientific institutions, government bodies, and even the Supreme Court have long warned that without such a step, the species remains vulnerable to extinction from a single catastrophic event.

A second dwelling

The need for a second home for Asiatic lions is rooted in decades of government-backed research. Multiple reports of the Wildlife Institute of India have consistently emphasised that a single population confined to one landscape is inherently vulnerable. Studies conducted since the 1980s have concluded that threats such as epidemics, forest fires, or other natural disasters could potentially wipe out the entire species if it remains geographically concentrated.

This scientific consensus was formally acknowledged in the landmark Supreme Court judgment of April 15, 2013, which directed the translocation of Asiatic lions from Gujarat's Gir forest to the Kuno National Park in Madhya Pradesh. The Court made it clear that conservation must be guided by ecological principles rather than regional considerations. The judgment explicitly recognised the risk that a single calamity could eliminate the entire population if it remained confined to one location.

Despite this clear directive, the translocation project has been stalled for over a decade. Gujarat has consistently resisted the relocation of lions outside the



Richa Singh

Senior Consultant at EY India, with a focus on forest management, wildlife conservation and biodiversity assessment

Reports by the Wildlife Institute of India have consistently emphasised that a single population confined to one landscape is inherently vulnerable



An Asiatic lioness with her two cubs at the Sakkarbaugh Safari breeding centre in Junagadh in 2025. VIJAY SONEJI

State, citing its success in conserving the species and raising concerns about habitat suitability elsewhere. This has created a policy impasse between scientific recommendations, judicial mandates, and State-level political considerations. While the Kuno National Park was prepared specifically to host the lions – by relocation of villages and habitat restoration among others – no lions have been introduced there.

Meanwhile, the ecological risks identified by experts have only intensified. The concentration of the entire global population of Asiatic lions within the Gir landscape makes them uniquely vulnerable to disease outbreaks. The 2018 outbreak of the Canine Distemper Virus among the population, which killed several lions and infected many others, serves as a stark reminder of this danger. Such diseases spread more rapidly in dense, socially structured populations, and their impact is amplified by the limited genetic diversity of the lions.

Government-supported studies and conservation plans have repeatedly highlighted that geographically isolated carnivore populations face extinction risks from both biological and environmental factors. In a single-site population, even non-recurring events – such as droughts, wildfires, or sudden prey decline – can have disproportionate effects. This is why conservation science advocates for a “metapopulation

approach”, where species are distributed across multiple habitats to reduce risk.

Recognising these concerns, recent policy initiatives such as Project Lion (2020) have attempted to revive the discussion on expanding lion habitats. There have been proposals to develop alternative sites such as the Barda Wildlife Sanctuary within Gujarat itself. However, experts argue that such sites, being geographically close to Gir, may not adequately address the core issue of risk diversification. A second population must be sufficiently distant to prevent the spread of disease or disaster across both populations simultaneously.

The delay in establishing a second home raises broader questions about environmental governance in India. It reflects a tension between national conservation priorities and State-level interests, where wildlife – though constitutionally recognised as a shared responsibility – can become entangled in regional identity and political considerations. The Supreme Court had clearly stated that Asiatic lions are a national heritage, not the property of any single State, yet implementation of this principle remains incomplete.

From success to security

Ultimately, the issue is whether India is willing to move from conservation success to conservation security. The current situation represents a paradox: a thriving population that remains ecologically fragile. Without establishing a second free-ranging population, the gains of decades of conservation effort remain vulnerable to reversal. The case of the Asiatic lion underscores a fundamental principle of modern conservation: numbers alone do not ensure survival; resilience does. Creating a second home is an ecological necessity; continued delay in implementing this vision risks turning a global conservation triumph into a preventable ecological vulnerability.

- Population recovery: From a few dozen in early 20th century to ~891 Asiatic lions today.
- Conservation success but policy failure: Single habitat concentration remains a risk.

- Scientific consensus: Single population is inherently vulnerable to extinction.
- Threats: Epidemics, forest fires, natural disasters.

- Supreme Court (15 April 2013): Directed translocation from Gir (Gujarat) to Kuno National Park (Madhya Pradesh).
- Principle: Conservation based on ecological, not regional, interests.

- Key risk: Concentration in Gir → vulnerable to disease outbreaks.
- 2018 CDV outbreak: Killed several lions; highlighted vulnerability.

- Government studies: Isolated carnivore populations face extinction risk due to biological + environmental factors.
- Solution suggested: Metapopulation approach for risk reduction.

- Policy initiatives: Project Lion (2020) to expand habitats.
- Alternative sites: Barda Wildlife Sanctuary (Gujarat) proposed.
- Expert view: Sites near Gir may not address risk diversification.

- Governance issue: Conflict between national conservation priorities and State-level interests.
- Supreme Court view: Asiatic lions are a national heritage, not State property.

- Paradox: Thriving population but ecologically fragile.
- Modern conservation principle: Numbers ≠ survival; resilience matters.

- Need: Establish a geographically separate second free-ranging population.
- Goal: Move from conservation success to conservation security.



KNOW YOUR ENGLISH

Many leaders are expected to jump ship

I ego-surfed and found my name only once

S. Upendran

What is the meaning and origin of 'jump ship'? (Revathi Narayan, Coimbatore)

The idiom, which in the past was mostly used by sailors, is today used in everyday contexts. When an employee decides to 'jump ship', he quits his job unexpectedly and joins another company. In other words, he jumps from one company to another. He abandons the company that he had been working for. Perhaps, the old company was going bankrupt or the new employer was making an offer that he just couldn't refuse a bigger salary with better perks, etc.

Given the terrible performance of the company this year, the management is worried that many people will jump ship.

In the past, living conditions on ships were terrible; this was particularly true in the 17th and 18th centuries. The low wages and the terrible conditions aboard made it increasingly difficult for shipping companies to get people to sign a contract to serve on a vessel. In England, the Navy hired people ('press gangs') whose job it was to threaten people to sign such a contract. If they failed to achieve this, it was not uncommon for the gang members to kidnap the reluctant sailor and leave him on a ship about to set sail. These individuals who had been brought aboard against their will tried to escape the first opportunity they got - when the ship neared a port, many of them jumped overboard and attempted to swim to safety. If the sailor was caught after having 'jumped ship', he was severely punished.

What is the difference between 'ego massage' and 'ego surging'? (V. Jayanth, Chennai)

The two expressions have very different meanings. When you give someone an 'ego massage', what you are doing is **massaging the ego of the individual - in other words, you are flattering or praising the person in order to win him over.** You don't really mean anything you say. Other expressions which have a similar meaning are 'ego padding', 'butter someone up', 'lay it on thick', 'curry favour with', etc.

Politicians love having their egos massaged.

The expression 'ego surging' has the same meaning as 'ego-surfing'.

Sometimes, when you are looking for something on the net, you are tempted to Google your name and see which sites list your name and how many times it appears. In the case of ego surging/surfing, you are massaging your own ego.

How is the word 'wiry' pronounced? (Rakesh Shukla, Udaipur)

The word consists of two syllables; the first sounds like the word 'wire', and the following 'y' is like the 'i' in 'bit', 'hit' and 'sit'. The word is pronounced 'WIRE-y', with the stress on the first syllable. It is mostly used to describe people. When you say that a man is 'wiry', what you are suggesting is that he is lean and strong. A 'wiry' individual is very athletic; someone who is capable of bending easily.

Anand is a wiry kid who is capable of lifting people twice his weight.

My daughter, Sunitha, has the wiry frame of a sprinter.

upendrankye@gmail.com

- 'Jump ship' = to leave a job or organisation suddenly to join another.
- Origin: From ships (17th-18th century) when sailors escaped poor conditions.
- Caused by: Low wages, harsh living conditions, coercion by 'press gangs'.
- If caught after jumping ship → severe punishment.

- Global warming impacts dairy production in Gangetic plains.
- Heat stress in lactating animals diverts energy from milk production.
- High temperatures lower milk yield by 20-30%.
- Haryana most affected high milk production tract.

- Key factors: >38°C, >70% humidity (May-June), extreme heatwaves.
- Winters have negligible effect.

- Data: Haryana (2004-2019)
 - 4.66M cross-bred cattle
 - 2.86M indigenous cattle
 - 35.56M buffaloes

- Economic loss: ~3.2M tonnes milk; ₹2,661 crore.
- Future risk: Loss may rise to 15M tonnes by 2050s.
- Climate change can reduce Indian milk production by 25% by 2085 (Lancet).

- Buffaloes most vulnerable: Lose ~1.4 litres milk/day for every 1 mm/day rise in evapotranspiration.
- Indigenous breeds (Sahiwal, Hariana) more heat-tolerant.

- Risks: Reduced fodder, feed, water, disease outbreaks.
- Need: Climate-smart dairy strategy, early warning systems, heat-tolerant breeds, shade, cooling, water management.

- 'Ego massage' = flattering/praising to please.
- 'Ego surging/surfing' = searching your own name online; massaging your own ego.
- 'Wiry' pronunciation: WIRE-y (stress on first syllable).
- 'Wiry' means: lean, strong, athletic; can bend easily.

Milk production in Gangetic plains has nosedived due to climate change

A new study has found that global warming acutely affects dairy production across the Global South, especially the high milk production tract of Haryana as lactating animals are more prone to heat stress; hence, they divert energy from milk production to regulate body temperature, resulting in a 20-30% decline in milk yield

Divya Gandhi
BENGALURU

A massive decline in bovine milk production in India, especially among buffaloes in the trans-Gangetic plains of northwestern India – one of the country's biggest sources of milk – has now been attributed to climate change. The phenomenon has a profound impact on the milk industry that caters to consumers every day.

While climate change significantly undermines livestock productivity worldwide, a new study published in *Scientific Reports* has found that global warming acutely affects dairy production across the Global South, especially “the high milk production tract of Haryana.”

India is the world's largest milk producer. Scientists studied data to assess the impact of climatic variables – including yearly minimum, maximum, and mean temperatures, heavy rainfall, temperature-humidity index – and evapotranspiration on milk yield and production in buffaloes, indigenous cattle, and cross-bred cattle in Haryana, spanning over a decade, from 2004 to 2019.

They studied livestock populations across 1,148 villages, which included 4.66 million cross-bred cattle, 2.86 million indigenous cattle and 35.56 million buffaloes.

The study documented milk yield in these three bovine categories and found that high temperatures (over 38 degrees Celsius), in combination with high humidity (over 70%) during July and August (summer and monsoon when humidity peaks) “significantly reduce milk production.” Interestingly, temperatures in winters had a negligible effect.

Adaptive strategies

Critically, evapotranspiration in May and June was an important factor, as was the temperature-humidity index and heatwaves. Solar radiation, ambient temperature, and vapour pressure were part of the climate impact assessments. In light of the fact that agrarian livelihood is likely to be affected profoundly with global warming, “these results underscore [potential evapotranspiration's] role in shaping adaptive strategies for sustainable livestock production,” the paper said.

Buffaloes, with their darker hue and bare skin are particularly vulnerable to absorb solar radiation. They also have fewer sweat glands than cattle: so, a unit increase in potential evapotranspiration (mm/day) reduces milk yield by around 1.4 litres per buffalo per day, the paper says.

Likewise, cross-bred cattle showed a significant decline in productivity during heatwaves too; but not indigenous cattle breeds such as Sahiwal and Hariana, perhaps because of their adaptation, such as loose skin, efficient sweating and lower metabolic heat production.



Beyond the direct impact of climate change on the health of the cattle, increasing temperatures are also affecting the broader dairy production system, like reduced production and availability of fodder and feed, increasing water scarcity and raising instances of pest and disease attacks. SHIV KUMAR PUSHKAR

index the greater is the impact on livestock physiology and productivity: they eat less, and the heat triggers homeostatic responses “in the form of panting, sweating and reduced activity,” the paper said.

The stress hormones and raised cortisol levels “impairs milk ejection and thereby causes a drop in milk yield and, in severe cases, livestock mortality,” says the paper.

Indigenous cattle

Fodder also becomes a casualty of rising surface temperature, affecting the livestock production system: changes are triggered in the quantity, quality and seasonal availability of feed and fodder. The paper estimates that such stressors in India lead to a loss of 3.2 million tonnes of milk, which is worth ₹2,661 crore in monetary losses that could rise to 15 million tonnes by 2050s.

Abhinav Gaurav, lead advisor for sustainable dairy at Environmental Defense Fund India, a Delhi-based non-profit, told *The Hindu* that heat stress has a significant impact on the milk productivity, health, and well-being of cattle and buffaloes.

“During the intense summer months, the lactating animals are more vulnerable to heat stress, given that animals divert energy from milk production to regulate body temperature, resulting in a 20-30% decline in milk yield.”

Beyond the direct impact of climate change on animals' health, production and wellbeing, increasing temperatures and prolonged summers are also affecting the broader dairy production system, like reduced production and availability of fodder and feed, increasing water scarcity and raising instances of disease attacks and compromised animal immune system.



Given that India is the largest milk producer and consumer of these production losses will put the livelihoods and nutrition of millions at risk

ABHINAV GAURAV

Lead advisor at Environmental Defense Fund India

disease attack quoted a report in *The Lancet* that estimates that climate change-induced temperature rise can reduce Indian milk production by 25% by 2085.

“Given that India is the largest milk producer and consumer of the world, these production losses will put the livelihoods and nutrition of millions at risk, papenny.

“Haryana's farmers, interestingly, “were not only well aware of ... technologies and change-induced temperature rise can reduce Indian milk production by 25% by 2085.

“Given that India is the largest milk producer and consumer of the world, these production losses will put the livelihoods and nutrition of millions at risk, especially the 80 million smallholder dairy farmers who contribute 85% of the total milk production,” he said.

Haryana's farmers, interestingly, “were not only well aware of ... technologies and practices but implemented them in the summer season (provided wallowing) authored by researchers from the ICAR-National Dairy Research Institute and other collaborating institutions,

(that is, they are better at regulating their internal environment), with more advanced evaporative cooling compared to buffaloes. Besides, “indigenous breeds show stronger immunity against local parasites and pathogens. This resilience indirectly supports climate tolerance, since heat stress often compromises immune function,” the authors wrote.

The National Bureau of Animal Genetic Resources has identified heat-tolerance traits in cattle, such as heat shock proteins, coat colour, and hair characteristics, said Dr. Gaurav.

And the research showed that the Sahiwal breed of cattle is significantly more heat-tolerant than exotic breeds with comparable milk productivity.

“The findings underscore the need for a strategic shift toward resilience oriented livestock management. We recommend the integration of potential evapotranspiration and temperature-humidity index ... into regional early warning systems to allow for proactive management,” it added.

“Furthermore, long-term climate resilience should prioritise thermo-tolerant breeding programs that leverage *Bos indicus* traits.”

The text concluded that indigenous breeds should be conserved as “reservoirs of climate-resilient traits,” and policies must prioritise in-situ conservation and farmer-led breed improvement programmes.

“The larger challenge now lies in scaling these solutions for millions of smallholder farmers, who often face limited awareness, inadequate financial resources, and the absence of coordinated national climate-smart dairy strategy,” Dr. Gaurav said.

- Study: Global warming severely reduces milk yield in bovines across Global South.
- High milk tract of Haryana most affected.

- Impact: Heat stress diverts energy from milk production to regulate body temperature.
- Result: 20–30% decline in milk yield.

- Key factors: High temperature (> 38°C), high humidity (>70%), May–June heatwaves.
- Winters: Negligible effect.

- Data: 1,148 villages in Haryana (2004–2019).
- Livestock: 4.66M cross-bred cattle, 2.86M indigenous cattle, 35.56M buffaloes.

- Loss estimate: 3.2 million tonnes milk; ₹2,661 crore loss.
- Future risk: Loss may rise to 15 million tonnes by 2050s.

- Buffaloes most vulnerable: Lose ~ 1.4 litres milk/day for every unit rise in evapotranspiration.
- Indigenous breeds (Sahiwal, Hariana) more heat-tolerant.

- Risks beyond animals: Reduced fodder, feed, water scarcity, disease outbreaks.
- Climate change may cut Indian milk production by 25% by 2085 (Lancet).

- Indigenous breeds: Natural heat tolerance (loose skin, light coat, larger ears, sweat rate).
- *Bos indicus* breeds more resilient than exotic breeds.

- Solutions: Early warning systems, evapotranspiration & THI based advisories.
- Focus: Heat-tolerant breeds, water management, shade, cooling, feed management.

- Policy priority: Conserve indigenous breeds, in-situ conservation, farmer-led breed improvement.
- Need: Climate-smart dairy strategy for smallholder farmers.

6 July 2026

The real crisis in India's fisheries

Official claims that most of India's marine fish stocks are sustainable should not distract from the continuing degradation of the country's inshore fishing grounds; stronger governance of coastal waters and better management of mechanised trawling are essential for truly sustainable fisheries

FULL CONTEXT

Maarten Bavinck

India has a very large and old marine fishing population. Every day, both small-scale and mechanised trawl fishers go out to earn a living and provide the nation with food.

The Government of India recently released its latest prognosis of the country's ocean fisheries (Ministry of Fisheries, 2022). Indian marine fisheries are largely sustainable, suggesting the country has avoided the issue of international fishing, namely overfishing.

Official claims

Drawing on figures compiled by the Central Marine Fisheries Research Institute (CMFRI), the government said that most commercial fish stocks "are in good health". Furthermore, it stated that different regions during 2022 were found sustainable. If this assessment is accurate, it would be good news. However, there are good reasons to doubt whether it is indeed correct.

For one, the Food and Agriculture Organization (FAO) is far more reserved in its assessment of the condition of Indian marine fisheries than the Indian government seems to be. India's country fisheries production has declined; most major stocks are fully exploited. [...] Unregulated access to these fisheries resulted in significant overcapacity, especially of medium and small fishery resources with mostly impoverished small-scale fishers as the one published by the Indian government.

I will not dispute CMFRI's conclusions or its methodology for calculating "sustainability". After all, most of its procedures are veiled in secrecy. What is known, however, is that compared with continues to rely primarily on landing data rather than stock assessments.

In other words, it calculates the availability of fish stocks in India's Exclusive Economic Zone (EEZ) – which includes up to 200 nautical miles (371 km) of sea area around the country – based on what fishermen catch. Even a layperson a certain number of shells on the beach does not necessarily predict the quantity of shells in the sea.

Other nations, therefore, make use of stock assessments at sea itself, thereby calculating how much aquatic life is available in certain waters. This is obviously the more reliable method to determine the health of fish stocks.

The Government of India cannot be blamed for not yet adopting this more costly form of stock assessment. But it raise suspicions that the race to catch up the fisheries sector, may also be inducing a hidden bias in the figures.

The decline of inshore ecosystems

Among the fishers I have spoken to over thirty years along the Tamil Nadu coast, the consensus is that catches have consistently gone down and that many species that were formerly available have disappeared. The government, however,



GETTY IMAGES

Overfishing, however, is not the central issue here. The more pressing concern is the decline, if not the destruction, of the inshore benthic environment. Over the past year, numerous fisheries scientists and policymakers have described the inshore fishing environment as "destroyed". What exactly do they mean?

India is surrounded by a relatively narrow continental shelf, where fishing is always the most productive. This continental shelf is broadest in Gujarat and a part of Maharashtra, but remains quite narrow along the rest of the sub-continent.

Generally speaking, one can assume that the territorial seas – a legal category referring to waters that lie within 12 nautical miles (or 22 km) from shore – largely overlap with the continental shelf. ecological conditions for commercially valuable species such as shrimp to feed, breed and grow.

But why do senior experts conclude this is no longer the case?

This is a complex question with many answers. This, one can point to the construction of dams in major rivers, which disallow land-based nutrients from entering the sea. One can also point to the ongoing destruction of mangroves, where fish breed, and to pollution that is entering the sea from various industrial, agricultural, and fishers too, point to such changes to explain the decline of fisheries. These factors obviously affect the inshore fishing zone more than they do distant waters.

Mechanised trawling and its cost

One of the many factors contributing to this decline is the dramatic and largely uncontrolled expansion of mechanised trawling.

expanded to gigantic proportions.

According to the same government press release, India now has 64,414 mechanised fishing vessels. These numbers are growing day by day as there are practically no restrictions on new entries. Moreover, existing vessels are continuously being extended and fitted with more powerful Chinese engines, enabling them to catch even more fish.

This oversized fleet of mechanised trawlers ploughs the inshore seabed in a continuous fashion. In heavily trawled areas, this results in a decline of all animal and plant life. It has also resulted in major conflicts with the numerous population of small-scale fishers who see their livelihoods imperilled.

The regulations to protect the inshore fishing zone are almost non-existent. Yes, mechanised boat fishing is closed for two months every year, so as to allow for the rejuvenation of fish stocks. But the main prohibition for mechanised boat fishers to operate within a geographic zone of 5 NM – lacks forcefulness.

There are two main reasons for this. First, coastal States lack sufficient staff or to patrol the inshore waters. Second, governments have protected fishers. Second, governments playing a helpful role in management. The result is that the ecology of the inshore fishing zone is continuously being degraded, and mechanised – are being pushed out to the offshore and the deep-sea fishing zones.

Rethinking fisheries policy

The Indian government is optimistic about the potential of deep-sea fishing and is encouraging fishers to make use. But the question is whether that government, which is also being tapped by the offshore fishers, can really do the best, only a marginal increase can be realised through exploitation of deep-sea

THE GIST

Food and Agriculture Organization presents a more cautious assessment of India's marine fisheries than official claims, warning that many major fish stocks are already fully exploited.

India's fish stock estimates rely largely on landing data rather than direct stock assessments, raising questions about how sustainability is measured.

Expanding mechanised trawling and weak enforcement of coastal fishing regulations are placing increasing pressure on inshore ecosystems and small-scale fishers.

- Govt claims: 91.1% of 135 marine fish stocks (2022) sustainable (CMFRI).
- FAO warns: Many stocks fully exploited; overcapacity remains.

- Stock assessment: CMFRI uses landing data, not scientific stock assessment.
- Reliable method: Survey at sea, not just catch data.

- Inshore ecosystem degrading: Dams, pollution, mangrove loss degrading habitats.
- Overfishing not only issue; habitat destruction major concern.

- India's continental shelf narrow except Gujarat & part of Maharashtra.
- Most productive area within 12 NM (territorial waters).

- Mechanised trawling expanded massively: 64,414 vessels.
- No effective regulation in inshore waters.

- Trawling causes loss of marine biodiversity & livelihood conflicts.
- Closed season (2 months) insufficient.

- Governance gaps: Lack of patrol staff, weak enforcement, exclusion of fishers.
- Result: Inshore ecology degraded; small fishers pushed out.

- Policy wasteful: Extra cost on fishers to travel farther.
- Need: Manage inshore waters, reduce pollution & trawling.

- Palk Bay example: Indian trawlers enter Sri Lankan waters; conflict persists.
- Katchatheevu ownership not a solution.

- Way forward: Strong governance, scientific management, capacity building.
- FAO: Urges states to upgrade marine fisheries management capacity.

More fundamentally, India's current fisheries policy is wasting the enormous potential of inshore waters. For one thing, it imposes extra expenses for fuel and technology on fishers so that they can actually travel to more distant waters. At the same time, it is closing its eyes to the dire need for proper management of inshore waters. Aside from addressing the problems of marine pollution, it also means curbing, if not reducing, mechanised boat fishing. This is more than a technical issue. Mechanised boat fishers, by way of their numbers and their political influence, now often stand in the way of proper management. This is witnessed, for example, in the case of the Palk Bay, which is located between India and Sri Lanka. There, the Indian fleet of mechanised boat fishers now pirates Sri Lankan waters to the detriment of small-scale fishers on the other side of the island Katchatheevu does not make any difference in this respect.

The way forward

While the government's assessment paints an encouraging picture of Indian fish stocks, a more fundamental concern remains. The larger issue is that fishers, scientists and policymakers continue to deny the degradation of the inshore grounds. A viable and truly realised if sustainable of the sea and inshore waters improves. For productive fishery government must adjust its perspective.

This is in line with FAO's view that: "Strenuous efforts are needed at several and levels to upgrade the country's capacity to manage its marine fisheries." In this context, CMFRI might also want to consider the benthic environment is actually like. This would provide a basis for deliberating on the (Maarten Bavinck is emeritus professor of coastal resource governance, University of Amsterdam)

1 टैंक अभी भी क्यों महत्वपूर्ण हैं



ब्रेकथू ऑपरेशन
युद्धभूमि पर प्रभुत्व

- झटका शक्ति, सुरक्षा और मारक क्षमता देते हैं
- आक्रमण व ब्रेकथू ऑपरेशन में निर्णायक भूमिका
- ड्रोन/ATGM के दौर में संयुक्त हथियारों के साथ जरूरी
- भारत: प्रोजेक्ट ज़ोरावर (लाइट टैंक) हिमालय हेतु
- FRCV से T-72 टैंकों का होगा प्रतिस्थापन
- आधुनिक टैंक: AI, सेंसर, एंटी-ड्रोन, नेटवर्क-सेंट्रिक

रक्षा आधुनिकीकरण • प्रोजेक्ट ज़ोरावर • FRCV
संयुक्त युद्धक क्षमता • पर्वतीय युद्ध • DRDO

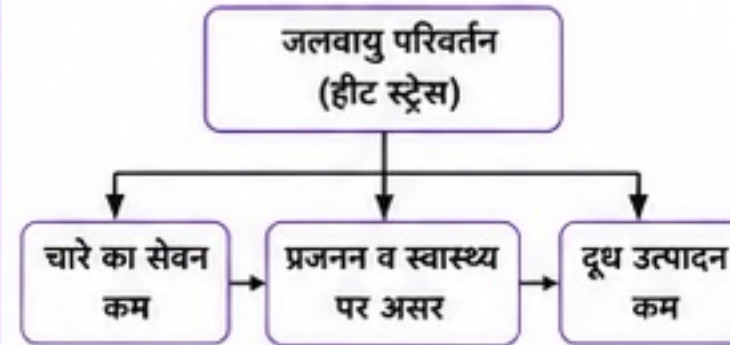
2 अब स्रोत पर ही कचरे को अलग करें



- सॉलिड वेस्ट मैनेजमेंट नियम, 2016 अनिवार्य करते हैं
- अलगाव: सूखा, गीला, घरेलू खतरनाक, सैनिटरी
- रिसायकलिंग व संसाधन पुनर्प्राप्ति में सहायता
- लैंडफिल बोझ और प्रदूषण को कम करता है
- परिपत्र अर्थव्यवस्था और जलवायु लक्ष्यों को समर्थन
- नागरिक भागीदारी और प्रवर्तन अत्यंत आवश्यक

स्वच्छ भारत मिशन • 3R सिद्धांत
SDGs 11.6 • अपशिष्ट से समृद्धि

3 गैयटिक मैदानी क्षेत्रों में दूध उत्पादन जलवायु परिवर्तन से घटा



- बढ़ता तापमान दूध उपज घटाता है
- हीट स्ट्रेस से चारा सेवन कम होता है
- प्रजनन क्षमता, पशु स्वास्थ्य प्रभावित
- डेयरी आजीविका व पोषण पर नकारात्मक प्रभाव
- अनुकूलन: ठंडा शेड, पानी, नस्ल सुधार
- जलवायु-लचीला डेयरी प्रबंधन आवश्यक

पशुधन व जलवायु • हीट स्ट्रेस
डेयरी क्षेत्र • अनुकूलन • CDSN

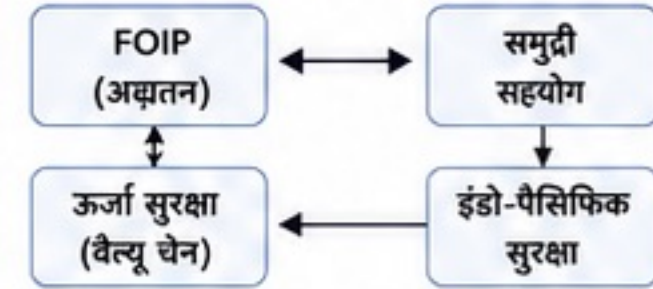
4 भारत की मातृ स्वास्थ्य कहानी में छूटा हुआ कड़ी



- मातृ स्वास्थ्य एक निरंतर प्रक्रिया है
- पूर्व-गर्भ स्वास्थ्य परिणामों में सहायक
- पोषण व एनीमिया प्रमुख चिंता का विषय
- प्रसवोपरांत देखभाल अक्सर उपेक्षित
- जीवन-चक्र आधारित एकीकृत दृष्टिकोण आवश्यक
- स्वास्थ्य, पोषण व सशक्तिकरण में समन्वय जरूरी

MMR • PMSMA • पोषण अभियान
एनीमिया मुक्त भारत • JSSK

5 दो साथ: भारत-जापान रणनीतिक साझेदारी



- स्वतंत्र व खुले इंडो-पैसिफिक हेतु सहयोग
- समुद्री ऊर्जा परिवहन वैल्यू चेन पर जोर
- समुद्री जागरूकता व निगरानी सुदृढ़
- दक्षिण व पूर्व चीन सागर पर साझा चिंता
- पूर्वोत्तर भारत से प्रादेशिक संपर्क पर ध्यान
- BIMSTEC को प्रमुख क्षेत्रीय साझेदार बताया

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ऊर्जा वैल्यू चेन • SLOCs • क्वाड

6 दस्तावेज़ से परे भी अधिकार से जुड़ने का हक



- व्यक्तित्व दस्तावेज़ से पहले आता है
- नागरिकता के कागज़ कम होना संभव
- अनु. 14: किसी भी व्यक्ति के लिए समानता
- अनु. 21: सभी व्यक्तियों के लिए जीवन व स्वतंत्रता
- अनु. 19: केवल नागरिकों को स्वतंत्रताएँ
- उचित प्रक्रिया व संवैधानिक नैतिकता आवश्यक

अनु. 14 • अनु. 21 • अनु. 19
नागरिकता • मतदाता सूची • प्रमाण का बोझ

7 हॉर्मर्ज से घर तक: अनिश्चित समय में भारत की लचीलापन



- हॉर्मर्ज: वैश्विक तेल आपूर्ति का महत्वपूर्ण मार्ग
- हालिया तनाव से ऊर्जा असुरक्षा उजागर हुई
- आपतकालीन उपायों से घरेलू आपूर्ति सुनिश्चित
- विविध आयात, SPR व भंडार जरूरी
- नवीकरणीय, हाइड्रोजन व ऊर्जा संक्रमण पर जोर
- सुरक्षित समुद्री मार्ग व सहयोग आवश्यक

ऊर्जा सुरक्षा • रणनीतिक पेट्रोलियम भंडार
SLOCs • विविधीकरण • ऊर्जा संक्रमण

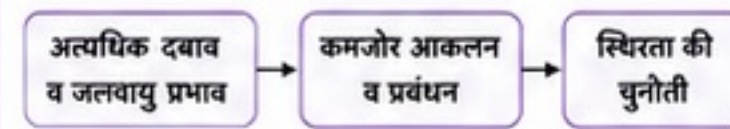
8 एशियाई शेरों के लिए भारत को दूसरा घर चाहिए



- सभी एशियाई शेर गिर क्षेत्र में सीमित
- ~891 शेर; एकल घटना में जोखिम
- SC (2013): कूनों (म.प्र.) में स्थानांतरण का निर्देश
- 2018 CDV प्रकोप ने संवेदनशीलता दर्शाई
- मेटा-जनसंख्या दृष्टिकोण जोखिम कम करता है
- राष्ट्रीय धरोहर, किसी एक राज्य की संपत्ति नहीं

वन्यजीव (संरक्षण) अधिनियम, 1972
IUCN: संकटापन्न • प्रोजेक्ट लायन

9 भारत की मत्स्यपालन में वास्तविक संकट



- Govt: 135 स्टॉक्स (2022) में 91.1% टिकाऊ (CMFRI)
- डेटा व तरीकों में सीमाएँ
- सतत प्रबंधन व निगरानी की आवश्यकता
- तटीय आजीविका व खाद्य सुरक्षा पर असर
- विज्ञान आधारित नीति व बेहतर शासन जरूरी
- नीली अर्थव्यवस्था के लिए महत्वपूर्ण क्षेत्र

CMFRI • नीली अर्थव्यवस्था • फिश स्टॉक
सतत मत्स्यपालन • तटीय आजीविका

क्विक न्यूज़

मेटा को 'चाइल्ड सेक्स एब्यूज' कंटेंट हटाने का आदेश दिल्ली HC का आदेश; IT एक्ट में दंडनीय।

सिंथेटिक सेल: जीवन जैसी मशीन वैज्ञानिकों ने DNA कॉपी कर विभाजित होने वाली कृत्रिम कोशिका बनाई।

भारत में BRICS एंटी-ड्रग्स बैठक अवैध नशीले कादथों व प्रीकर्स के विरुद्ध सहयोग बढ़ाने हेतु बैठक।

पुरानी शराब, नई बोटल दीर्घ-कालिक कानूनी प्रावधानों के संदर्भ में राजनीतिक प्रथाओं का विश्लेषण।

AI में कॉर्पोरेट विश्वास घट रहा हेल्थीनेशन, गोपनीयता, IP, नियमन व जवाबदेही पर चिंताएँ।

जापान के अंतरिक्ष यान ने समीपी क्षुद्रग्रह का फ्लाइबाय किया NEA शोध व ग्रह रक्षा को मिलेगा बल।

गगनयान मिशन के लिए ISRO ने प्रमुख घटक का परीक्षण किया भारत के पहले मानव अंतरिक्ष मिशन में प्रगति।

पंडवानी की दिग्गज कलाकार तीजन बाई का निधन छत्तीसगढ़ की प्रसिद्ध लोकगायिका; पंडवानी को वैश्विक पहचान दिलाई।

स्वतंत्रता घोषणा-पत्र और सार्वभौमिक अधिकारों का निर्माण 1776 की घोषणा-पत्र का वैश्विक अधिकार विचार पर प्रभाव।

भारत-जापान साझेदारी से इंडो-पैसिफिक में लचीलेपन को बल समुद्री सुरक्षा और ऊर्जा सहयोग पर गहराई।

प्रीलिम्स फैक्ट्स

- हॉर्मर्ज जलडमरूमध्य फारसी खाड़ी को ओमान की खाड़ी से जोड़ता है।
- एशियाई शेर भारत के गिर (गुजरात) में ही पाए जाते हैं।
- सॉलिड वेस्ट मैनेजमेंट नियम, 2016 में स्रोत पर पृथक्करण अनिवार्य।
- MMR: प्रति 1,00,000 जीवित जन्म पर मातृ मृत्यु।
- FOIP: फ्री एंड ओपन इंडो-पैसिफिक।
- CMFRI ICAR के अंतर्गत; मुख्यालय: कोच्चि।
- अनु. 14 किसी भी व्यक्ति के लिए; अनु. 21 सभी के लिए।
- सिंथेटिक बायोलॉजी: प्रयोगशाला में जैव प्रणालियों का निर्माण।
- BRICS (2026) के 10 सदस्य देश हैं।

शब्दावली

- ▶ लचीलापन — झटकों से उबरने की क्षमता।
- ▶ निरंतरता — बिना रुकावट के आगे बढ़ने की प्रक्रिया।
- ▶ मेटा-जनसंख्या — अलग-अलग आवासों में कई जनसंख्याओं का संयुक्त अस्तित्व।
- ▶ रणनीतिक — दीर्घकालिक लक्ष्य हेतु योजनाबद्ध।
- ▶ उचित प्रक्रिया — निर्णय से पूर्व विन्धक कानूनी प्रक्रिया।

1 WHY TANKS STILL MATTER



Shock Power
(Armour + Firepower)



- Tanks provide shock action & protection
- Critical for breakthrough & manoeuvre
- High firepower in mobile warfare
- Essential in combined arms operations
- India: Project Zorawar (light tank)
- Future Ready Combat Vehicle (FRCV)

Armoured Warfare • Project Zorawar
FRCV • Mountain Warfare • Doctrine

2 IT'S TIME TO SEGREGATE AT SOURCE

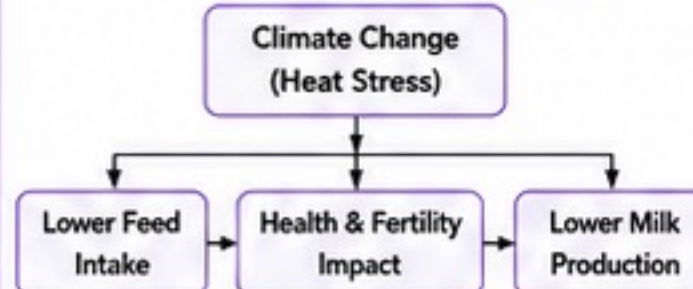
Dry Waste (Blue) Wet Waste (Green) Domestic Hazardous Reject Waste



- Solid Waste Management Rules, 2016
- Segregation: dry, wet, domestic hazardous
- Improves recycling & resource recovery
- Reduces landfill burden & pollution
- Supports circular economy & climate goals
- Citizen participation is crucial

Swachh Bharat Mission • 3R Principles
SDGs 11.6 • Waste to Wealth

3 MILK PRODUCTION IN GANGETIC PLAINS HAS NOSEDIVED DUE TO CLIMATE CHANGE



- Rising temperatures reduce milk yield
- Heat stress lowers feed intake
- Affects fertility & animal health
- Impacts dairy livelihoods & nutrition
- Adaptation: cooling, water, breeds
- Supports climate-resilient dairying

Livestock & Climate • Heat Stress
Dairy Sector • Adaptation • CDSN

QUICK NEWS



Meta told to disable 'child sex abuse' content
Delhi HC order; CSAM illegal under IT Act.



Synthetic cell: machine that could
Scientists create cell that grows,
copies DNA & divides.



India to host BRICS anti-drugs meet today
To strengthen cooperation against illicit
trafficking & precursor chemicals.



Old wine, new bottle
Examines political practices through
long-standing legal provisions.



How corporate trust in AI is declining
Concerns: hallucinations, privacy, IP,
regulation & accountability.



Japan space probe performs flyby
of near-Earth asteroid
Mission enhances research on NEAs &
planetary defence.



ISRO conducts test of key component
for Gaganyaan mission
Advances India's first human spaceflight
programme.



Chhattisgarh's Pandavani legend
Teejan Bai dies at 70
Renowned folk artist; brought Pandavani
to global audiences.



The Declaration of Independence &
the making of universal rights
Reflects on 1776 document & its global
influence on rights.



India-Japan partnership for resilient
Indo-Pacific
Deepens maritime security & energy
cooperation.

4 THE MISSING LINK IN INDIA'S MATERNAL HEALTH STORY

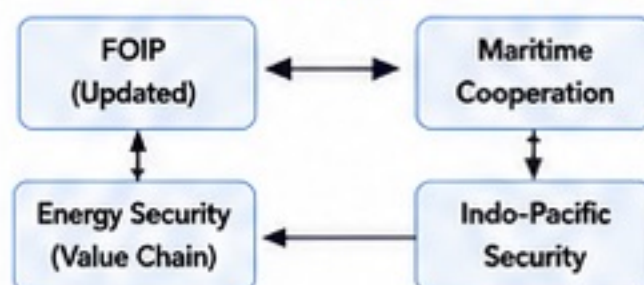


- Maternal health is a continuum
- Pre-conception health critical
- Nutrition & anaemia major concerns
- Postpartum care often neglected
- Integrated life-cycle approach needed
- Convergence across sectors essential

MMR • PMSMA • POSHAN Abhiyaan
Anaemia Mukht Bharat • JSSK

5 TWO TOGETHER

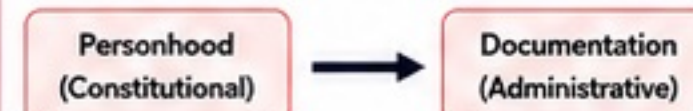
India-Japan Strategic Partnership



- Strengthened bilateral strategic ties
- Cooperation for Free & Open Indo-Pacific
- Maritime energy transport value chain
- Enhances maritime domain awareness
- Concern over South China Sea, Taiwan
- Focus on Northeast India & BIMSTEC

FOIP • BIMSTEC • Indo-Pacific
Energy Security • SLOCs • Quad

6 THE RIGHT TO BELONG BEYOND OFFICIAL DOCUMENTATION



- Personhood precedes documentation
- Citizenship cannot be reduced to papers
- Article 14: equality for any person
- Article 21: life & liberty for all persons
- Article 19: freedoms for citizens only
- Due process & constitutional morality

Art 14 • Art 21 • Art 19 • Citizenship
Electoral Roll • Burden of Proof

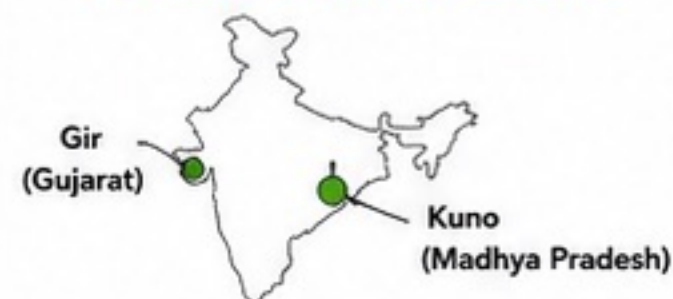
7 HORMUZ TO HOME: INDIA'S RESILIENCE IN UNCERTAIN TIMES



- Strait of Hormuz: critical oil chokepoint
- One-fifth of global oil passes through it
- India responded with emergency measures
- Need long-term energy resilience
- Diversify imports, build strategic reserves
- Boost renewables & maritime security

Energy Security • SPR • SLOCs
Diversification • Energy Transition

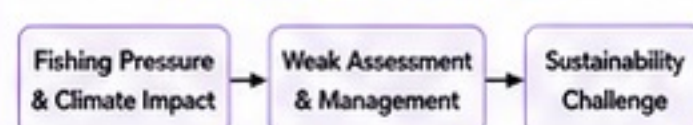
8 INDIA NEEDS A SECOND HOME FOR ASIATIC LIONS



- Asiatic lion confined to Gir landscape
- ~891 lions; vulnerable to single event
- SC (2013): translocate to Kuno (M.P.)
- 2018 CDV outbreak showed vulnerability
- Metapopulation approach reduces risk
- National heritage, not one State's property

Wildlife (P) Act • IUCN: Endangered
Metapopulation • WII • Project Lion

9 THE REAL CRISIS IN INDIA'S FISHERIES



- Govt: 91.1% of 135 marine stocks (2022) assessed as sustainable (CMFRI)
- Data & methods have limitations
- Need robust science & monitoring
- Balance ecology with livelihoods
- Key for food security & blue economy

CMFRI • Blue Economy • Fish Stock
Sustainable Fisheries • Coastal Livelihoods

PRELIM FACTS



Strait of Hormuz connects Persian Gulf to Gulf of Oman.



Asiatic lion is endemic; only in Gir (Gujarat).



Solid Waste Management Rules, 2016 mandate segregation at source.



MMR = Maternal deaths per 100,000 live births.



FOIP stands for Free & Open Indo-Pacific.



CMFRI is under ICAR; HQ: Kochi.



Article 14 applies to any person; Art 21 to all persons.



Synthetic biology builds life-like systems artificially.



BRICS (2026) has 10 member countries.

VOCABULARY

- ▶ **Resilience** — Capacity to recover quickly from shocks.
- ▶ **Continuum** — A continuous sequence without gaps.
- ▶ **Metapopulation** — Multiple populations in separate habitats acting as one.
- ▶ **Chokepoint** — Strategic location vulnerable to disruption.
- ▶ **Due Process** — Fair legal procedure before decision.