

PrepAlpine

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DAILY CURRENT AFFAIRS DATED 07.04.2026

GS Paper II: Current Affairs

1. Freedom of Choice in Marriage and Prevention of Honour Crimes Act, 2026 (Karnataka): Law, Society and Constitutional Morality

a. Introduction

Marriage in India has never been purely a personal choice. It is deeply shaped by caste, community, family authority, and long-standing social norms. While the Constitution guarantees individuals the freedom to choose their partners, social practices have often restricted this freedom—sometimes violently.

In this context, the Freedom of Choice in Marriage and Prevention of Honour Crimes Act, 2026 (Karnataka) is a significant step towards bridging the gap between constitutional ideals and social reality. The law moves beyond treating honour crimes as isolated incidents and recognises them as a structural problem rooted in caste hierarchy and patriarchy. It affirms a core principle: the right to choose one's partner is a fundamental right, not a privilege.



b. Understanding Honour Crimes in the Indian Context

Meaning and Nature of Honour Crimes

- Based on the belief that family or community honour depends on individual behaviour
- Mostly linked to marriage choices, especially by women
- Seen as punishment for violating social norms

Forms of Honour Crimes

- Threats and intimidation
- Forced confinement or separation
- Social boycott by community
- Physical violence, including killings

Key Characteristics

- Often collective in nature — family/community involvement
- Driven by caste, religion, or social norms
- Not random crimes, but acts of social control

These features show that honour crimes are deeply embedded in social structures, not just individual acts. This leads to the need for constitutional protection of individual choice.

c. Constitutional Foundations of the Right to Marry

Article 21: Right to Life and Personal Liberty

- Includes the freedom to make intimate personal decisions
- Covers the right to choose one's partner

Article 19: Freedom of Expression

- Expressing identity and relationships
- Choosing a partner as a form of personal expression

Article 14: Equality Before Law

- Prohibits discrimination based on caste, gender, etc.
- Ensures equal protection for all individuals

Judicial Support

- *Shakti Vahini v. Union of India* (2018)
- Supreme Court upheld the right to marry by choice
- Emphasised that constitutional morality must prevail over social morality

Thus, the Karnataka law is not new in principle—it translates these constitutional values into enforceable mechanisms.

d. Key Features of the 2026 Law

Recognition of Absolute Choice in Marriage

- Adults have unconditional right to choose partners
- No legal relevance of parental or community consent
- Reinforces personal autonomy as a legal right

Criminalisation of Honour-Based Violence

- Defines honour crimes as a distinct category
- Covers violence, threats, harassment, intimidation
- Makes offences cognizable and non-bailable

Enhanced Punishment

- Additional penalties over general criminal law (BNS)
- Treats honour crimes as aggravated offences
- Acts as stronger deterrent

Institutional Mechanisms for Protection

- District-level bodies like *Eva Nammava Vedike*
- Headed by Deputy Commissioner
- Provide counselling, support, and assistance

- Fast-track courts for speedy trials
- Monitoring committees for accountability

Legal Protection for Couples

- Formal system for protection against threats
- Encourages victims to approach authorities
- Makes rights practically enforceable

These provisions show that the law combines punishment with support, making it both preventive and corrective.

e. Social Context Behind the Law

Persistence of Caste and Endogamy

- Strong preference for marriage within caste/community
- Violation seen as social rebellion

Patriarchal Control

- Women's choices linked to family honour
- Greater restrictions on female autonomy

Ground Reality

- Continued cases of honour killings (Karnataka and India)
- Gap between legal rights and social practices

Thus, the law responds to a deeper contradiction: legal equality vs social inequality.

f. Significance of the Law

Strengthening Fundamental Rights

- Reinforces right to marry as part of personal liberty
- Aligns statutory law with constitutional values

Filling Legal Gap

- Recognises honour crimes as a distinct category
- Enables targeted enforcement

Social Reform Dimension

- Challenges caste-based restrictions
- Weakens patriarchal control over marriage

Comprehensive Approach

- Combines preventive and punitive measures
- Focuses on both protection and punishment

This makes the law not just legal reform, but also an instrument of social transformation.

g. Challenges and Concerns

Possibility of Misuse

- May be invoked in complex family disputes

- Requires careful judicial scrutiny

Deep-Rooted Social Attitudes

- Honour-based thinking linked to caste and patriarchy
- Resistance to change likely

Implementation Issues

- Dependence on police and administrative efficiency
- Need for training and sensitisation

Institutional Capacity

- Effectiveness of district bodies uncertain
- Delays or weak enforcement may reduce impact

These challenges highlight that law alone cannot bring complete change.

h. A Larger Transition in Indian Society

Traditional System

- Marriage controlled by family and caste
- Individual choice limited

Emerging Trend

- Rise of individual autonomy
- Increasing acceptance of inter-caste/inter-faith marriages

Nature of Transition

- Shift from status-based society to rights-based society
- Uneven and contested process

Thus, the law reflects a broader social transformation already underway.

i. Way Forward

Strengthening Implementation

- Training police and officials
- Ensuring quick response to threats

Awareness and Sensitisation

- Promote constitutional values
- Reduce social resistance

Support Systems

- Safe houses for couples
- Legal aid and financial support

Community Engagement

- Dialogue with community leaders
- Gradual change in social attitudes

Ultimately, legal reform must be supported by social change.

Conclusion

The Freedom of Choice in Marriage and Prevention of Honour Crimes Act, 2026 is a crucial step towards aligning Indian law with constitutional morality. It places individual dignity and autonomy above caste and community pressures, and recognises honour crimes as systemic violations of rights.

However, its success will depend on effective implementation and societal acceptance. The deeper message of the law is clear: true honour lies not in controlling individuals, but in respecting their freedom and dignity.

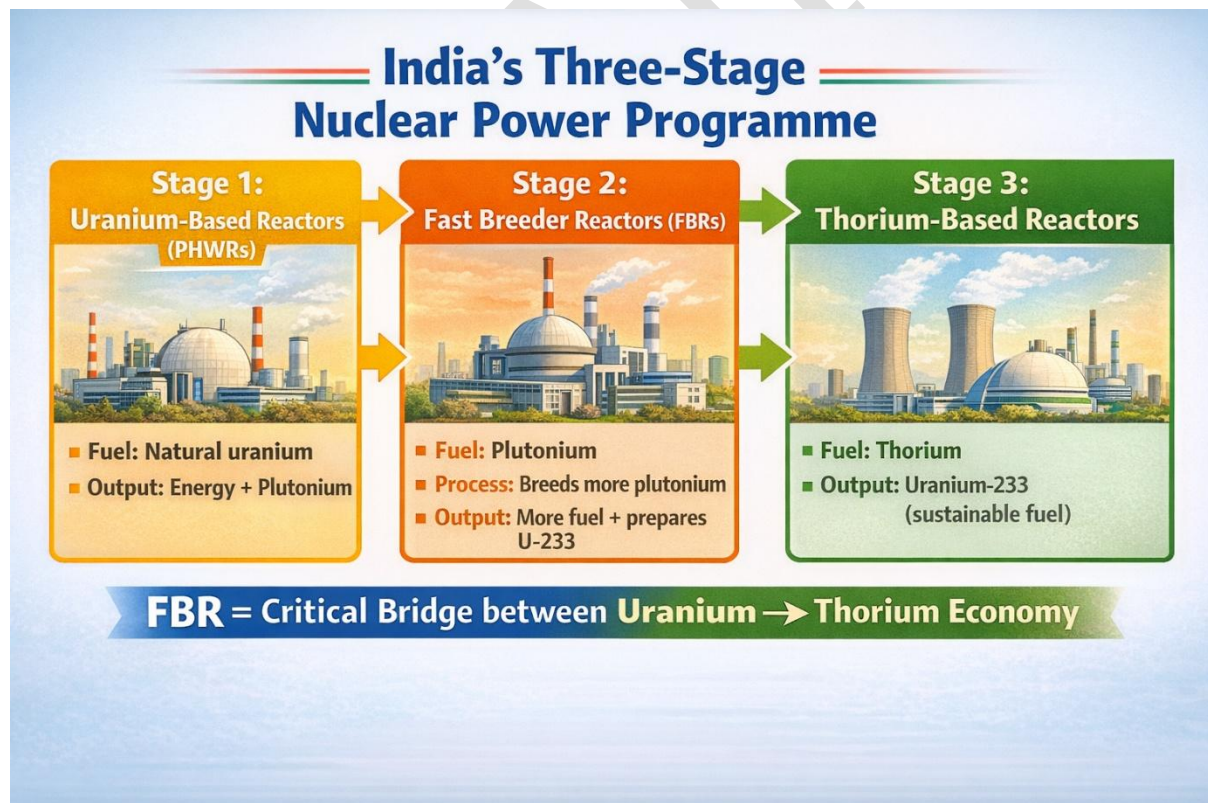
GS Paper III: Science and Technology

2. Fast Breeder Reactor at Kalpakkam: Technology, Strategy and India's Nuclear Future

a. Introduction

India's nuclear energy programme has always been shaped by a unique constraint: limited domestic uranium resources but abundant reserves of thorium. This structural reality led India to design a long-term, three-stage nuclear strategy aimed at achieving energy security through efficient fuel utilisation and eventual reliance on thorium.

In this context, the achievement of criticality in the Fast Breeder Reactor (FBR) at Kalpakkam marks a decisive milestone. It signals not only technological maturity but also progress in India's transition towards a more sustainable and self-reliant nuclear energy system.



b. Understanding the Idea of Criticality

What is Nuclear Fission and Chain Reaction

- Nuclear reactors work on nuclear fission—splitting of heavy atoms (like uranium), releasing energy and neutrons.

- These neutrons trigger further fission reactions, creating a chain reaction.

Meaning of Criticality

- When the chain reaction becomes self-sustaining, the reactor is said to reach *criticality*.
- It means energy production continues steadily without external input.

Why Criticality Matters

- It confirms that the reactor design is functionally sound.
- It marks the transition from testing to operational readiness.
- It is the most crucial milestone before electricity generation begins.

Thus, criticality is like the “engine starting successfully” before full power generation.

c. What Makes a Fast Breeder Reactor Different

Use of Fast Neutrons

- Unlike conventional reactors, FBRs use fast (high-energy) neutrons.
- No moderator is used, allowing neutrons to retain high energy.

Breeding of Fuel

- The reactor core is surrounded by a blanket of uranium-238.
- Fast neutrons convert it into plutonium-239 (usable fuel).

Key Distinction

- Conventional reactors — consume fuel
- Fast Breeder Reactors — produce more fuel than they consume

Hence, FBRs act like a “fuel multiplier”, making them highly efficient.

d. Role in India’s Three-Stage Nuclear Programme

Stage 1: Uranium-Based Reactors

- Use natural uranium in Pressurised Heavy Water Reactors (PHWRs)
- Produce plutonium as a by-product

Stage 2: Fast Breeder Reactors (Current Stage)

- Use plutonium as fuel
- Generate more plutonium and prepare for uranium-233

Stage 3: Thorium-Based Reactors

- Use thorium to produce uranium-233
- Enable long-term sustainable energy

FBR is the critical bridge between Stage 1 and Stage 3.

e. Strategic Importance for India

Efficient Use of Limited Uranium

- Converts non-fissile uranium into usable fuel
- Extracts maximum energy from limited resources

Gateway to Thorium Utilisation

- India has vast thorium reserves
- Thorium needs FBRs for conversion into usable fuel

Strengthening Energy Security

- Reduces dependence on imported fossil fuels
- Provides reliable baseload power — continuous supply

Technological and Strategic Edge

- Only a few countries possess FBR technology
- Enhances strategic autonomy and global standing

Thus, FBR is not just a reactor—it is a strategic asset.

f. Features of the Kalpakkam Reactor

Technical Specifications

- 500 MW electric capacity
- Fully indigenous design and development

Cooling Mechanism

- Uses liquid sodium as coolant
- Ensures efficient heat transfer without slowing neutrons

Advanced Design

- Incorporates modern safety and control systems
- Designed for long-term sustainability

It reflects decades of Indian expertise in nuclear engineering.

g. Significance of Achieving Criticality

- **Validation of Technology:** Confirms reactor design and systems are working correctly
- **Transition Phase:** Moves from construction/testing to operational stage
- **Path to Power Generation:** Reactor can now be gradually scaled to full power output

Criticality is the turning point before commercial electricity generation.

h. Challenges Associated with Fast Breeder Reactors

High Cost and Complexity

- Expensive construction and maintenance
- Requires advanced materials and precision engineering

Safety Concerns

- Sodium coolant reacts violently with air/water
- Requires strict safety protocols

Long Development Timeline

- Projects take years/decades
- Need sustained policy and financial support

These challenges explain why only a few countries have mastered FBR technology.

i. Role in India's Energy Transition

Complement to Renewables

- Solar and wind are intermittent
- Nuclear provides stable baseload power

Low Carbon Energy Source

- Helps reduce carbon emissions
- Supports climate commitments

Balanced Energy Mix

- Combines nuclear, renewable and other sources
- Ensures reliable and clean energy system

FBRs strengthen India's shift towards a sustainable energy future.

j. Way Forward

Scaling Up Technology

- Build more breeder reactors
- Expand nuclear capacity

Transition to Thorium

- Accelerate Stage 3 development
- Fully utilise India's thorium reserves

Strengthening Safety and Trust

- Improve regulatory oversight
- Build public confidence

Integration with Energy Policy

- Combine nuclear with renewables
- Create a resilient energy system

Conclusion

The achievement of criticality in the Fast Breeder Reactor at Kalpakkam represents a major step in India's long-term nuclear strategy. It demonstrates the country's ability to develop complex technologies and move closer to a sustainable, thorium-based energy future.

While challenges remain, the reactor stands as a symbol of India's pursuit of energy security, technological self-reliance, and clean energy transition.

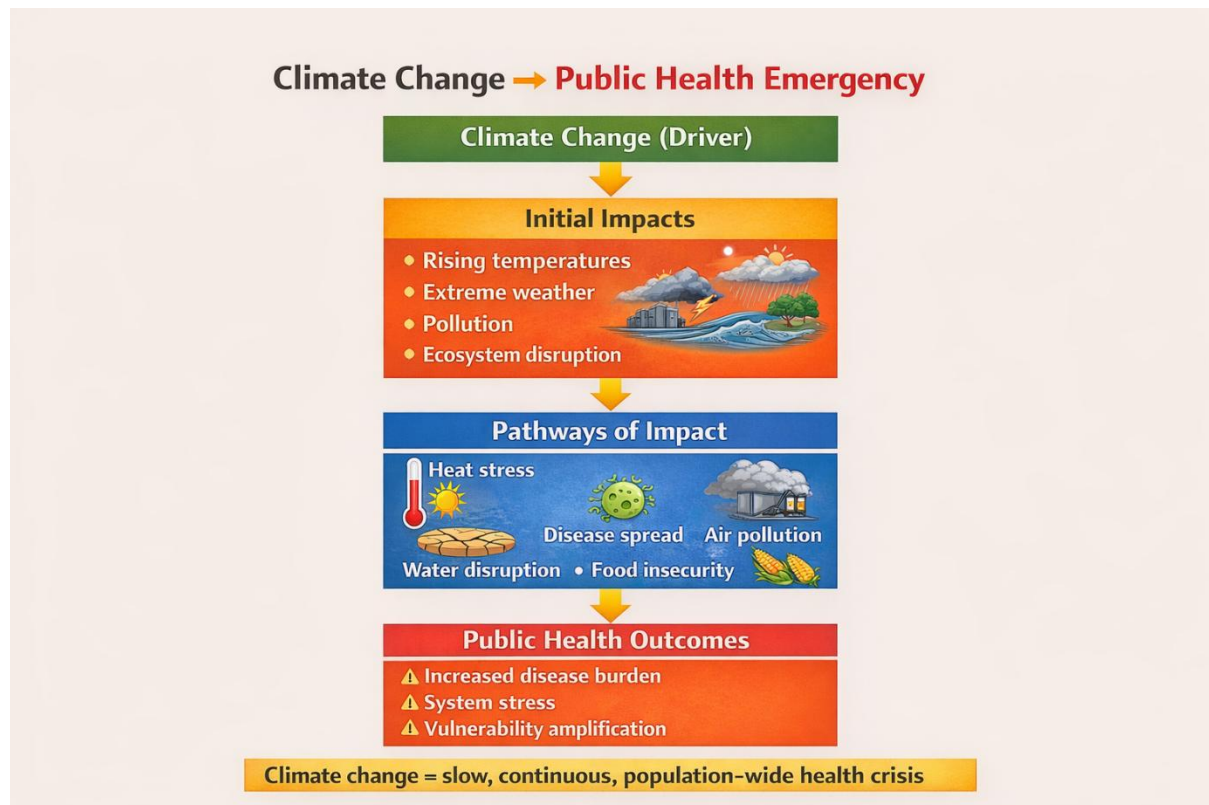
GS Paper III: Disaster Management

3. Climate Change as a Public Health Emergency: Understanding the Human Impact

a. Introduction

Climate change is often discussed in terms of rising temperatures, melting glaciers, or extreme weather events. However, its most immediate and profound impact is on human life itself. Increasingly, it is being recognised that climate change is not only an environmental issue but also a serious public health challenge.

It affects how people live, work, eat, and survive, thereby placing pressure on health systems and increasing disease burdens. In this sense, climate change must be understood as a public health emergency, because its effects are widespread, continuous, and deeply interconnected with human well-being.



b. Understanding a Public Health Emergency

Meaning and Characteristics

- A public health emergency involves large-scale health risks affecting populations.
- It requires urgent and coordinated response from governments and institutions.
- It often leads to pressure on healthcare systems.

Why Climate Change Fits This Definition

- It affects millions simultaneously, not isolated individuals.
- It increases disease burden and weakens health systems.
- Unlike epidemics, it is slow-moving but persistent, making it harder to manage.

Thus, climate change is a “silent and continuous emergency”, not a sudden crisis.

c. Impact of Heat on the Human Body

Rising Temperatures and Heatwaves

- Climate change has increased frequency and intensity of heatwaves.
- The human body struggles to maintain heat balance at extreme temperatures.

Health Effects

- Dehydration, heat exhaustion, and heat stroke
- Increased strain on the heart and circulatory system
- Higher risk for elderly and those with pre-existing conditions

Role of Night-Time Temperatures

- Earlier, cooler nights allowed body recovery
- Rising night temperatures prevent recovery, causing cumulative stress

Vulnerable Groups

- Outdoor workers
- Urban poor
- Elderly

Heat is the most immediate and visible health impact of climate change.

d. Changing Patterns of Disease

Role of Climate in Disease Spread

- Temperature, humidity, and rainfall affect mosquito breeding
- Climate influences survival and spread of pathogens

Emerging Trends

- Diseases like dengue and malaria spreading to new regions
- Longer transmission seasons

Key Insight

- Climate change is reshaping geography and timing of diseases
- Makes disease prediction and control more difficult

Thus, it is not just increasing diseases, but changing their behaviour.

e. Air Pollution and Systemic Health Effects

Link Between Climate Change and Pollution

- Higher temperatures increase pollutant formation
- Increased energy use leads to higher emissions

Health Impact of PM2.5

- Fine particles enter bloodstream
- Affect multiple organs

Diseases Caused

- Respiratory issues — asthma
- Cardiovascular problems — heart attack, stroke
- Organ damage — kidneys, etc.

Climate change leads to whole-body health effects, not just respiratory problems.

f. Water, Sanitation, and Disease Burden

Impact on Water Systems

- Floods contaminate water sources
- Droughts reduce access to clean water

Resulting Health Risks

- Water-borne diseases: cholera, typhoid, diarrhoea
- Increased risk in urban areas with poor drainage

Climate change disrupts basic public health conditions like safe water.

g. Food Security, Nutrition, and Health

Impact on Agriculture

- Irregular rainfall and extreme weather reduce crop yield
- Disrupt food supply chains

Health Consequences

- Malnutrition and micronutrient deficiency
- Weak immunity leads to higher disease vulnerability

Impact on Vulnerable Groups

- Children face developmental issues
- Pregnant women face health complications

Climate change affects health indirectly through the food system.

h. Additional Dimensions of Health Impact

Maternal and Child Health

- Heat stress and pollution increase risk of preterm births

Occupational Health

- Workers face dehydration, fatigue, kidney issues

Mental Health

- Disasters cause stress, anxiety, trauma
- Loss of livelihood increases psychological burden

Climate change creates a multi-dimensional health crisis.

i. Climate Change as a Threat Multiplier

Meaning

- Climate change worsens existing vulnerabilities
- It amplifies rather than always creating new problems

Examples

- Malnutrition and heatwave → higher disease risk
- Poor sanitation and floods → severe outbreaks

Impact on Inequality

- Disproportionately affects the poor and vulnerable
- Deepens social and health inequalities

It acts as a force multiplier of risk, making existing problems worse.

j. India's Vulnerability

Structural Factors

- Large population
- Tropical climate
- Dependence on agriculture

Developmental Challenges

- Rapid urbanisation with weak infrastructure
- Limited public health resources

India faces a combined burden of environmental and health stress.

k. Governance Challenges

Policy Fragmentation

- Climate policy and health policy are often separate

Lack of Preparedness

- Weak early warning systems
- Limited disease surveillance

Urban and Social Gaps

- Poor urban planning leading to heat islands, flooding
- Low public awareness

Without integration, responses remain ineffective and reactive.

1. Way Forward

Integrating Climate and Health Policy

- Include climate risks in health planning
- Build climate-resilient healthcare infrastructure

Strengthening Surveillance

- Monitor climate-sensitive diseases
- Improve early warning systems

Improving Urban Planning

- Reduce heat stress with green spaces
- Strengthen drainage and sanitation

Protecting Vulnerable Groups

- Focus on labourers, elderly, children
- Targeted welfare measures

Long-Term Solutions

- Clean energy transition
- Sustainable agriculture
- Environmental conservation

A preventive and adaptive approach is essential.

Conclusion

Climate change has transformed from an environmental issue into a direct and immediate threat to human health. Its impacts are widespread, interconnected, and long-lasting, affecting everything from disease patterns to nutrition and mental well-being.

Recognising climate change as a public health emergency is crucial because it shifts focus towards human survival and well-being. Only through integrated, proactive, and inclusive strategies can societies effectively respond to this growing challenge.

GS Paper III: Disaster Management

4. One Health Approach: Integrating Human, Animal and Environmental Well-being

a. Introduction

In the contemporary world, health challenges are no longer confined to individuals or even to human populations alone. The rise of pandemics, vector-borne diseases, and antimicrobial resistance shows that human health is deeply linked with animals and the environment.

The One Health approach emerges from this reality. It recognises that effective disease prevention and health promotion require a coordinated and integrated perspective, rather than isolated efforts by different sectors.

b. The Core Idea of One Health

Fundamental Principle

- Human health, animal health, and environmental health are interconnected and interdependent.
- A change in one domain affects the others.

Real-World Illustration

- Deforestation disrupts wildlife habitats



- Increased human-animal interaction raises risk of disease transmission
- Example: COVID-19 showed how local events can become global crises

Thus, protecting human health requires maintaining ecological balance and animal health.

c. Why the One Health Approach Has Become Necessary

Limits of Traditional Health Systems

- Earlier focus was on treating diseases after they appeared
- Assumed diseases were confined to human populations

Emerging Realities

- Many new diseases are zoonotic (animal-origin)
- Climate change is altering disease patterns
- Overuse of antibiotics in livestock is causing antimicrobial resistance (AMR)

Key Insight

- Health problems are now systemic and interconnected
- Require a holistic and preventive approach

This marks a shift from human-centric to system-centric health thinking.

d. Understanding One Health as an Approach

Nature of the Framework

- Not a single policy, but a collaborative framework
- Involves multiple disciplines:
 - Medicine
 - Veterinary science
 - Environmental science
 - Public policy

Focus Areas

- Prevention rather than reaction
- Early detection of risks at source
- Coordinated response across sectors

One Health focuses on stopping diseases before they spread to humans.

e. Key Areas Where One Health is Crucial

Zoonotic Diseases and Cross-Species Transmission

- Diseases that spread from animals to humans
- Increased by deforestation, wildlife trade, urban expansion
- Early monitoring helps prevent epidemics

Climate Change and Health Outcomes

- Temperature and rainfall changes affect disease vectors
- Spread of diseases like dengue and malaria
- Extreme events (floods, heatwaves) worsen health outcomes

Food Systems and Antimicrobial Resistance

- Excessive antibiotic use in livestock
- Leads to drug-resistant bacteria
- Spread through food, water, and contact

Environmental Degradation and Disease Burden

- Pollution → respiratory and systemic diseases
- Water contamination → outbreaks
- Ecosystem disruption → increased infection risks

These areas show that health challenges are multi-sectoral in nature.

f. Key Features of the One Health Approach

Integration Across Sectors

- Breaks silos between health, agriculture, and environment
- Encourages data sharing and collaboration

Preventive Orientation

- Focus on early identification of risks
- Reduces long-term disease burden and costs

Scientific and Interdisciplinary Basis

- Combines knowledge from multiple fields
- Provides comprehensive understanding of risks

Global Cooperation

- Diseases cross borders easily
- Requires international coordination

One Health is both preventive and collaborative in nature.

g. Institutional Framework and Global Efforts

Global Collaboration

- WHO → Human health
- FAO → Food and agriculture
- UNEP → Environment
- WOAHA → Animal health

Indian Initiatives

- National One Health Mission
- Focus on:
 - Disease surveillance
 - Inter-sectoral coordination
 - Pandemic preparedness

Institutional support is essential for operationalising One Health.

h. Significance of the One Health Approach

Pandemic Prevention

- Identifies risks early
- Prevents large-scale outbreaks

Cost Efficiency

- Prevention reduces healthcare expenditure
- Avoids crisis-driven spending

Improved Public Health

- Addresses root causes, not just symptoms

Sustainable Development

- Links health with environment and food systems
- Supports long-term well-being

One Health ensures resilient and sustainable health systems.

i. Challenges in Implementation

Institutional Fragmentation

- Departments work in isolation
- Lack of coordination

Data Sharing Issues

- Limited information exchange
- Weak surveillance systems

Awareness and Capacity Gaps

- Limited understanding among policymakers
- Lack of trained professionals

Resource Constraints

- Funding and infrastructure limitations
- Greater challenge in developing countries

These barriers hinder effective implementation.

j. A Shift in Thinking

Earlier Model

- Reactive — Treat disease after occurrence
- Human-centric focus

New Model

- Preventive — Address risks at source
- System-based — Includes animals and environment

This reflects a shift from reaction to prevention, and isolation to integration.

k. Way Forward

Policy Integration

- Align health, agriculture, and environment policies

Strengthening Surveillance

- Improve early warning systems
- Enhance data sharing

Promoting Research and Capacity

- Encourage interdisciplinary studies
- Build skilled workforce

Public Awareness

- Educate communities about preventive practices

Global Cooperation

- Strengthen international partnerships
- Share knowledge and resources

A coordinated and long-term strategy is essential.

Conclusion

The One Health approach recognises a simple but powerful truth: human well-being cannot be separated from the health of animals and the environment. In an interconnected world marked by emerging diseases, climate change, and ecological stress, this integrated perspective is essential.

By shifting from isolated treatment to coordinated prevention, One Health provides a pathway towards resilient, sustainable, and equitable health systems.

Reader's Note — About This Current Affairs Compilation

Dear Aspirant,

This document is part of the PrepAlpine Current Affairs Series — designed to bring clarity, structure, and precision to your daily UPSC learning.

While every effort has been made to balance depth with brevity, please keep the following in mind:

1. Orientation & Purpose

This compilation is curated primarily from the UPSC Mains perspective — with emphasis on conceptual clarity, analytical depth, and interlinkages across GS papers.

However, the PrepAlpine team is simultaneously developing a dedicated Prelims-focused Current Affairs Series, designed for:

- factual coverage
- data recall
- Prelims-style MCQs
- objective pattern analysis

This Prelims Edition will be released separately as a standalone publication.

2. Content Length

Some sections may feel shorter or longer depending on topic relevance and news density. To fit your personal preference, you may freely resize or summarize sections using any LLM tool (ChatGPT, Gemini, Claude, etc.) at your convenience.

3. Format Flexibility

The formatting combines:

- paragraphs
- lists
- tables
- visual cues

—all optimised for retention.

If you prefer a specific style (lists → paras, paras → tables, etc.), feel free to convert using any free LLM.

4. Monthly Current Affairs Release

The complete Monthly Current Affairs Module will be released soon, optimized to a compact 100–150 pages — comprehensive yet concise, exam-ready, and revision-efficient.

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