



"We help you reach for the star"

VIDHVATH IAS KAS ACADEMY & STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 29/06/2026 (MONDAY)



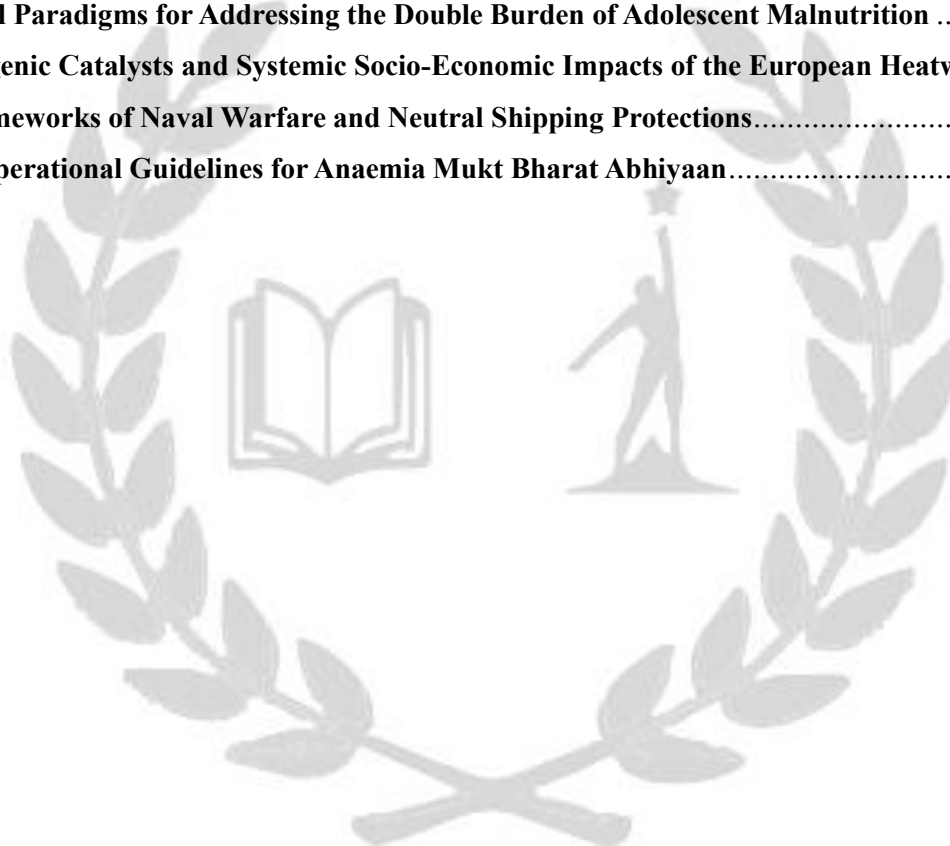
9972258970 & 9740702455

**#317/A SKB Arcade, D. Subbaiah Road,
Ramaswamy Circle, Mysuru-570004**



Table of Contents

1. India-Seychelles Bilateral Relations and Indian Ocean Strategy	2
2. Operationalisation of Integrated Battle Groups (IBGs) and Military Restructuring	3
3. Critical Interventions in India's Low-Occupancy Tiger Reserves.....	4
4. Macroeconomic Implications of Water Stress on Sovereign Credit Ratings	5
5. Geopolitical and Strategic Realities of the Global Quantum Computing Race	6
6. Vulnerabilities and Mitigation of a Weak Southwest Monsoon Commencement	7
7. Structural Fire Vulnerabilities in Urban India and Mitigation Strategies	8
8. Molecular Determinants of Zoonotic Spillover in Coronaviruses	9
9. Institutional Paradigms for Addressing the Double Burden of Adolescent Malnutrition	10
10. Anthropogenic Catalysts and Systemic Socio-Economic Impacts of the European Heatwave	11
11. Legal Frameworks of Naval Warfare and Neutral Shipping Protections.....	13
12. Revised Operational Guidelines for Anaemia Mukht Bharat Abhiyaan.....	14



VIDHVATH IAS ACADEMY



1. India-Seychelles Bilateral Relations and Indian Ocean Strategy

- **High-Level Recognition & Strategic Ties:** Prime Minister Narendra Modi was conferred the 'Guardian of the Blue Horizon' title by Seychelles during his address to their National Assembly in Victoria, underscoring deep-rooted maritime and diplomatic cooperation.
- **Vision for the Indian Ocean Region (IOR):** India envisions transforming the Indian Ocean into an "Ocean of Opportunity" by ensuring robust maritime security, economic prosperity, and a partnership built on mutual respect and trust rather than geopolitical size.
- **Advocacy for the Global South:** The address heavily emphasized 'climate justice' for the Global South, demanding equitable climate action and resource allocation for developing island nations disproportionately affected by environmental degradation.
- **Combating Transnational Maritime Threats:** Bilateral discussions focused on neutralizing non-traditional security threats in the IOR, including illegal, unreported, and unregulated (IUU) fishing, drug trafficking, and piracy.
- **Institutional Security Architecture:** The partnership reinforces India's role as a net security provider in the region, aligning with collaborative frameworks to maintain open, safe, and inclusive sea lanes of communication (SLOCs).

Key Definitions

- **Global South:** Refers broadly to regions of Asia, Africa, and Latin America that face developmental challenges and have historically been marginalized in global geopolitical discourse.
- **Climate Justice:** A framework that acknowledges climate change has ethical and political dimensions, noting that those least responsible for emissions often suffer the most severe consequences.

Constitutional and Legal Provisions

- **Article 51 of the Indian Constitution:** Directs the State to promote international peace and security, maintain just and honourable relations between nations, and foster respect for international law.
- **UNCLOS (UN Convention on the Law of the Sea):** The international legal framework governing maritime jurisdictions, freedom of navigation, and the exploitation of marine resources, crucial for bilateral anti-piracy operations.



UPSC Relevance

- **GS Paper II:** India and its neighborhood-relations; Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
- **GS Paper III:** Security challenges and their management in border areas; Maritime security architecture in the IOR.

Conclusion

The conferment of the prestigious title highlights India's growing stature as a reliable security partner and development ally in the Western Indian Ocean. By championing climate justice and maritime security, India strengthens its strategic footprint while building a resilient, rule-based order in the region.



2. Operationalisation of Integrated Battle Groups (IBGs) and Military Restructuring

- **Structural Pivot to Modern Warfare:** The Indian Army is set to operationalise its first Integrated Battle Groups (IBGs), transitioning from bulky legacy formations to agile, self-contained, brigade-sized fighting units to meet contemporary threats.
- **Geostrategic Strategic Deployment:** The initial units are being carved out of the Panagarh-based XVII Mountain Strike Corps (MSC) facing China, specifically designed for swift, high-altitude operational deployment in mountainous border terrains.
- **Cohesive Resource Integration:** Comprising over 5,000 troops, each IBG integrates vital combat and logistical components, including infantry, artillery regiments, Combat Engineers, electronic-mechanical wings, and dedicated mobile field hospitals.
- **The 3Ts Operational Doctrine:** These formations are custom-tailored based on the 3Ts principle—Threat, Terrain, and Task—allowing them to undertake both offensive and defensive roles with immense flexibility.
- **Rapid Mobilisation and Response:** By bypassing the long mobilization timelines required for an entire corps, IBGs are structurally engineered to deploy within 12-48 hours, ensuring rapid tactical response and surprise elements.

Key Definitions

- **Integrated Battle Group (IBG):** An agile, self-sufficient, brigade-sized combat formation combining infantry, armor, artillery, and support services to launch rapid, coordinated operations.
- **Mountain Strike Corps:** A specialized, high-altitude offensive military formation trained primarily for mountain warfare and cross-border counter-offensive operations.

Constitutional and Legal Provisions

- **Article 355 of the Indian Constitution:** Entrusts the Union government with the sacred duty to protect every State against external aggression and internal disturbance.
- **Seventh Schedule (Union List - Entry 1):** Places the defense of India and every part thereof, including preparation for defense and all such acts as may be conducive in times of war, under the exclusive legislative domain of Parliament.



UPSC Relevance

- **GS Paper III:** Internal Security; Security challenges and their management in border areas; Linkages of organized crime with terrorism; Defence modernization reforms.

Conclusion

The operationalisation of IBGs marks a monumental doctrinal shift towards leaner, technology-empowered, and mission-driven warfare. By replacing traditional logistical drag with rapid-response capabilities, the Indian Army significantly enhances its deterrence posture and tactical readiness against collusive trans-border security challenges.



3. Critical Interventions in India's Low-Occupancy Tiger Reserves

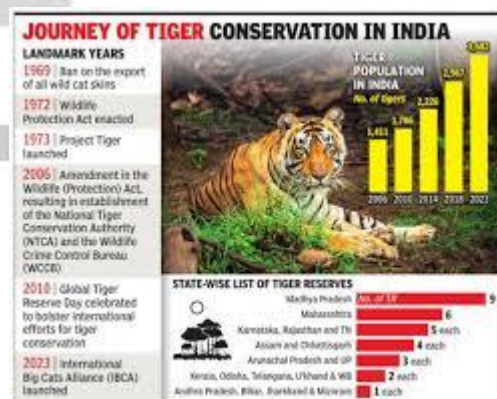
- **Targeted Recovery Interventions:** To mark 18 years of tiger reintroduction at Sariska Tiger Reserve, the Union Ministry of Environment, Forest and Climate Change released two comprehensive reports flagging 25 out of India's 58 tiger reserves as priority areas that are critically low on big cats or have zero populations.
- **Identification of Zero-Tiger Zones:** The reports highlight specific reserves facing zero-tiger status, including Satkosia (Odisha), Kawal (Telangana), Dampa and Kamlang (Northeast), and Buxa (West Bengal), demonstrating highly uneven distribution despite an overall national rise in tiger numbers.
- **Core Anthropogenic and Ecological Constraints:** The recurring reasons for localized depletion and failed translocations include low prey base abundance, habitat loss, poaching historical impacts, and severely fragmented connectivity with source populations which cuts off natural dispersal in reserves like Ranipur, Achanakmar, Kali, and Mukundara Hills.
- **Scientific Reintroduction and Community-Led Architecture:** Future recovery paradigms shift toward rigorous science-backed translocations, intensive prey base augmentation, continuous monitoring, and mandatory local community consultation to build trust and mitigate man-animal conflict.
- **Source Populations as Ecologic anchors:** The Environment Ministry identified 13 high-density, healthy source reserves—including Bandipur, Kanha, Ranthambore, and Corbett—possessing optimal prey density and pristine habitats essential to support future translocation pipelines to the 25 identified "potential recipient sites."

Key Definitions

- **Tiger Translocation:** The deliberate human-mediated movement of wild tigers from high-density source populations to depleted or locally extinct habitats to restore ecological balance and genetic viability.
- **Prey Base Abundance:** The population density of primary herbivorous target species (such as chital, sambar, and wild boar) within a habitat required to sustain apex predators without forcing them into human settlements.

Constitutional and Legal Provisions

- **Article 48A of the Indian Constitution:** A Directive Principle prescribing that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g):** Imposes a Fundamental Duty on every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife.
- **Wildlife (Protection) Act, 1972:** The foundational statutory framework providing strict legal protection to tigers (Schedule I) and establishing the National Tiger Conservation Authority (NTCA) to oversee reserve management.



UPSC Relevance

- **GS Paper III:** Conservation, environmental pollution and degradation, environmental impact assessment; statutory bodies like NTCA; project-based conservation frameworks.



Conclusion

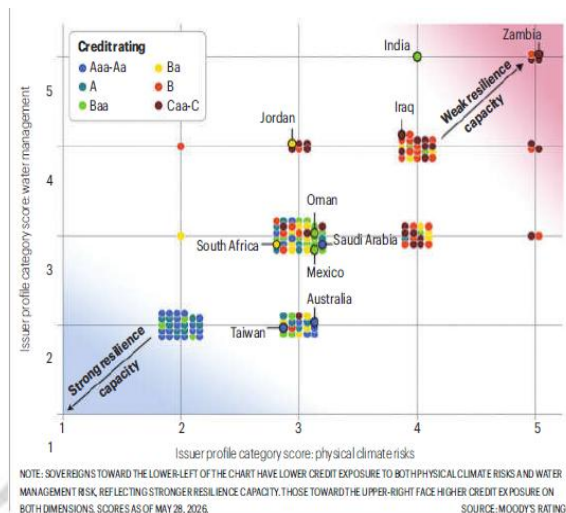
While India's macroscopic tiger conservation narrative reflects macro-level success, localized extinctions highlight structural gaps. Moving from passive protection to active, science-driven metapopulation management combined with robust corridor connectivity and community integration remains paramount to long-term ecological sustainability.

4. Macroeconomic Implications of Water Stress on Sovereign Credit Ratings

• Water Risk as a Sovereign Credit Matrix:

According to a report by Moody's Ratings, water reliability and management capacity have emerged as severe fiscal risks, directly impacting the sovereign creditworthiness of one-third of global sovereigns, including India.

- **India's Vulnerability Profile:** India (rated Baa3) faces significant vulnerabilities, holding a physical climate risk category score of 4 (high exposure to heat stress, flooding, and monsoon variability) and a water management category score of 5, indicating "very high credit exposure" due to weak infrastructure and structural imbalances.



- **Compounding Demand Drivers:** The crisis is severely exacerbated by rising domestic demand, extreme weather, aging infrastructure, and the rapid growth of water-intensive digital infrastructure like AI-driven data centers and cloud computing networks.
- **Resilience versus Exposure:** Moody's framework notes that sovereign credit quality reflects an economy's proactive institutional capacity to manage water stress, rather than its mere physical exposure to adverse environmental conditions.
- **Fiscal and Economic Spillover:** Unmanaged water stress disrupts crucial sectors like households, agriculture, and industry, creating structural supply chain bottlenecks, elevating inflation risks, and placing a long-term drag on GDP growth.

Key Definitions

- **Sovereign Credit Rating:** An independent assessment of a country's ability to meet its debt obligations, serving as a benchmark for borrowing costs in international capital markets.
- **Water Stress:** A situational crisis occurring when the demand for high-quality water exceeds the available sustainable supply during a specific period or when poor quality restricts its use.

Constitutional and Legal Provisions

- **Article 21 of the Indian Constitution:** The Supreme Court has repeatedly expanded the Right to Life to include the right to clean, pollution-free drinking water as a fundamental human right.
- **Seventh Schedule (Distribution of Powers):** State List (Entry 17) gives states legislative jurisdiction over water supplies, irrigation, and canals, while the Union List (Entry 56) governs the regulation and development of inter-state rivers.
- **Article 262:** Provides the constitutional mechanism for Parliament to adjudicate disputes relating to waters of inter-state rivers or river valleys.



UPSC Relevance

- **GS Paper III:** Indian Economy and issues relating to planning, mobilization of resources, growth, and development; Infrastructure (Water, Energy); Environmental degradation and climate-risk management.

Conclusion

The indexing of water mismanagement into global credit profiles underscores that environmental degradation is no longer a peripheral issue but a core fiscal risk. For India to safeguard its investment-grade rating and macroeconomic stability, transitioning toward aggressive infrastructure modernization, mandatory water-auditing for digital industries, and decentralized water conservation is imperative.

5. Geopolitical and Strategic Realities of the Global Quantum Computing Race

- **Doctrinal Pivot in Global Quantum Race:** Long dismissed due to unstable qubits and prohibitive error rates, quantum computing has transitioned into a critical geostrategic capability, driving massive state investments due to its profound economic and defense implications.
- **Accelerated Global Milestones:** Breakthroughs by Google Quantum AI, Oratomic, and Microsoft's Majorana 1 architecture have proved that error-correction algorithms can slash the required interconnected qubits from millions down to just 10,000–26,000, drastically accelerating commercial viability.
- **Strategic Mobilization by Global Powers:** The US has launched a \$2 billion investment plan and executive orders aiming for a scientific-grade quantum computer by 2028, while China leads with over \$15 billion in investments, pioneering the first quantum communications satellite and an extensive patent footprint.
- **The Looming Imperative of Q-Day:** National security establishments face the systemic threat of "Q-Day"—the threshold where quantum systems can breach standard global encryption—alongside "harvest now, decrypt later" tactics, forcing rapid migration to post-quantum cryptography.
- **India's Quantum Footprint and Vulnerabilities:** India launched the ₹6,003.65-crore National Quantum Mission (NQM) in 2023, yielding progress like QpiAI's 25-qubit computer and C-DOT's quantum-secured network; however, domestic funding faces severe scale deficits compared to US and Chinese capital.



Key Definitions

- **Q-Day:** The theoretical point in time when a cryptanalytically directed quantum computer becomes capable of dismantling prevailing asymmetric encryption standards safeguarding global digital infrastructure.
- **Harvest Now, Decrypt Later:** A cyber warfare strategy where adversaries intercept and store encrypted high-value state or financial data today, intending to decrypt it once sufficiently powerful quantum hardware becomes operational.



Constitutional and Legal Provisions

- **Seventh Schedule (Union List - Entry 1 & 6):** Places the defense of India and atomic energy/scientific resources under the exclusive legislative and executive jurisdiction of the Central Government.
- **Information Technology Act, 2000 (Section 66A & 70):** Outlines data protection and protected system frameworks, which must be systematically upgraded to incorporate quantum-resistant encryption protocols.

UPSC Relevance

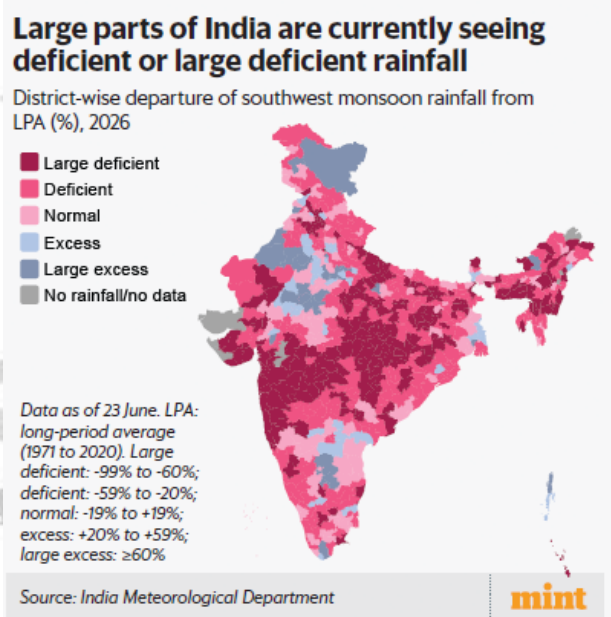
- **GS Paper III:** Science and Technology-developments and their applications and effects in everyday life; Achievements of Indians in science & technology; Indigenization of technology and developing new technology; Awareness in the fields of IT and Computers.

Conclusion

The contraction of quantum development timelines from decades to years has transformed computing into a crucial arena of major-power rivalry. For India, matching the hardware, IP creation, and fiscal scales of the US and China is no longer merely a scientific milestone, but an absolute structural prerequisite to safeguard sovereign digital assets and strategic autonomy.

6. Vulnerabilities and Mitigation of a Weak Southwest Monsoon Commencement

- **Substantial Rainfall Deficit:** The southwest monsoon commenced with critical weakness, recording a cumulative nationwide rainfall deficit of 41.6% below the long-period average (LPA) as of June 24, signaling immediate stress across core agrarian zones.
- **Depressed Seasonal Projections:** The India Meteorological Department (IMD) estimated seasonal precipitation (June–September) at only 90% of the LPA, indicating an 84% probability of a deficient or below-normal season.
- **The Disruptive El Niño Factor:** The overriding catalyst behind this initial deceleration is the El Niño phenomenon, characterized by anomalous warming of equatorial Pacific sea surface temperatures, which weakens the monsoon's trade wind circulation.
- **Widespread Institutional Risk:** This structural deficit coincides with major reservoir levels dropping to 26% capacity, creating acute threats of delayed Kharif sowing, amplified groundwater depletion, and urban water distribution crises.
- **Proactive State Contingency Architecture:** To offset agrarian shock, the Ministry of Agriculture has operationalized targeted contingency plans across 315 vulnerable, rain-fed districts to assist localized farming systems.





Key Definitions

- **Long-Period Average (LPA):** The benchmark average rainfall recorded over a 50-year period (currently 1971–2020, quantified at 87 cm for the full season), used to gauge annual deviation.
- **El Niño:** A climate pattern involving the abnormal warming of surface waters in the central and eastern tropical Pacific Ocean, historically linked to deficient monsoons in India.

Constitutional and Legal Provisions

- **Article 39(b) of the Indian Constitution:** Directs the State to secure that the ownership and control of the material resources of the community are distributed to best subserve the common good, mandating equitable water and food management during crises.
- **Disaster Management Act, 2005:** Provides the statutory basis for executing district-level drought contingency plans, relief distribution, and agricultural financial interventions.

UPSC Relevance

- **GS Paper I:** Important Geophysical phenomena (Earthquakes, Tsunami, Volcanic activity, Cyclone, Geographical features and their location).
- **GS Paper III:** Major crops, cropping patterns in various parts of the country; Irrigation systems; Economics of animal-rearing; Disaster and disaster management.

Conclusion

A weak monsoon opening underscores India's continuing structural dependence on climate variables. Mitigating these multi-sectoral shocks demands transitioning from reactive district contingency measures toward institutionalized rainwater harvesting, micro-irrigation expansion, and aggressive adoption of climate-resilient, short-duration crop varieties to insulate the macroeconomy from systemic environmental shocks.

7. Structural Fire Vulnerabilities in Urban India and Mitigation Strategies

- **Escalating Urban Fire Hazards:** High-profile fire disasters—such as the recent incidents at a Delhi bed & breakfast and a Lucknow commercial complex—underscore systemic architectural flaws and weak regulatory enforcement across India's rapidly growing urban hubs.
- **Critical Design Violations:** Major structural compounding factors include the lack of dedicated secondary staircases, poorly ventilated common areas, close clearance between false ceilings and floors, and the widespread use of highly inflammable external building facades and wall-cladding.
- **The Doctrine of Compartmentation:** Modern urban safety requires active 'compartmentation'—the structural method of dividing expansive floor spaces into smaller, fire-rated sections—to isolate fire outbreaks, prevent rapid vertical flame spread, and guarantee safe evacuation windows.
- **High-Density Access Constraints:** Dense urban pockets suffer from a severe lack of open operational space, where narrow streets (less than 9 metres wide), unauthorized street parking, and commercial encroachments critically impede the maneuverability of emergency firefighting vehicles.
- **Technological and Maintenance Gaps:** Passive installations like automated sprinklers, fire detection sensors, and smoke-check checks are rendered completely ineffective without regular structural maintenance and strict prohibitions on hazardous modifications or change of building occupancy.



Key Definitions

- **Compartmentation:** An architectural safety mechanism that divides a building into distinct thermal zones using fire-resistant barriers to restrict the spread of smoke, heat, and toxic gases.
- **Flashover Phase:** The critical point in a structural fire where the combination of thermal radiation and accumulated combustible gases causes simultaneous ignition of all exposed contents within an enclosed space.



Constitutional and Legal Provisions

- **Article 21 of the Indian Constitution:** The Right to Life implicitly guarantees the right to a safe living and working environment, free from foreseeable structural or man-made fire hazards.
- **National Building Code (NBC) of India:** The comprehensive statutory guide published by the Bureau of Indian Standards (BIS) that prescribes strict fire and life safety requirements for all multi-story and mixed-use commercial properties.
- **Twelfth Schedule (Article 243W):** Empowers Urban Local Bodies (ULBs) and municipal corporations with the statutory duty to manage fire services and implement urban safety bylaws.

UPSC Relevance

- **GS Paper III:** Disaster and disaster management (Urban fires, anthropogenic hazards); Infrastructure safety models; Institutional frameworks for regulatory compliance.

Conclusion

Urban fire safety in India must transition from reactive crisis response to rigid preventive compliance. Overhauling municipal enforcement, making multi-compartment layouts mandatory, and eliminating high-risk facade materials are critical structural interventions needed to safeguard human lives and make Indian cities resilient against localized thermal disasters.

8. Molecular Determinants of Zoonotic Spillover in Coronaviruses

- **Discovery of a Single Genetic Switch:** A breakthrough study by researchers at the University of California, San Francisco (UCSF) has revealed that a single amino acid alteration can entirely transform how a coronavirus interacts with the respiratory systems of different mammal species.
- **Comparative Molecular Profiling:** By comparing the human pathogen SARS-CoV-2 with its closest known bat-only counterpart, RaTG13, using the first laboratory-grown horseshoe bat lung cell line, scientists decoded the precise mechanism governing species-barrier breaches.
- **The Key Regulatory Protein:** The investigation identified an accessory viral protein, designated OrfB9 (or Orf9b), as the critical molecular driver behind the evolutionary adaptation and host-immune evasion that leads to cross-species transmission.
- **Immune Evasion in Human Cells:** In human lung tissue, the mutated SARS-CoV-2 variant of OrfB9 successfully deactivates cellular interferon pathways and innate immune alarm systems, permitting unhindered, rapid viral replication and severe infection.



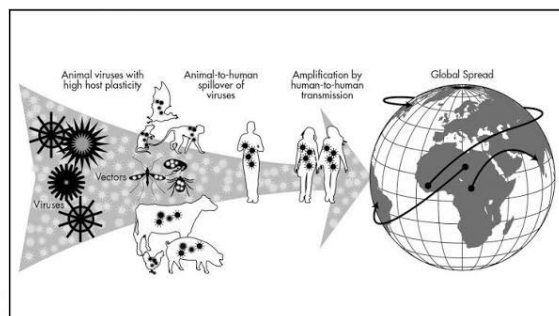
- **Containment Dynamics in Animal Hosts:** Conversely, inside bat lung cells, the RaTG13 version of the same protein actively triggers immune alarms, working as an ecological defense framework that keeps the viral load contained without causing clinical disease.

Key Definitions

- **Zoonotic Spillover:** The critical biological event where a pathogen shifts permanently or transiently from its natural reservoir animal host population into humans.
- **Interferon System:** A group of signaling proteins made and released by host cells in response to the presence of viruses, acting as the primary line of defense.

Constitutional and Legal Provisions

- **Article 51A(h) of the Indian Constitution:** Prescribes a Fundamental Duty to develop the scientific temper, humanism, and the spirit of inquiry and reform, underpinning public investments in advanced biosafety research.
- **Epidemic Diseases Act, 1897:** The historic statutory tool empowering the central and state governments to institute sweeping quarantine measures and respond to localized zoonotic outbreaks.
- **Biological Diversity Act, 2002:** Regulates access to biological resources and associated knowledge, critical for cross-border scientific collaboration on pathogens.



UPSC Relevance

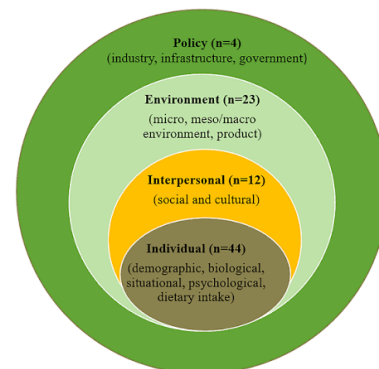
- **GS Paper III:** Science and Technology-developments and their applications in everyday life and public health; Awareness in the fields of Biotechnology and bio-defense; Disaster management regarding public health emergencies.

Conclusion

Unmasking how micro-mutations trigger macro-level public health crises elevates pandemic preparedness from a policy response to an exact science. By cataloging these distinct protein-level signatures across species, global health architectures can build predictive genomic early-warning pipelines, neutralizing high-risk zoonotic spillover events long before they escalate into global pandemics.

9. Institutional Paradigms for Addressing the Double Burden of Adolescent Malnutrition

- **The Paradigm of the Double Burden:** India is facing a complex public health emergency characterized by the simultaneous co-existence of undernutrition (stunting/wasting) alongside skyrocketing rates of overnutrition (obesity and metabolic syndromes) spreading into rural geographies.
- **Alarming Anthropometric Trajectories:** National Family Health Survey-6 (NFHS-6) datasets reveal that adult obesity has expanded to 30.7% in women and 27.3% in men, while early-onset metabolic markers like high blood sugar have breached 20.9% for young males.





- **The Metabolic Reality of Thin-Fat Phenotypes:** Comprehensive National Nutrition Survey (CNNS) metrics highlight that while 27.4% of Indian adolescents remain structurally stunted, a substantial portion of apparently lean children carry elevated triglycerides, creating a ticking cardiovascular time bomb.
- **Dietary Shifts and the Rise of UPFs:** Nutritional quality is collapsing due to inadequate consumption of protective micronutrients alongside a >13.7% year-on-year surge in the consumption of Ultra-Processed Foods (UPFs) and High Fat, Sugar, and Salt (HFSS) products.
- **Schools as Critical Public Health Hubs:** The ICMR-National Institute of Nutrition (ICMR-NIN) under its 'Let's Fix Our Food' (LFOF) initiative advocates utilizing schools to transform food environments via UPF-free zones, mandatory nutrition literacy, and skill-based food label reading.

Key Definitions

- **Thin-Fat Phenotype:** A body composition configuration prevalent in South Asians where individuals present a normal or low Body Mass Index (BMI) but possess disproportionately high visceral fat and severe metabolic risks.
- **Ultra-Processed Foods (UPFs):** Industrial formulations consisting entirely of substances derived from foods and additives, typically characteristically low in fiber and micronutrients while high in glycemic load.

Constitutional and Legal Provisions

- **Article 47 of the Indian Constitution:** Directs the State as a primary duty to raise the level of nutrition and the standard of living of its people and the improvement of public health.
- **Article 21:** The right to health and access to clean, non-toxic, nutritional security forms an absolute component of the right to an honorable life.
- **FSSAI (Food Safety and Standards Authority of India) Regulations:** Formulates statutory limits on HFSS advertising and governs the mandatory front-of-pack nutritional labeling (FOPL) systems.

UPSC Relevance

- **GS Paper II:** Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources; Government policies and interventions.
- **GS Paper III:** Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System-objectives, functioning, limitations, revamping.

Conclusion

Transitioning India's youth away from a projected trajectory of chronic lifestyle diseases requires moving past passive health advisories. Structural school-based dietary regulation, aggressive taxation on HFSS commodities, and standardizing metabolic screenings within primary education frameworks are non-negotiable interventions to safeguard India's demographic dividend.

10. Anthropogenic Catalysts and Systemic Socio-Economic Impacts of the European Heatwave

- **Unprecedented Climatological Thresholds:** A record-breaking heatwave across continental Europe pushed localized temperatures past the 40°C threshold, establishing a new baseline for high-latitude thermal anomalies and severely overwhelming regional climate resilience.



- **Severe Demographic Vulnerability and Mortality:** The climate anomaly caused over 1,000 excess deaths in France alone, primarily concentrated among elderly demographics, highlighting critical deficits in geriatric care networks and community heat-response protocols during extreme weather events.
- **Widespread Infrastructure and Energy Degradation:** Prolonged thermal stress caused widespread disruption by degrading heavy transportation grids, causing physical damage to basic municipal infrastructure, and altering cooling operations to bottleneck national power generation.
- **The Fingerprint of Anthropogenic Forcing:** Advanced attribution science establishes that the structural intensity and anomalous night-time temperatures—now quantified as 100 times more likely to occur than two decades ago—would be virtually impossible without human-induced global warming.
- **Compound Meteorological Disasters:** The thermal crisis was immediately compounded by severe, volatile convective storms moving across affected regions, leading to a cascading emergency of simultaneous power grid failures and travel disruptions.

Key Definitions

- **Attribution Science:** A sub-field of meteorology that utilizes statistical modeling to measure how much human-induced climate change directly alters the probability, frequency, and severity of specific extreme weather events.
- **Excess Mortality:** The temporary or sustained increase in the number of deaths observed during a specific period compared to the historical baseline expected under normal, non-crisis environmental conditions.

Constitutional and Legal Provisions

- **Article 48A of the Indian Constitution:** Mandates that the State shall endeavor to protect and improve the environment, serving as the constitutional foundation for India's domestic climate change litigation and international mitigation targets.
- **Article 21:** Interpreted progressively by the Supreme Court to encompass the right to clean air, stable ecological balances, and institutional protection against lethal environmental or thermal hazards.
- **The Paris Agreement (2015):** A legally binding international treaty on climate change aiming to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels, to prevent runaway heat anomalies.

UPSC Relevance

- **GS Paper I:** Important Geophysical phenomena (Climate change metrics, spatial heatwave distribution, global warming patterns).
- **GS Paper III:** Environmental degradation and pollution; Disaster management architectures (Heat Action Plans, urban heat island mitigation, infrastructure resilience).

Conclusion

The catastrophic footprint of the European thermal crisis underscores that extreme weather anomalies are no longer distant projections but pressing macro-critical threats. For global administrations, including India, this highlights the urgent necessity of transitioning from passive disaster relief toward climate-hardened infrastructure engineering and decentralized, proactive municipal Heat Action Plans (HAPs).



11. Legal Frameworks of Naval Warfare and Neutral Shipping Protections

- **Fatal Transgressions Against Neutral Shipping:** Recent U.S. Navy Hellfire missile strikes targeting merchant tankers—Marivex, Settebello, and Jalveer—operating in the volatile Strait of Hormuz led to the deaths of three Indian seafarers aboard Settebello, triggering acute issues of state responsibility.
- **Fragility of Geopolitical MoUs:** The attacks occurred despite the June 17, 2026 Islamabad Memorandum of Understanding signed by U.S. President Donald Trump and Iranian President Masoud Pezeshkian, highlighting how rapidly ongoing maritime friction can breach diplomatic agreements.
- **Dual Strands of Maritime Law:** Naval operations during international armed conflicts are bound by a complex intersection of the "law of naval warfare" (International Humanitarian Law governing hostilities) and the "law of the sea" (structuring operational geography and maritime zones).
- **Inviolability of Transit Passage:** Under standard customary international law and UNCLOS frameworks, neutral commercial vessels retain the strict legal right of "transit passage" through vital international straits, insulated from unilateral military targeting.
- **Thresholds for Losing Protected Status:** Neutral merchant ships forfeit their immunity only under narrow conditions outlined in the San Remo Manual (1994)—such as intentionally breaching a public blockade, transporting active contraband, or directly engaging in war-sustaining military intelligence.
- **Sovereign Avenues for Indian Redress:** Under the internationally recognized doctrine of "diplomatic protection," India possesses clear legal standing to espouse claims for injuries to its nationals, demand formal accountability, seek financial compensation, and initiate independent investigations into the fatalities.



Key Definitions

- **Jus in Bello:** The body of international law and humanitarian principles that strictly regulates the conduct and methods of parties already engaged in an active armed conflict.
- **Contraband:** Goods or commodities with direct military utility destined for an enemy-controlled territory or directly supporting an adversary's active war effort.

Constitutional and Legal Provisions

- **Article 51(c) of the Indian Constitution:** A Directive Principle mandating that the State shall endeavor to foster respect for international law and treaty obligations in the dealings of organized peoples with one another.
- **UNCLOS (United Nations Convention on the Law of the Sea):** The global codification defining maritime sovereignty, exclusive economic zones, and standard transit passage parameters, functioning as the customary standard for global ocean governance.



UPSC Relevance

- **GS Paper II:** Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora; Important International institutions, agencies and fora-their structure, mandate.

Conclusion

The targeting of Indian-crewed commercial tankers highlights a critical systemic friction between unilateral military blockade enforcement and established international humanitarian standards. For India, asserting diplomatic protection is essential not only to secure justice for its citizens but to prevent the normalization of illegal violence against neutral civilian shipping lines.

12. Revised Operational Guidelines for Anaemia Mukht Bharat Abhiyaan

- **Evolution of the Flagship Paradigm:** The Union Ministry of Health and Family Welfare launched the revamped Anaemia Mukht Bharat (AMB) Abhiyaan at the 16th meeting of the Central Council of Health and Family Welfare, pivoting from simple medicinal supplementation to a comprehensive, technology-driven, community-led intervention framework.
- **Transition to the 7x7x7 Strategy:** The updated policy matrix expands the baseline 6x6x6 blueprint into a multi-dimensional 7x7x7 framework, adding Low Birth Weight (LBW) infants aged 0-6 months as the seventh beneficiary group to mandate early clinical protection during crucial early growth windows.
- **Institutionalisation of Eating Right:** The seventh core intervention incorporates the "Eating Right" paradigm, transitioning the national strategy toward daily diversification of nutrient-dense, localized diets to counter underlying non-nutritional and nutritional cross-deficiencies.
- **Upgraded T4 Service Protocol:** The operational model replaces the historical T3 framework with an active T4 approach: Test (intensive routine hemoglobin screening), Treat (protocol-based management), Talk (targeted nutritional counseling), and Track (systematic beneficiary referral and digital follow-up).
- **Clinical Escatological Interventions:** For severe public health vulnerabilities among pregnant or lactating cohorts who show zero progress on oral iron, the guidelines explicitly standardize advanced intravenous treatments using Ferric Carboxymaltose (FCM) and Iron Sucrose at public health facilities.
- **Integrated Digital Monitoring Ecosystem:** The strategy establishes a unified tracking architecture, converging independent real-time data from the JANANI portal (for pregnant women), RBSK, and U-WIN portals into a single, comprehensive AMB Abhiyaan Portal for data-driven municipal planning.



Key Definitions

- **Anaemia:** A clinical blood disorder characterized by a deficit in circulating red blood cells or hemoglobin concentrations, dropping the blood's oxygen-carrying capacity below normal physiological thresholds.
- **Thin-Fat Phenotype:** An anthropometric status characterized by a low or normal body mass index concurrently combined with high internal visceral fat and elevated multi-metabolic risk factors.



Constitutional and Legal Provisions

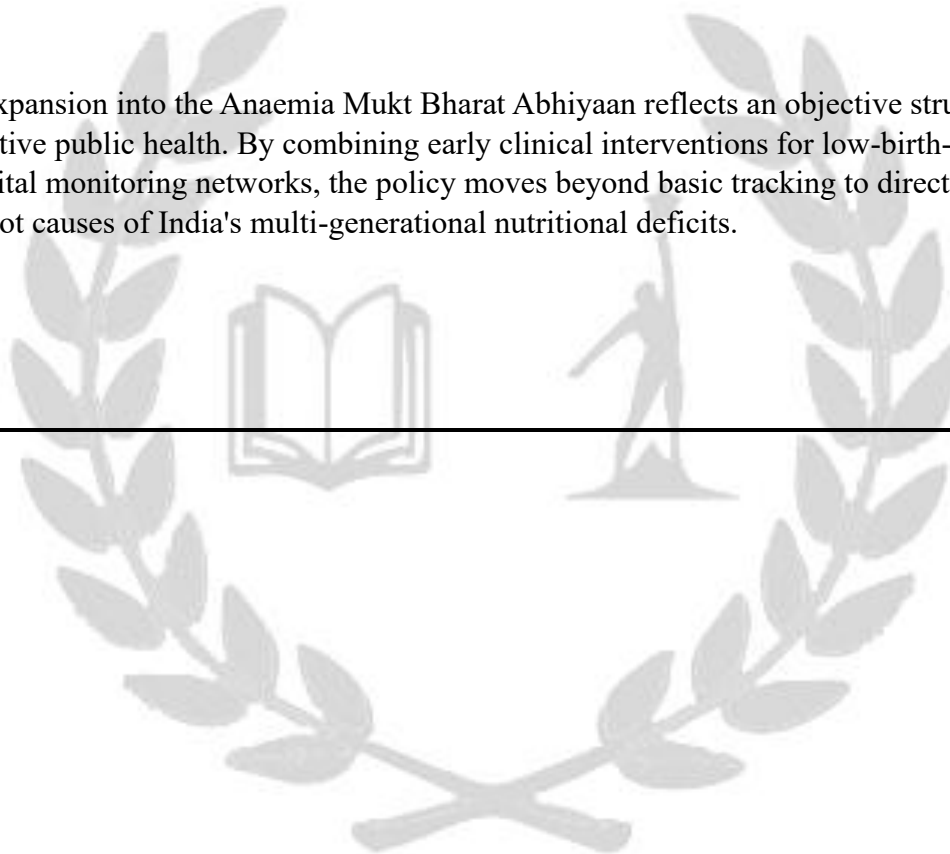
- **Article 47 of the Indian Constitution:** Directs the State as a primary duty to raise the level of nutrition and the standard of living of its people and to improve public health across all demographic sectors.
- **National Food Security Act (NFSA), 2013:** Provides legal entitlements to nutritional support for pregnant women, lactating mothers, and children, reinforcing the legal framework behind direct dietary interventions.

UPSC Relevance

- **GS Paper II:** Issues relating to the development and management of the Social Sector/Services relating to Health, Education, and Human Resources; Welfare schemes for vulnerable sections.

Conclusion

The structural expansion into the Anaemia Mukht Bharat Abhiyaan reflects an objective structural shift toward preventative public health. By combining early clinical interventions for low-birth-weight neonates with unified digital monitoring networks, the policy moves beyond basic tracking to directly target the physiological root causes of India's multi-generational nutritional deficits.



VIDHVATH IAS ACADEMY