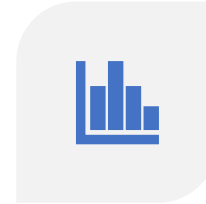
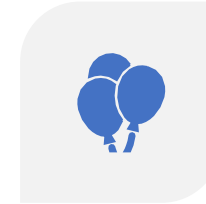




AXIA IAS ACADEMY



EDITORIAL ANALYSIS



MAY 24



CONSISTENT
COMPREHENSIVE AND
CREDIBLE



UNIQUE AND BEST IN
QUALITY



1. India and the 'New West' (THE SUNDAY GUARDIAN)
2. Cold War 2.0 must repeat success of Cold War 1.0 (THE SUNDAY GUARDIAN)
3. NSO's health survey shows real gains but also a crisis hiding in plain sight (THE TIMES OF INDIA)
4. What a rain gauge tells us about Indian science history (THE INDIAN EXPRESS)



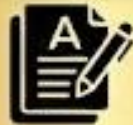
AXIA IAS ACADEMY

UPSC CSE CLASSES

RISE ABOVE THE REST



EXPERT
FACULTY &
GUIDANCE



COMPREHENSIVE
SYLLABUS
COVERAGE



STRATEGIC
TEST SERIES &
MENTORSHIP

ADMISSIONS OPEN

- Prelims + Mains + Interview
- Current Affairs Focus
- Personalized Attention
- Online & Offline Batches

 WEBSITE: axiaiasacademy.com

 CONTACT: +91 6002-417488 



MOHAN TOURANGBAM
NEW DELHI

The "West" as a political, economic, and normative construct in international relations is no longer as self-evident as it once appeared. For decades after the Second World War, the transatlantic alliance between the United States and Europe served not merely as a strategic coalition, but as a central organising principle of the international system itself. States within and beyond this structure positioned themselves in either amity or enmity toward it. NATO institutionalised Western collective defence, the Bretton Woods system shaped global finance, and the language of liberal democracy, free markets, and a rules-based order underpinned both the rhetoric and practice of the West's distribution of global public goods. For much of the post-war period, engaging the West meant dealing with a relatively coherent strategic and economic bloc. That coherence, however, is now under increasing strain.

Across the operationalisation of shared values and interests, the United States and Europe increasingly appear to be operating with diverging priorities, misaligned threat perceptions, and more transactional understandings of alliances.

The result is not necessarily the collapse of the West, but the emergence of a "New West"—a more fragmented, contested, and fluid configuration of Western power and identity. This transformation carries profound implications for India as well. Since the end of the Cold War, New Delhi has calibrated its ties with the West on the assumption of a relatively cohesive transatlantic partnership, despite periodic disagreements. India's strategic convergence with the United States, growing engagement with Europe, participation in Indo-Pacific frameworks, and integration into Western-led economic and technological ecosystems were all shaped by this operational logic. As fissures deepen within the Western alliance itself, however, India faces a new foreign policy test: navigating a West that is no longer fully unified in strategy, values, or priorities.

At one level, the "New West" remains a metaphorical construct. NATO still endures, the European Union remains a major political and economic entity, and the United States continues to anchor the transatlantic framework. Yet beneath this institutional continuity lies a widening divergence over alliances, burden-sharing, economic interdependence, security responsibilities, and even democratic values themselves. These tensions have become increasingly visible in recent years. The Munich Security Conference, once a symbol of transatlantic solidarity, now increasingly reflects strategic dissonance. European leaders speak of "strategic autonomy," while

India and the 'New West'

For India, fissures and fragmentation within the West introduce new strategic complexities. Over the last two decades, both the United States and Europe have emerged as key strategic partners across multiple domains, despite persistent conceptual and functional challenges.

Washington emphasises burden-sharing and transactional commitments. European capitals question long-term American reliability, even as the United States increasingly views allies through the lens of costs, reciprocity, and immediate strategic utility. The Trump administration, both rhetorically and through strategic documents, has repeatedly criticised Europe over immigration and warned of a looming "civilizational crisis."

Historically, the West derived cohesion from a shared threat environment. During the Cold War, the Soviet Union served as the strategic glue binding American and European security interests, with NATO embodying a broad ideological and geopolitical compact. Post-Cold War triumphalism reinforced the idea of a consolidated West through NATO's eastward expansion, deeper European integration, and the seeming irreversibility of liberal globalisation.

India's engagement with the West evolved within this framework. While retaining strategic autonomy, New Delhi steadily expanded ties with Western powers after 1991. As China's rise accelerated and Beijing grew more assertive, India's partnerships with the

United States and Europe gained greater geopolitical significance. The Indo-Pacific framework, the Quad, defence interoperability, technology cooperation, and supply-chain initiatives all emerged from this larger strategic environment.

Since the 2008 global financial crisis, economic dislocation, demographic anxieties, the rise of populism and polarization have steadily reshaped political discourse across Europe and the United States. For the first time in modern international relations, the West was compelled to confront the rise of formidable new power centers and the structural changes they introduced to global politics, economics, and security. As emerging stakeholders demanded a greater operational democratisation of global decision-making long dominated by the West, both the grammar and geometry of international relations began undergoing a significant transformation.

Questions of burden-sharing within NATO and the impact of new economic forces had already exposed strains within the West as it navigated an unprecedented global power transition. However, developments in recent years, particularly amid the Russia-Ukraine war and the onset of the



second Trump administration, have been nothing short of seismic. While the war was expected to revitalise NATO against a common adversary, it instead exposed deeper anxieties over the future of European security and America's role within it. It highlighted the risks of Europe's over-dependence on American security guarantees, underinvestment in defence, and renewed debates over strategic autonomy, common defence, and the need for a more independent European security identity.

Trump's rhetoric on NATO, tariffs, burden-sharing, and relations with Russia and China reinforced the perception that Washington increasingly views alliances through a transactional prism. Although calls for greater European defence spending predate Trump, his style of engagement made these

disagreements unusually public and politically corrosive. This is where the idea of the "New West" becomes more tangible. The transatlantic relationship is no longer sustained by inherited assumptions of solidarity alone but is being renegotiated in real time through competing strategic priorities and narratives. From the systemic challenge posed by China's rise to the immediate security threat from Russia, and from Indo-Pacific priorities to reassurance in the Atlantic theatre, virtually every major issue is now open to renegotiation in search of new conceptual and operational frameworks.

Consequently, Europe is increasingly seeking to diversify both economically and strategically. The language of "de-risking," initially aimed at China, is now gradually extending to the United States as well. European efforts to strengthen defence-industrial capacity, strategic autonomy, and reduce external dependencies reflect this shift. None of this suggests that the transatlantic alliance is collapsing beyond repair. The United States and Europe remain deeply interconnected economically, militarily, technologically, and culturally, while NATO continues to provide a critical security umbrella de-

spite Europe's continued dependence on American military capabilities. Yet the relationship is clearly undergoing a structural shift, moving from presumed cohesion to negotiated cohesion. For India, this transition presents both opportunities and risks.

Greater European strategic autonomy could create new space for India-Europe partnerships less constrained by American preferences. Europe's push for diversification aligns with India's ambitions to emerge as a trusted economic, technological, and geopolitical partner. This complements India's strategy of deepening bilateral ties with major European powers while integrating them into its broader engagement with the European Union as a political and economic bloc. A more independent and globally active Europe would also resonate with India's own trajectory towards stronger development and security partnerships.

However, the benefits do not come without their own set of risks. The story of the "New West" is not simply one of decline. American power remains central to the international system, while Europe continues to wield enormous economic and technological influence. Rather, it is a story of

metamorphosis, of Western leadership being renegotiated under conditions of geopolitical stress, domestic fragmentation, and global power transition. The transatlantic alliance is undergoing one of the most consequential stress-tests in its history, and the verdict is still out on what it will ultimately crystallise into.

For India, fissures and fragmentation within the West introduce new strategic complexities. Over the last two decades, both the United States and Europe have emerged as key strategic partners across multiple domains, despite persistent conceptual and functional challenges. The operating framework, however, rested on a degree of transatlantic strategic cohesion. Divergences between Washington and Brussels may, in the immediate term, open new avenues for renegotiating terms of engagement and accelerate decisions that may have remained in cold storage earlier. Yet the medium- and long-term implications of a "New West" will require India to calculate its strategic choices with considerable sobriety and precision. In an era where old certainties are eroding faster than new alignments are taking shape, strategic agility will matter as much as strategic autonomy. For India, the challenge will no longer be merely to navigate competing poles of power, but to retain room for independent action in a world where the very architecture of the West is being fundamentally rewritten.

"Mohan Tourangbam is a Fellow at the Chitwan Research Foundation (CRF), New Delhi.

- **Key Terms and Explanations**

- **The 'New West':** This is not a formal organization but a descriptive concept for a Western world (primarily US and Europe) that is losing its traditional cohesion. It signifies a shift from a bloc acting with shared assumptions and solidarity to a more fragmented, contested, and fluid configuration of power and identity. *Example: Imagine a sports team where players used to follow the captain's orders without question. Now, they all have their own strategies and are constantly negotiating plays on the field. That's the 'New West'.*
- **Strategic Autonomy (European Context):** The ability of the European Union to act independently in foreign policy and defense matters, without being entirely dependent on the United States. It involves developing its own military capabilities, defense industries, and strategic decision-making processes. *Example: Instead of relying solely on US-made weapons and US-led NATO commands, Europe wants its own rapid reaction force and the capacity to manage a regional crisis on its own.*
- **Burden-Sharing (NATO Context):** The principle that all members of a military alliance should contribute fairly to the common defense, typically measured as a percentage of GDP spent on defense. The US has long argued that many European allies spend too little, leaving the US to shoulder an unfair share of the financial and military burden. *Example: The US spends over 3% of its GDP on defense, while some European NATO members spend less than 1.5%, leading to US complaints that it is "subsidizing" European security.*
- **Transatlantic Alliance:** The long-standing political, economic, and military partnership between North America (primarily the US and Canada) and Europe. Its institutional pillars include NATO for security and the EU-US trade and technology relationship for economics. The article argues this alliance is moving from *presumed* to *negotiated* cohesion.
- **De-risking:** A strategy aimed at reducing strategic vulnerabilities and dependencies, particularly on potential adversaries. While originally used in the context of reducing economic reliance on China, the article notes this concept is now being extended to the US by some European powers, reflecting a desire for diversification even from traditional allies. *Example: Europe wants to build its own missile systems and satellite navigation (Galileo) so it is not dependent on US systems, which could be turned off in a disagreement.*
- **Civilizational Erasure:** A highly charged term referenced in the article to describe extreme rhetoric, particularly from the Trump administration, accusing Europe of abandoning its cultural and demographic foundations (e.g., through immigration policies). It signifies a deep ideological and cultural rift within the West, beyond just policy disagreements.

- **Main Arguments and Substantive Parts**

- **Core Thesis:** The Western alliance is undergoing a fundamental structural shift from a cohesive bloc to a fragmented "New West." This is driven by diverging interests, economic pressures, populism, and questions over leadership. For India, this dismantles a key operational assumption (Western unity) and introduces new strategic complexities, requiring a more agile and precise foreign policy.

- **Key Points with Supporting Evidence:**

- **Erosion of Cohesion:** The article argues the old glue of the Cold War (shared Soviet threat) and post-Cold War triumphalism is gone. Evidence includes widening divergences over alliances, burden-sharing, and even democratic values.

- **Drivers of Fragmentation:** Key drivers identified are the 2008 global financial crisis, demographic anxieties, rise of populism, and the Russia-Ukraine war. The war, expected to revitalize NATO, instead exposed Europe's over-dependence on the US.

- **The Trump Factor:** The second Trump administration's rhetoric on NATO, tariffs, and relations with Russia/China is described as "seismic." It made internal disagreements unusually public and corrosive, accelerating the shift towards negotiated cohesion.

- **India's Dilemma:** India's strategic convergence with the US and engagement with Europe was built on the expectation of transatlantic unity. The emerging fissures mean India can no longer engage with the "West" as a single strategic entity.

- **Opportunities for India:** A more strategically autonomous Europe could become an independent partner for India, less constrained by US preferences. Europe's push for diversification aligns perfectly with India's ambition to be a trusted manufacturing and tech partner.

- **Risks for India:** The fragmentation introduces new complexities. In the medium and long term, India will have to manage competing expectations from the US and a potentially more independent Europe, requiring sober and precise strategic choices.

- **Counterarguments Acknowledged:** The article is careful to note that the "New West" is a metaphorical construct. It does not mean the collapse of NATO, the EU, or the transatlantic economic relationship. The US remains central, and Europe remains powerful. The change is in the *nature* of the relationship (from presumed to negotiated cohesion), not its complete disappearance.

- **Historical Evolution of the Issue**

- **Cold War Era (1947-1991):** The West derived its cohesion from the shared existential threat of the Soviet Union and communism. NATO was not just a military pact but the embodiment of a broader ideological and geopolitical compact. India, as a leader of the Non-Aligned Movement (NAM), strategically distanced itself from this polarized world, viewing it as a relic of colonialism and bipolar rivalry.
- **Post-Cold War Unipolarity (1991-2008):** Triumphalism in the West led to NATO's eastward expansion and deepening European integration. The West appeared consolidated, irreversible, and as the dominant force in globalization. India, after its 1991 economic crisis, began its strategic engagement with this unipolar West, shedding some of its Cold War skepticism. The logic was pragmatic: engage with the dominant power centers for economic growth and security.
- **The Era of Erosion (2008-2020):** The global financial crisis of 2008 was a watershed moment. It exposed deep economic dislocations and fueled populism and polarization in both the US and Europe. For the first time, the West faced the rise of formidable new powers (China, India, others) demanding a democratization of global decision-making. The foundations of Western-led globalization began to crack.
- **The Seismic Shift (2020-Present):** The Russia-Ukraine war and the return of a "America First" style administration (as represented by Trump) have proven to be seismic events. The war did not unify the West as expected; instead, it forced a painful debate on Europe's own defense capabilities and American reliability. Trump's transactional, public criticism of allies has made the underlying tensions irrepressible. This period marks the transition from a cohesive West to the "New West."



INDIA & THE “NEW WEST”: A COMPREHENSIVE UPSC GEOPOLITICAL ANALYSIS



KEY TERMS



“NEW WEST”:
FRAGMENTED
TRANSATLANTIC ALLIANCE



STRATEGIC AUTONOMY:
INDEPENDENT STATE
CAPACITY



DE-RISKING:
REDUCING CRITICAL
RELiance



UPSC RELEVANCE



GS-II: International Relations
(Effect of policies on India)



ESSAY: Evolving world orders
& India's role



NCERT Link: ‘Contemporary
World Politics’ (US Hegemony)

CORE ARGUMENTS



TRADITIONAL
WESTERN
ALLIANCE
(Unified Cold War
Cohesion,
Shared Values)

‘NEW WEST’
(Fragmented Cohesion,
Transactional Ties,
Different Priorities)



Fissures, Transactional ties, Domestic
politics impact (e.g., Burden-Sharing)

IMPACT ON INDIA



- Navigating divergent Western views
- Transactional alliances
- Kautilyan Pragmatism

STRATEGIC DIMENSION



- Indo-Pacific Focus
- Flexible issue-based coalitions (e.g., Quad)
- Reduced reliance on grand alliances



ECONOMIC DIMENSION



- Supply Chain De-risking
- Trade Diversification Competition
- Industrial Policy Competition of US subsidies

CHALLENGES



Supply Chain
Implementation
Complexity



Policy
Unpredictability



Erosion of Global
Rules



WAY FORWARD

- Domestic Capacity Building (Atmanirbhar Bharat)
- Direct European Ties
- Flexible Coalitions



- **Logical and Philosophical Base**

- **Underlying Logic (Realism):** The article's logic is firmly rooted in the realist school of international relations. It argues that alliances are not forever binding due to shared values alone. They are ultimately held together by converging interests and shared threats. As the threat environment changes (Soviet Union gone, Russia weaker, China rising) and interests diverge (US focus on Indo-Pacific vs. European focus on near-abroad security), the cohesion of the alliance naturally erodes. The "New West" is simply the logical outcome of shifting power dynamics and national interests.

- **Key Assumptions:**

- **Cohesion is not natural:** The post-Cold War unity of the West was an exception, not a permanent state. History is the norm.
- **Domestic politics drive foreign policy:** The rise of populism, economic anxiety, and polarization in the US and Europe are not side effects but primary drivers of the changing transatlantic relationship.
- **Strategic Autonomy is a zero-sum game (in the short term):** For Europe to gain more autonomy, the US must cede some influence. This creates friction.

- **Philosophical Foundations:**

- **Pragmatism over Idealism:** The article dismisses the idealistic notion of a permanent "community of values." It argues that values (democracy, freedom) take a backseat when issues like burden-sharing, trade deficits, and domestic politics are at stake. This is a deeply pragmatic view of international politics.
- **Post-modern Alliance Theory:** Traditional alliances are formed against a common enemy. The "New West" describes a post-modern form of alliance where the members are not sure who the enemy is (China? Russia? each other's domestic politics?) and are constantly renegotiating the terms of their partnership.



- **Multidimensional Analysis**

- **Social:** The fragmentation of the West reflects deeper social crises in the US and Europe – rising inequality, identity politics, and declining trust in elites. These social cleavages directly drive the populist foreign policy stances that undermine alliance cohesion. For India, this highlights the risk of over-identifying with the political elite of a Western country, whose social mandate can change dramatically.

- **Political:** Politically, this signifies a shift from bi-polarity (Cold War) to uni-polarity (Post-Cold War) to a non-polar or multi-polar world where the West itself is not a single pole. Power is diffused among states (US, China, Germany, India) and non-state actors. India's political challenge is to thrive in this fluid environment by building issue-specific coalitions rather than relying on permanent allies.

- **Legal:** International law, particularly the law of treaties and the UN Charter, assumes a world of sovereign states. A fragmented "New West" negotiating new rules on trade (WTO reform), cyber warfare, and space law will create a patchwork of conflicting regimes. India's legal diplomacy must focus on preventing a "clash of legal orders" between a US-led framework and an EU-led one.

- **Ethical:** The idea challenges the ethics of liberal internationalism, which assumed that democracies naturally cooperate. The "New West" shows that democracies can be as self-interested and short-sighted as any other system. For India, this reinforces the ethical basis of its own strategic autonomy – the principle that every nation must be the primary guarantor of its own security and development.

- **International:** The central international implication is the emergence of a fluid, multi-order world. The Indo-Pacific will be the primary arena of competition, but the rules of that competition are up for grabs. Europe's role is no longer guaranteed as a US deputy. This creates a vacuum that powers like China and Russia will try to exploit, but also one that middle powers like India can help shape.

- **Economic:** Economically, the "New West" portends a decoupling of supply chains not just from China, but also potential transatlantic friction (e.g., US Inflation Reduction Act vs. EU green subsidies). India's opportunity lies in becoming a neutral, high-volume manufacturing hub that can serve both the US and European markets as they seek to diversify away from each other's vulnerabilities as well.



- **Linkages with NCERTs**
 - **Class 12 Political Science (Contemporary World Politics), Chapter 2: ‘The End of Bipolarity’:** This chapter explains the collapse of the Soviet Union and the rise of the US as the sole superpower. The article discusses the subsequent fragmentation of that unipolar "West," making this a direct conceptual sequel. Students can link the factors that collapsed the USSR (economic strain, political fragmentation) with the centrifugal pressures in the West today.
 - **Class 12 Political Science (Contemporary World Politics), Chapter 4: ‘Alternative Centres of Power’:** This chapter discusses the European Union as an alternative pole. The article updates this concept, explaining how the EU is trying to move from an *economic* pole to a *strategic* one, leading to friction with the US. It links the EU's common foreign and security policy to the idea of strategic autonomy.
 - **Class 11 Political Science (Political Theory), Chapter 10: ‘Development’:** This chapter discusses the idea of development as freedom and the critique of Western-centric models. The article’s mention of the 2008 financial crisis and the demand for "democratisation of global decision-making" connects directly to post-colonial and development critiques of Western-led globalisation.

Linkages with UPSC CSE Syllabus

GS Paper 2 :

- **International Relations:** India's bilateral relations with the US and EU; Effect of policies and politics of developed countries on India's interests; Important groupings like NATO, Quad, and their shifting dynamics.
- **Political Philosophy:** Concepts of strategic autonomy, burden-sharing, and alliance cohesion.

GS Paper 1:

- **History of Post-Cold War World:** The rise of populism, the financial crisis, and the unipolar moment are key themes in post-1991 world history.

GS Paper 3:

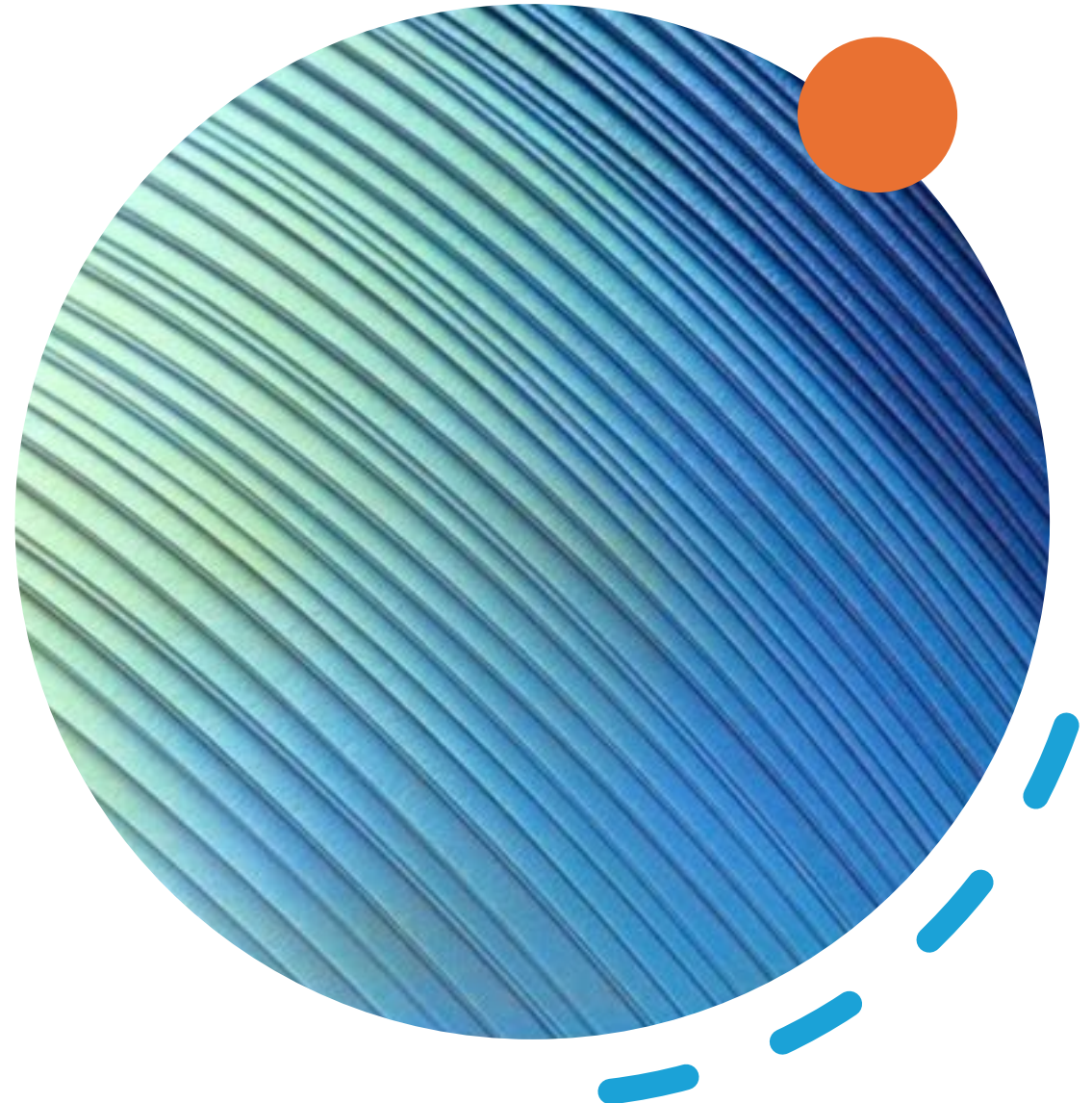
- **Economy:** Issues of supply chain resilience, de-risking, technology denial regimes, and the impact of US/EU trade policies on Indian economic strategy.

GS Paper 4 (Ethics):

- **Ethics in International Relations:** The tension between national interest (realism) and shared values (idealism) is a classic ethical dilemma. The article provides a modern case study.

Essay Paper:

- Potential topics: "The centre of gravity of world politics is shifting from unity to fragmentation," "Strategic autonomy is the new realism in a multi-polar world," "The 'New West' and the 'Rising East': A tale of two realignments."



- 
- **Way Forward**
 - **For India :**
 - **Issue-Based Engagement:** Move away from a single "Western policy" to multiple, issue-specific strategies. On Russia-Ukraine, engage with Europe on humanitarian aid. On Indo-Pacific, engage with the US on maritime security. On tech, engage with both on different parts of the supply chain.
 - **Deepen Direct Europe Ties:** Invest heavily in the India-EU Trade and Technology Council. Build defense-industrial partnerships with individual European nations (France, Germany, Italy) to hedge against dependence on either US or Russia.
 - **Strengthen Domestic Capabilities:** The ultimate hedge against a fragmented world is national strength. The article implies that India's strategic autonomy is only as strong as its domestic manufacturing, technology, and defense base. Focus on PLI schemes, defense indigenization (Atmanirbhar Bharat), and a resilient financial system.
 - **For the West :**
 - **Formalize the 'Negotiated Cohesion':** Acknowledge that divergence is permanent and create formal mechanisms for managing it, such as a "NATO 2.0" with differentiated roles (US leads on China, Europe leads on Europe).
 - **Invest in European Pillar:** The US should actively support European strategic autonomy as a long-term benefit, not a short-term threat. A stronger, self-reliant Europe is a more capable and credible ally.
- 

- **All Previous Years' UPSC Questions**

- **Mains 2021 (GS2):** "Can the European Union be considered a successful alliance of nation-states? Critically examine." (*Directly touches on EU cohesion, a core theme of the article*)
- **Mains 2020 (GS2):** "What is the significance of Indo-Pacific for India? Discuss its geopolitical and economic dimensions." (*The article frames Indo-Pacific as a key arena of Western divergence*)
- **Mains 2019 (GS2):** "How does the strategic autonomy of India influence its foreign policy? Provide examples." (*Central concept of the article applied to India*)
- **Mains 2018 (GS2):** "The era of the Cold War was characterized by bipolarity. Discuss the major features of the post-Cold War world order." (*The article is about the unravelling of the post-Cold War order*)
- **Mains 2016 (GS2):** "The relations between the United States of America and the European Union have witnessed significant strains. Examine." (*Exact theme, examined through trade, security, and strategic culture*)
- **Prelims 2014:** "The term 'Strategic Autonomy' is often used in the context of which of the following?" (*Basic conceptual question*)
- **Mains 2015 (GS2):** "The proposed Transatlantic Trade and Investment Partnership (TTIP) has been a source of friction between the US and the EU. Explain." (*An economic dimension of the Western fissure*)

Cold War 2.0 must repeat success of Cold War 1.0

It is now the era of Cold War 2.0 between the US and China, but will the two sides avoid a direct kinetic conflict as their predecessors did during Cold War 1.0?

ROOTS OF POWER

M.D. NALAPAT



BENEVOLE MURDER became an Italian, among the most melodramatic of languages in the world. It is being applied to what is getting termed the New World Disorder. Italians too are amongst the most charming of people in the world. Of course, when they want to be. For there is an unforgiving side to the Italian psyche as well, of which a grisly example was provided by the way the deposed and defeated dictator of Italy, Benito Mussolini, together with his lady friend of many years, Claretta Petracchi, met his end. After it became clear that Italy had lost the 1939-45 World War as a consequence of Mussolini's unwisely teaming up with the psychotic Nazi Führer (Leader) Adolf Hit-

ler, the people of Italy turned on Mussolini and Claretta. They brought silver heads down and left them in that position until both died. The story has it that neither Claretta nor Mussolini begged for mercy while the final reserves of their ebbing strength were still with them. Both glanced at each other while hanging upside down, each finding solace in the other to the end of their consciousness. It was after seeing the fate of his friend Benito Mussolini that Adolf Hitler decided on suicide rather than capture after the Allies occupied Berlin. The final days of Adolf Hitler were spent in an underground shelter underneath the Reich Chancellery, and he was joined there by his lady friend Eva Braun, although it was clear that the end was near. Apparently touched in his inchoate heart by the decision of Eva Braun, he decided in their final days to give her the respectability she had long craved for, of being not the mistress but the wife of Adolf Hitler. The marriage ceremony took place in the tiny, windowless, almost airless bunker,

and the newlyweds had a honeymoon night together before Hitler administered cyanide to her, after testing it on his dog Blondi. After she died, Hitler shot himself in the mouth. It had been a tradition in the German military of yore for a military commander to take his own life rather than surrender to the enemy. In a way, such a tradition was similar to that of Japan, where defeated commanders committed seppuku or hara kiri, slicing their navels with three curved swords deep in them. Some Japanese commanders did commit ritual suicides after their defeat, just as some Wehrmacht commanders did, not by hara kiri but by shooting themselves in the head. The disorder that Hitler brought to the world was swiftly replaced by the New World Order, where the US and the USSR were the two superpowers, and the European powers considerably diminished. Indeed, they each lost their empires one after the other after the war ended. The British people showed the commonsense that was their forte, tacking out the best wartime leader they had in the 20th century, Winston Churchill and his Conservative Party. They brought to power the Labour government headed by Clement Attlee, who had been a member of the War Cabinet headed by Churchill as all political parties united to combat the Nazis. The

Labour government, for the first time in Britain, established a comprehensive social security blanket to cover the British people facing the hardships of low economic standing.

The disorder of the period when Hitler was Führer of Germany (1933-45) was followed by a new World Order, as has been said. President Roosevelt wanted the US and the USSR to co-exist and even be partners as they were during the war. Unfortunately, he died just before the Nazis surrendered, and was succeeded by his Vice-President, Harry Truman, who hated the USSR implacably and made that dislike clear to Stalin, who in the final meeting of the Big Three at Potsdam, saw that in both the US and Britain, there had been a change in the government (British) or in the leadership (US). Now the President of the US, Truman made his dislike for the USSR and for Stalin transparent to the dictator, who decided to confront the US when he saw that the Rooseveltian era of cooperation had gone. He launched the Berlin Blockade, which was met with the Berlin airlift of the US Air Force, and from then on, Cold War 1.0 between the USSR and the US began. The good news is that until the USSR imploded in 1991, there were many proxy wars but never a direct war between the USSR and the US. It is now the era of Cold War 2.0 between

the US and China, but will the two sides avoid a direct kinetic conflict as their predecessors did during Cold War 1.0? Unlikely, for there are far too many flashpoints that are difficult if not impossible to ignore or avoid. For President Trump, Taiwan is a bargaining chip in his dealmaking with Xi Jinping. Should Trump make way before his term ends and hand over the keys to the White House to Vice-President Vance, the approach of the latter would not be dealmaking at the expense of US security. Taiwan has long been a matter for concern for Vance, who along with Secretary of State Marco Rubio knows that were Taiwan to fall, the entire Pacific Ocean and the Pacific Ocean rim countries would be at risk of hostile actions by the PRC. Under Prime Minister Narendra Modi, India is building an undeclared alliance system. The Vietnamese leader was hosted in Delhi, and this was followed by the visit of Defence Minister Rajnath Singh to Vietnam. The country has a population that defeated first the French and later the US side in war. The defeat of France in Dien Bien Phu under the army led by Vo Nguyen Giap was the first time a colonised country had defeated the army of the colonial power. When Kennedy was killed, war was over. The hopes for a militarily settlement with Ho

Chi Minh. His successor Lyndon Johnson could not see what Kennedy did, that Vietnam would become a bottomless pit were US troops to be sent. Kennedy wanted out but was killed before he could bring that about. Nearly 700,000 US troops were sent to South Vietnam, where Seymour Hersh made public the atrocities being caused by US forces, including at My Lai. General Westmoreland wanted body counts, and US troops would line up entire villages and machine gun them or mine napalm on them from the skies. It was of no use, for the Viet Cong and the North Vietnam army fought on despite the brutal way US forces were dealing with them. The US finally withdrew, the stain of Vietnam haunting the US troops who fought there all their lives. Vance and Rubio do not want another defeat, but seek to win Cold War 2.0 in the way their predecessors won Cold War 1.0. Once the Trump era ends, the US would be rejuvenated and would revive the Quad. The new occupant of the White House after Trump leaves would find a willing and able partner in Prime Minister Narendra Modi. Events will shape futures, and events will ensure Democrats and Republicans cooperate in order for the US and its partners to prevail over the new foes and not as the side the USSR did.

Key Terms and Explanations

Cold War 1.0: This refers to the historical period (approximately 1947-1991) of intense geopolitical and ideological rivalry between the United States and the Soviet Union. It was characterized by proxy wars, an arms race, and global polarization, though the two superpowers never engaged in direct armed conflict. The Cuban Missile Crisis is a classic example of this high-stakes standoff.

Cold War 2.0: A modern conceptual framework used to describe the contemporary, systemic competition primarily between the United States and China. Unlike its predecessor, this rivalry is deeply rooted in technological supremacy, economic influence, and supply chain dominance, rather than purely ideological divides.

Kinetic Conflict: This term denotes active, lethal military operations involving direct armed combat and the use of physical force. The primary goal of major powers in a "Cold War" scenario is to achieve strategic objectives while strictly avoiding kinetic conflict, which between nuclear-armed states could lead to mutually assured destruction.

Proxy War: A conflict where major powers instigate or support opposing factions or secondary nations to fight on their behalf, avoiding direct confrontation with each other. The Vietnam War is a historical textbook example, where the US fought communist forces heavily backed by the USSR and China.

Strategic Flashpoint: A specific geographical area or political issue with a high probability of erupting into sudden, broader conflict due to overlapping superpower interests. The Taiwan Strait and the South China Sea serve as modern flashpoints.



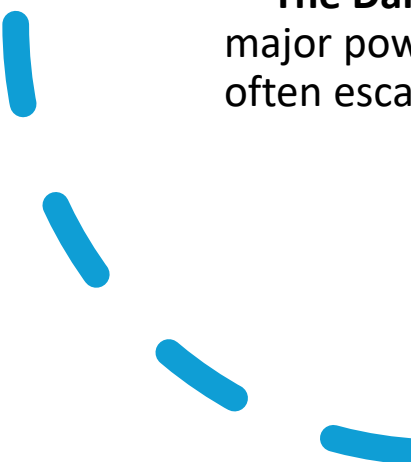
- **Main Arguments and Substantive Parts**

- **The Imperative of Deterrence:** The central thesis of this geopolitical paradigm is that the global order has definitively shifted into a renewed era of superpower rivalry. The immediate necessity for global stability is replicating the successful deterrence strategies of the 20th century to prevent this competition from degrading into an active World War.

- **Shifting Theaters of Influence:** Historical struggles often revolved around a divided Europe, symbolized by the Berlin Blockade. Today, the center of gravity has shifted entirely to the Indo-Pacific. Regions like Taiwan hold the same symbolic and strategic weight today that Berlin held decades ago; an alteration in the status quo there could trigger a cascading collapse of regional security architectures.

- **The Evolution of Middle Powers:** Middle powers and emerging economies are no longer passive bystanders. Democratic nations in the Indo-Pacific, particularly India, are actively forging undeclared alliance systems and deepening defense cooperation with historically unaligned nations like Vietnam. This creates a multipolar web of deterrence rather than a strict bipolar divide.

- **The Danger of Miscalculation:** The transition phases of national leadership—whether in the US or other major powers—create windows of vulnerability. The core argument rests on the historical reality that conflicts often escalate not out of sheer aggression, but from a misreading of the adversary's red lines and resolve.



Historical Evolution of the Issue

The Bipolar Consolidation (1945-1991): Emerging from the ashes of World War II, the world was swiftly divided into two camps led by the US and the USSR. The defining characteristic was ideological containment. Major crises were managed through brinkmanship and back-channel diplomacy, while actual blood was spilled in peripheral proxy zones like Korea, Vietnam, and Afghanistan.

The Unipolar Moment (1991-2008): Following the collapse of the Soviet Union, the US enjoyed a period of unchallenged global hegemony. This era fostered the belief that economic globalization and integration into institutions like the WTO would naturally democratize rising powers. China quietly executed its "peaceful rise" strategy during this window, integrating deeply into global supply chains.

The Resurgence of Great Power Competition (2008-2020): The 2008 financial crisis exposed Western vulnerabilities, while China accelerated its militarization and geopolitical assertiveness under initiatives like the Belt and Road Initiative (BRI). The US gradually shifted its security focus, officially recognizing China as a strategic competitor rather than just a trade partner.

The Crystallization of Cold War 2.0 (2020-Present): Catalyzed by the global pandemic, technological decoupling, and conflicts like the war in Ukraine, the geopolitical lines have hardened. The competition is now overt, defined by semiconductor export controls, tariff wars, and the strengthening of plurilateral security dialogues in the Indo-Pacific.

GEOPOLITICAL ANALYSIS: COLD WAR 2.0 & INDIA'S STRATEGIC IMPERATIVES



AXIA COMPETITIVE EXAM CENTRE

INDIA'S STRATEGIC LANDSCAPE



Middle Power Agency
Strategic Influence
Indicators of Influence

Tech-Security Nexus
Importance of
AI, Semiconductors

SUSTAINABILITY & CHALLENGES

Climate Change Paradox
Competition vs. Cooperation

Risk of Miscalculation
Crisis Management

UNDERSTANDING THE PARADIGM

COLD WAR 1.0
(US vs. USSR)



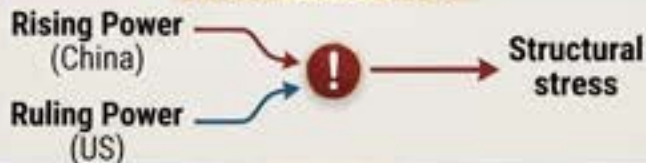
COLD WAR 2.0
(US vs. CHINA)



COLD WAR 2.0
(US vs. CHINA)



THUCYDIDES TRAP



INDIA'S WAY FORWARD & GS/PSIR LINKAGES

WAY FORWARD

1. Multi-alignment & Strategic Autonomy
2. Indigenous Tech R&D (e.g., 'Chips for India')
3. Resilient Supply Chains
4. Agile Diplomacy

LINKING TO DIRECTLY TO UPSC SYLLABUS

- GS Paper 2 & 3: What tops Between threat?
- PSIR: Paper 2 & 3: Use kams and betanmate?

ALL PREVIOUS YEARS' UPSC QUESTIONS

- 'US-China threat' (2021)
- 'Quad evolution' (2022)
- 'Quad evolution' (2020)
- 'US-China threat' (2023)
- 'China's Valoyor' (2024)
- 'Quad evolution' (2024)

MODEL ANSWER STRUCTURE



- **Logical and Philosophical Base**

- **Thucydides Trap and Realism:** The underlying logic of this friction is deeply rooted in the structural realist theory of International Relations. Coined by Graham Allison, the Thucydides Trap suggests that when a rising power threatens to displace an established ruling power, structural stress makes violent conflict highly likely, though not inevitable.


- **The Logic of Mutually Assured Destruction (MAD):** The philosophical justification for avoiding kinetic war relies on the rational actor model. It assumes that state leaders will prioritize national survival over total victory. The existence of nuclear arsenals fundamentally alters the calculus of war, forcing competition into non-lethal domains.

- **Pragmatism over Ideological Purity:** The current landscape demonstrates a philosophical shift toward extreme pragmatism. Nations are routinely setting aside historical grievances and ideological differences to balance against the primary perceived threat, as seen in warming ties between former adversaries like the US and Vietnam.



- **Multidimensional Analysis**

- **Social:** Geopolitical rivalries inevitably seep into society, fostering tech-nationalism and occasionally resulting in increased xenophobia. The narrative framing of the "other" shapes public consciousness, making societies less receptive to cultural exchange and internationalism.
- **Political:** The weaponization of political systems is evident. There is a continuous ideological struggle to prove which system of governance—liberal democracy or authoritarian state capitalism—is better equipped to deliver economic growth and manage crises in the 21st century.
- **Legal:** The rules-based international order is under severe strain. Contestation over maritime law, specifically the United Nations Convention on the Law of the Sea (UNCLOS), highlights how international legal frameworks are frequently disregarded by powerful states to secure strategic buffers.
- **Ethical:** Proxy conflicts and economic sanctions carry a heavy human toll. The ethical dilemma lies in major powers pursuing strategic containment policies that often result in economic hardship or physical displacement for populations in vulnerable, third-party developing nations.
- **International:** The absolute pivot of global geopolitics to the Indo-Pacific theater has marginalized traditional conflict zones. It forces a complete realignment of international grand strategies, compelling European and Middle Eastern powers to formulate distinct Indo-Pacific policies.
- **Economic:** We are witnessing a transition from hyper-globalization to fragmented globalization. Concepts like "friend-shoring" (moving supply chains to allied countries) and industrial subsidies (like the US CHIPS Act) represent a return to state-directed economic planning and protectionism.

- 
- **Linkages with NCERTs**
 - **Class 12 Political Science (Contemporary World Politics) - Chapter 1: The Cold War Era:** This chapter is foundational for understanding the concepts of bipolarity, the logic of deterrence, the Non-Aligned Movement (NAM), and the mechanics of proxy wars, which are essential for comparing the historical era to the current context.
 - **Class 12 Political Science (Contemporary World Politics) - Chapter 3: US Hegemony in World Politics:** Provides the critical historical bridge explaining how the world transitioned from a unipolar American moment in the 1990s toward the currently emerging multipolar or bipolar reality.
 - **Class 12 History (Themes in World History):** Chapters dealing with the post-WWII order and decolonization provide the necessary background to understand why nations like Vietnam or India fiercely guard their strategic autonomy today.

Linkages with UPSC CSE Syllabus

General Studies Paper 2:

- *Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.* (Direct application to the Quad, Indo-US ties, Indo-Vietnam relations).
- *Effect of policies and politics of developed and developing countries on India's interests.* (Impact of US-China trade wars and technological decoupling on Indian foreign policy).

General Studies Paper 3:

- *Security challenges and their management in border areas.* (Link to the militarization of the Indo-Pacific and proxy influences in the neighborhood).
- *Awareness in the fields of IT, Space, Computers, robotics, nano-technology.* (The tech-security nexus driving the current geopolitical competition).

PSIR Optional (Paper 2): Topics covering Comparative Politics, International Relations theories (Realism vs. Liberalism), the evolution of the global political economy, and India's foreign policy strategies in a multipolar world.



Way Forward

Fortifying Strategic Autonomy:

Developing nations, particularly India, must double down on multi-alignment. This involves issue-based partnerships that secure national interests—such as technology transfers and defense modernization—without being drawn into binding military pacts that provoke unnecessary hostility.

Establishing Geopolitical Guardrails: The international community must prioritize the establishment of crisis-management mechanisms, dedicated military hotlines, and clear rules of engagement in contested domains (cyber space, outer space, and maritime chokepoints) to prevent tactical miscalculations from escalating kinetically.

Building Resilient Domestic Capacities: True strategic independence in Cold War 2.0 requires self-reliance in critical technologies. Governments must aggressively fund R&D, foster indigenous semiconductor manufacturing, and build secure, diversified supply chains to insulate their economies from external weaponization of trade.

- **All Previous Years' UPSC Questions**

- **Mains (GS Paper 2 - 2023):** "The USA is facing an existential threat in the form of China, that is much more challenging than the erstwhile Soviet Union.' Explain."

- **Mains (GS Paper 2 - 2020):** "Quadrilateral Security Dialogue (Quad) is transforming itself into a trade bloc from a military alliance, in present times. Discuss."

- **Mains (GS Paper 2 - 2019):** "The time has come for India and Japan to build a strong contemporary relationship, one involving global and strategic partnership that will have a great significance for Asia and the world as a whole. Comment."

- **Prelims (2020):** Questions analyzing the geographical and strategic importance of the South China Sea and international maritime boundaries.

- **Mains (GS Paper 2 - 2018):** "In what ways would the ongoing US-Iran Nuclear Pact Controversy affect the national interest of India? How should India respond to its situation?" (Similar theme of navigating superpower tensions).

NSO's health survey shows real gains but also a crisis hiding in plain sight

BY INVITATION



URVASHI PRASAD

Every few years, the National Statistical Office (NSO) holds up a mirror to the nation's health. The 80th round of the Household Social Consumption Survey, released recently, is that mirror. What it reflects is not a simple story of progress or failure, but both at once, demanding to be read together.

The gains are genuine. Institutional deliveries have risen to 95.6% in rural areas. Govt health insurance coverage has expanded more than threefold in rural India since 2017-18, from 12.9% to 45.5% of the rural population. The use of public health facilities for outpatient care has grown. These are real improvements in real people's lives, and they deserve acknowledgement.

But the same survey also tells us this: one in

eight Indians is currently sick. The disease rate has more than doubled since 1995-96. Cardiovascular diseases have nearly tripled in seven years — from 1,333 cases per 100,000 population in 2017-18 to 3,891 in 2025. The average out-of-pocket expenditure (OOPE) on hospitalisation stands at Rs 34,064 — while the median is Rs 11,285, meaning costs are heavily skewed toward the most serious cases. And in India's poorest states — Bihar, Jharkhand, Uttar Pradesh — patients at govt hospitals are paying more than the national average, not less.

NCD TSUNAMI

The cardiovascular finding deserves to be read slowly: A near-tripling of heart disease burden in seven years is not a statistical fluctuation. It is an epidemiological signal that tells us India's disease profile has fundamentally shifted, faster than its health system has adapted.

What makes it more urgent is who is being affected. The survey shows cardiovascular dis-

ease hospitalisation rising sharply in the 30-44 age group, with young adults between 15 and 29 also showing increasing vulnerability. This is the working-age population — economically active, disproportionately uninsured in the private sector, and almost entirely absent from India's non-communicable disease (NCD) policy frameworks, which are calibrated around the elderly. I know something of what it means to be ill in this age bracket. Diagnosed with cancer in my mid-thirties, I navigated a system that had not been designed with someone like me in mind — not in its protocols, not in its research, not in its financial protection mechanisms. The NSO data tells me that this experience is no exception.

WHAT THE AVERAGES CONCEAL

The survey's most striking finding on equity is one that has received the least attention: in India's poorest states, the public hospital is the most expensive hospital. Bihar's average OOPE per hospitalisation

at a govt facility is Rs 10,553. In Uttar Pradesh, it is Rs 12,878. In Jharkhand, Rs 12,364. The national average is Rs 6,631. The households least able to absorb health costs are paying the most — at the facilities that exist precisely to protect them.

Cancer is identified as the costliest hospitalisation condition — at Rs 1,04,424 per case, it is nearly 50% more expensive than heart disease treatment. For a family in Bihar or Jharkhand, that can be a financial sentence. Insurance coverage expansion, however welcome, does not automatically reach those who need it most: in states where implementation is weakest, among populations with the least capacity to navigate enrolment processes.

DATA GAP MIRRORS POLICY GAP

Yet the survey itself embodies the very problem it documents. It measures hospitalisation costs in granular detail but does not report total OOPE on outpatient care — even though that data was collected. Jan Swasthya Abhiyan, which reviewed the re-

port, called this a major analytical shortcoming. It is also a political one. A health data framework that centres hospitals is the mirror image of a health system that centres cure over prevention.

India's NCD burden — tripling cardiovascular disease, skyrocketing cancer costs, rising diabetes — is not primarily a hospitalisation failure. It is a primary care failure, a public health failure, a failure to invest upstream before patients arrive at a ward. The survey tells us what the system spent on treating disease. It has almost nothing to say about what was spent — or not spent — preventing it.

A health system that has expanded insurance coverage while watching cardiovascular disease nearly triple has not solved the problem; it has insured people against a crisis it has not prevented. Investing in keeping people out of hospitals, not just treating them once they arrive, should be the real priority. ■

Prasad is a public health professional and former director at NITI Aayog

Key Terms and Explanations

Out-of-Pocket Expenditure (OOPE): This is the direct payment made by individuals to healthcare providers at the time of service use. It includes expenses not covered by insurance, such as outpatient consultation fees, diagnostic tests, and medicines.
Example: A patient with government health insurance still paying Rs 5,000 at a pharmacy for post-discharge medication.

Epidemiological Transition: This refers to the shift in a country's disease burden from communicable, maternal, and nutritional diseases to Non-Communicable Diseases (NCDs) as the population ages and lifestyles change.

Non-Communicable Diseases (NCDs): Chronic medical conditions that are not transmitted from person to person. *Example:* Cardiovascular diseases (heart attacks), diabetes, cancer, and chronic respiratory diseases.

Institutional Delivery: The process of giving birth in a medical facility (public or private hospital) under the supervision of trained medical staff, rather than at home. This is a primary indicator of maternal and neonatal healthcare access.

Primary vs. Tertiary Care: Primary care is your first point of contact—local clinics, wellness centers, and preventive health screenings. Tertiary care involves highly specialized medical care, usually in a hospital with advanced facilities, dealing with complex surgeries or acute treatments.

- **Main Arguments and Substantive Parts**

- When examining recent statistical observations of India's health sector, a nuanced picture emerges—one of simultaneous systemic expansion and alarming vulnerability.
- **The Paradox of Access and Illness:** There has been undeniable progress in infrastructural reach. Institutional deliveries have soared, and government-backed health insurance coverage has expanded massively in rural areas. Yet, concurrently, the absolute disease rate is climbing rapidly, showing that increased healthcare access does not automatically equate to a healthier population.
- **The NCD Tsunami in the Working-Age Population:** The disease profile has fundamentally shifted. Cardiovascular disease rates are skyrocketing, not just among the elderly, but notably in the 15-44 age bracket. This economically active, working-age demographic is disproportionately uninsured and largely overlooked by NCD policy frameworks that traditionally target older populations.
- **Geographical and Economic Inequity in Public Health:** A counterintuitive reality exists in the poorest states—public hospitals often end up being the most expensive options due to hidden costs, supply shortages, and high OoPE. The very institutions designed to protect the most vulnerable are currently places where they incur heavy financial burdens.
- **The Upstream Failure (Prevention vs. Cure):** Systemic data collection and policy interventions often fixate on hospitalization costs. This hospital-centric model masks a massive failure in primary healthcare. Treating a heart attack or late-stage cancer is a tertiary care intervention; failing to manage blood pressure or screen for tumors early is a primary care failure. The system is currently insuring people against crises it has failed to prevent.

- **Historical Evolution of the Issue**

- To understand why the system behaves this way today, we must look at how it was built. The trajectory of India's healthcare policy has always oscillated between ambitious universal goals and resource-constrained realities.

- **Pre-Independence to Early Republic (1940s-1970s):** The foundational blueprint was laid by the Bhole Committee (1946), which strongly advocated for a publicly funded, primary health-centric system, emphasizing preventive medicine over curative care.

- **The Alma-Ata Declaration Era (1978):** India became a signatory to "Health for All," officially committing to robust primary healthcare. However, severe economic constraints meant execution remained weak.

- **Economic Liberalization (1990s):** As the economy opened, healthcare saw rapid commercialization. The state slowly retreated from tertiary care, allowing a massive, unregulated private sector to bloom, laying the groundwork for today's high OOPe.

- **The Mission Mode (2005 onwards):** The launch of the National Rural Health Mission (NRHM) marked a pivot back to strengthening public infrastructure, heavily pushing maternal and child health (hence the success in institutional deliveries).

- **The Insurance Shift (Present):** We are currently in the era of strategic purchasing. Schemes like Ayushman Bharat (PM-JAY) signal a shift where the government acts as a payer for care (often in private hospitals) rather than solely as a provider, running parallel with an attempt to upgrade primary centers to Health and Wellness Centres (HWCs).



PHONE: +91 6002-417488

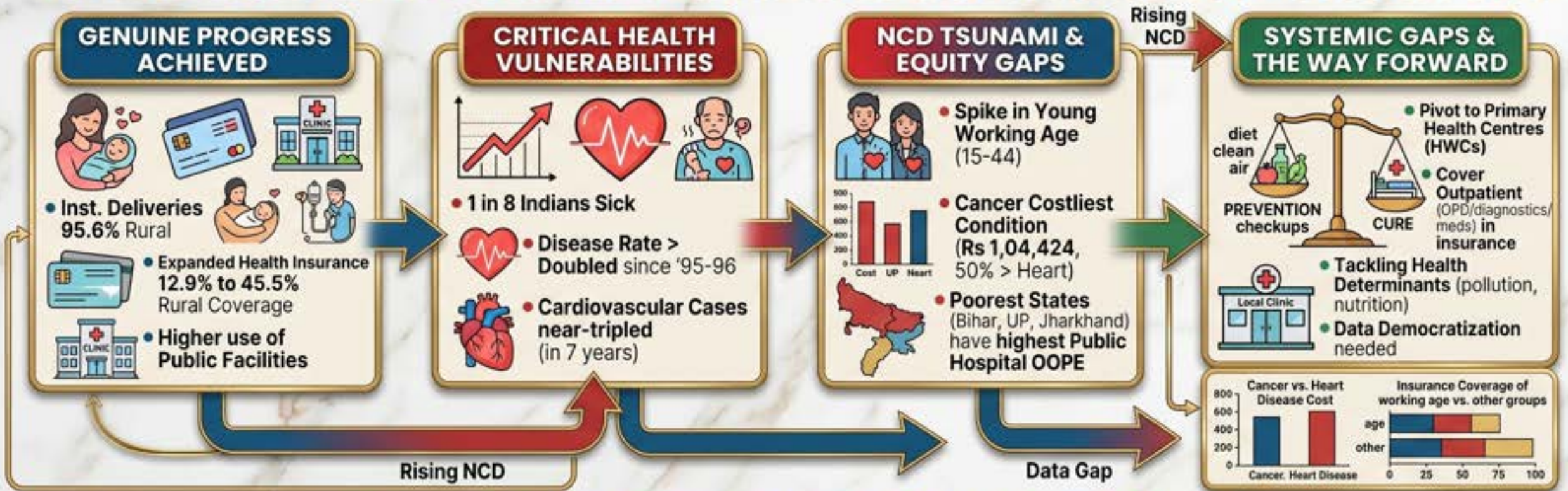


WEBSITE: AXAIASACADEMY.COM

AXIA IAS ACADEMY



RISE ABOVE THE REST

THE INDIA HEALTHCARE PARADOX: ANALYSIS FROM THE 80th NSO ROUND



AXIA COMPETITIVE EXAM CENTRE



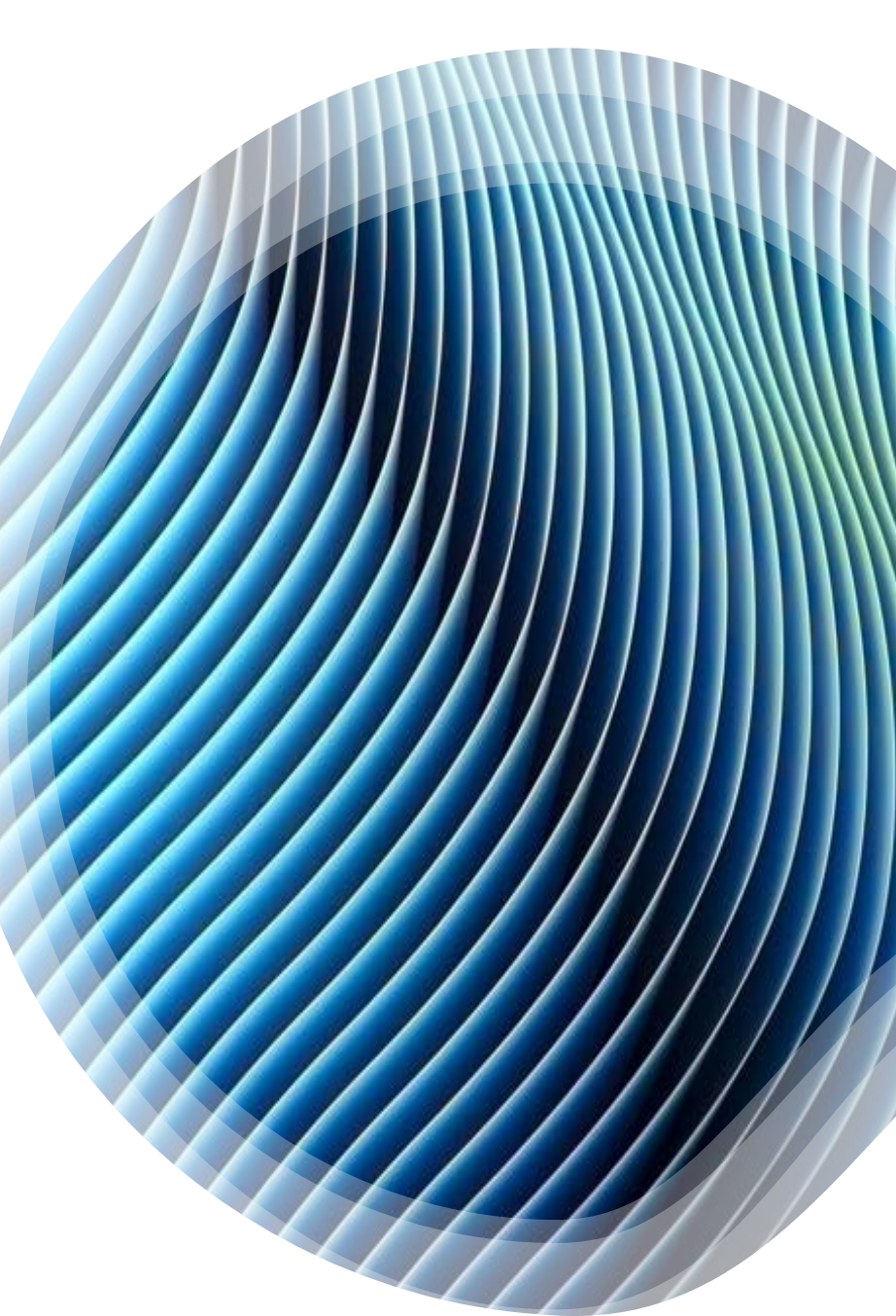
- 
- **Logical and Philosophical Base**
 - Public health is never just about medicine; it is deeply rooted in political philosophy and ethics.
 - **Amartya Sen's Capability Approach:** Health is not just the absence of disease; it is a foundational "capability." Without health, a citizen cannot exercise their freedoms, access education, or participate in the economy. Therefore, healthcare is a prerequisite for a functioning democracy.
 - **Rawlsian Veil of Ignorance:** If you didn't know which state or economic class you would be born into, what kind of healthcare system would you design? You would inherently design one where the poorest state offers the strongest free public health protection. The current reality, where public hospitals in poor states demand the highest OOPE, violates this fundamental principle of justice.
 - **Utilitarianism vs. Equity:** A system focused purely on "number of people insured" (utilitarian metric) might look successful on paper. However, if a young laborer facing cancer is bankrupted by outpatient costs before even reaching a hospital bed, the system fails the equity test.
- 

- **Multidimensional Analysis**

- **Social:** The disease burden disproportionately affects vulnerable groups. When a young breadwinner falls ill, women in the household often drop out of the workforce to become unpaid caregivers, worsening gender inequality.
- **Political:** As healthcare becomes a major electoral issue, political parties tend to announce populist insurance schemes or mega-hospitals. Long-term, invisible investments in sanitation, nutrition, and preventive clinics offer fewer immediate political optics.
- **Legal:** India still lacks a comprehensive, centrally mandated 'Right to Health Act' that makes universal basic healthcare legally actionable for every citizen, leaving it to the mercy of varying state policies.
- **Ethical:** It is deeply unethical that a patient's survival depends heavily on their zip code. The commercialization of healthcare often leads to the over-prescription of diagnostics and surgeries, violating the core medical ethic of *primum non nocere* (first, do no harm).
- **International:** India is committed to SDG 3 (Good Health and Well-being) and Universal Health Coverage (UHC) by 2030. High OOPe and rising NCDs severely jeopardize our ability to meet these global commitments.
- **Economic:** Out-of-pocket healthcare costs are the single largest cause of people slipping back into poverty in India. Furthermore, a rising NCD burden in the youth directly reduces labor productivity and GDP growth.



- **Linkages with NCERTs**
- **Class 7 Civics (Social and Political Life II) - Chapter 2: Role of the Government in Health.** This chapter beautifully contrasts public and private healthcare systems, making the exact point about hidden costs in private care and the duty of the state.
- **Class 9 Economics - Chapter 2: People as Resource.** It establishes health and education as the twin pillars of human capital formation, essential for understanding the economic impact of youth illness.
- **Class 11 Indian Economic Development - Chapter 8: Infrastructure.** This outlines the historical state of health infrastructure, the rural-urban divide, and the rising challenge of communicable vs. non-communicable diseases.
- **Class 12 Biology - Chapter 8: Human Health and Disease.** Excellent for brushing up on the scientific definitions and causes of NCDs like cancer and cardiovascular diseases.



Linkages with UPSC CSE Syllabus

GS Paper 2:

- Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.
- Welfare schemes for vulnerable sections of the population by the Centre and States.
- Issues relating to poverty and hunger.

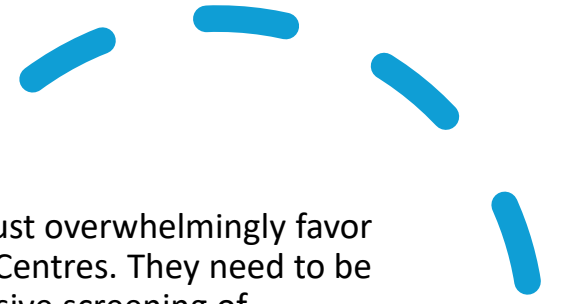
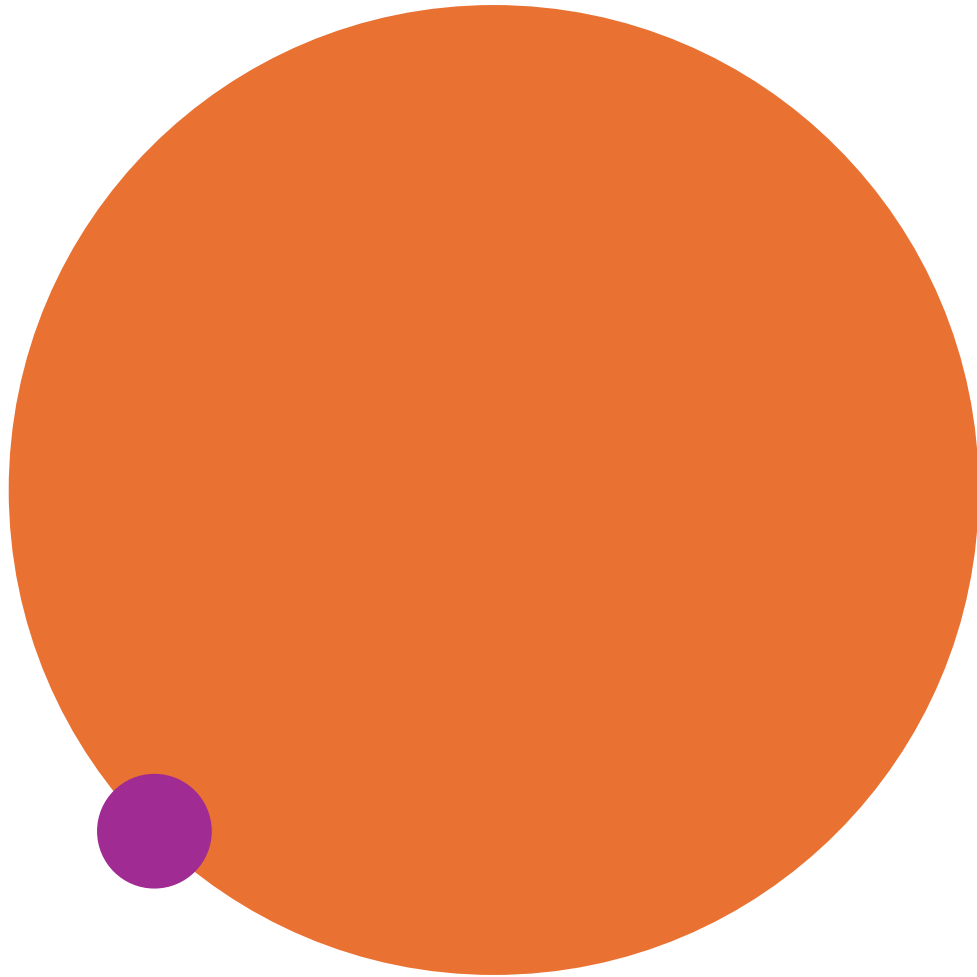
GS Paper 3:

- Inclusive growth and issues arising from it.
- Development and employment (impact of health on the workforce).

GS Paper 4 (Ethics):

- Empathy, tolerance, and compassion towards the weaker sections (case studies on health administration).
- Ethical issues in international relations and funding (pharma ethics).

Essay Paper: Directly relevant to topics concerning demographic dividend, human capital, and social justice.



- **Way Forward**

- **Pivot to Primary Care:** Budgetary allocations must overwhelmingly favor the strengthening of primary Health and Wellness Centres. They need to be equipped not just for maternal care, but for aggressive screening of hypertension, diabetes, and common cancers.
- **Include OPD in Universal Coverage:** Health insurance schemes must be redesigned to cover outpatient consultations, essential medicines, and diagnostics, as these constitute the bulk of Out-of-Pocket Expenditure.
- **Tackle the Determinants of Health:** Public health goes beyond hospitals. A multi-sectoral approach tackling air pollution, ultra-processed foods, lack of safe urban exercise spaces, and workplace stress is required to stem the NCD tsunami.
- **Strengthen State-Level Capacity:** The Centre must incentivize and assist poorer states to build robust administrative capacities, ensuring that supply chains for essential medicines in public hospitals remain unbroken.
- **Data Democratization:** Future national surveys must explicitly map and publish the financial burden of outpatient care and preventive medicine to force a shift in policy focus.



All Previous Years' UPSC Questions

UPSC Mains GS 2 (2015): "Public health system has limitations in providing universal health coverage. Do you think that the private sector could help in bridging the gap? What other viable alternatives would you suggest?"

UPSC Mains GS 2 (2018): "Appropriate local community-level healthcare intervention is a prerequisite to achieve 'Health for All' in India. Explain."

UPSC Mains GS 2 (2019): "Besides being a moral imperative of a Welfare State, primary health structure is a necessary pre-condition for sustainable development." Analyze.

UPSC Mains GS 2 (2020): "In order to enhance the prospects of social development, sound and adequate healthcare policies are needed particularly in the fields of geriatric and maternal healthcare." Discuss. .

What a rain gauge tells us about Indian science history



HISTORY HEADLINE

By SOLOMON VIMAL,
ASIT K BISWAS & VIJAY P SINGH

INDIA'S CONTRIBUTIONS to global scientific and technological developments are quite significant, but sadly, neither India nor the rest of the world knows much about them. A primary reason is that, unlike the West, not a single Indian university, IIT, or IISc has credible research unit on the history of science and technology.

Consider rainfall measurement. Imagine a government official in the Mauryan Empire, sometime around 300 BCE. He stands at the entrance of a state granary in the weeks after the monsoon. In front of him is a clay bowl, wide-mouthed, standardised, placed precisely where the chief minister had dictated. The official reads the water level, converts it to *drosas*, and records the figure for the state. His report then travels up the administrative chain to formulate important evidence-based policies: the relief that farmers should receive, tax owed, and harvest levels. The state has measured its rainfall, and it was done because of law. This is explicitly documented in one of the most consequential administrative Indian texts.

The *Arthashastra*, attributed to Kautilya, chief minister to Chandragupta Maurya, is a treatise on statecraft, economics, and administration written roughly around the 4th-3rd century BCE.

What is mostly unknown is that it contains the details of a complete operational system for measuring rainfall — a standardised instrument, defined units of measurement, prescribed placement locations, and a regional data collection system for six distinct zones of the subcontinent. This is an example of evidence-based hydrological knowledge that drove Indian public policy.

The unit of measurement was the *drosa*, approximately 13.2 kg by weight of water, translatable into a depth reading. The text then enumerates expected annual rainfall for six distinct regions of the em-



The *Arthashastra*, attributed to Kautilya, chief minister to Chandragupta Maurya. The 4th-3rd Century treatise has details of a system for measuring rainfall. (1)

pire: Himalayan foothills, Gangetic plains, regions toward the western and southern coasts, and drier inland zones. Actual rainfall was used as a proxy for economic conditions of a primarily agrarian country to decide on taxation and also subsidies when rainfall was low.

The next development in rain gauge came more than 17 centuries later. The Korean Cheugugi, installed under King Sejong in 1441 CE, is consistently cited in international hydrological literature as the world's first standardised rain gauge network. European instrumentation began even later, with Benedetto Castelli's rainfall observations in 1639, followed by Christopher Wren's tipping-bucket gauge in 1662.

If the *Arthashastra*'s system is accepted on its own terms, it represents the earliest documented, state-administered rainfall measurement system in the entire recorded human history.

What makes this finding genuinely remarkable is not merely the instrument. The measurement was mandatory, not a matter of local discretion. The gauge was placed at a specific government facility, the storehouse, ensuring consistency across locations. The data was fed directly into tax policy. The text explicitly connects rainfall totals to the remission of agricultural taxes. Farmers in drought-stricken regions received state relief calibrated to what the gauge recorded. This is integrated, evidence-based governance, a hydrological information system embedded

in the machinery of an ancient state.

That this achievement has gone unrecognised in global science history reflects a problem deeper than neglect. The dominant narrative of scientific progress was written during the European Enlightenment and hardened during the colonial era. Measurement and systematic observation were framed as Western contributions to civilisation. India's colonial education system, de-

signed to produce administrators rather than historians of indigenous knowledge, did little to contest this. Post-independence, investments in research on the history of science have remained conspicuously thin, not because the evidence is absent, but because institutions to pursue it rigorously have never been built.

The correction is not difficult to envision. What is needed is a coordinated national programme: new critical translations of texts such as the *Arthashastra* by teams combining Sanskrit scholars

with historians of science and technology; peer-reviewed publications in leading international journals that place India's contributions squarely and accurately within the global scientific timeline; and curriculum reforms that give Indian students an honest picture of where their civilisation stood in the long arc of scientific development.

Solomon Vimal is CEO and Chief Scientist of Geothrax. Biswas is an international authority on water. Singh is at Texas A&M University.

If *Arthashastra*'s system is accepted on its own terms, it represents the earliest documented, state-administered rainfall measurement system in the entire recorded human history

- **Key Terms and Explanations**

- **Arthashastra:** An ancient Indian treatise on statecraft, economic policy, and military strategy, attributed to Kautilya (also known as Chanakya or Vishnugupta), who was a scholar and chief advisor to Chandragupta Maurya (c. 4th-3rd century BCE). It is not merely a political text but a manual of administration covering law, taxation, agriculture, espionage, and even environmental management. *Example: Just as a modern finance ministry has a detailed budget manual, the Arthashastra served as a comprehensive rulebook for running an empire.*

- **Drona:** An ancient Indian unit of measurement for volume, specifically for water. In the context of rainfall measurement, one drona represented the weight of water approximately 13.2 kg. This could be translated into a depth reading (e.g., cm or inches) based on the area of the standardized rain gauge's mouth. *Example: If a standardized bowl collected water weighing 13.2 kg, that equaled 1 drona of rainfall, which might correspond to a specific agricultural outcome.*

- **Evidence-Based Governance:** A principle of public administration where decisions on policies, resource allocation, and interventions (like tax relief or subsidies) are made based on systematically collected and analyzed data, rather than on intuition, tradition, or political convenience. *Example: Instead of guessing which region faced drought, the Mauryan state used rainfall data to automatically reduce taxes for farmers in that specific area.*

- **Cheugugi:** The standardized rain gauge invented and deployed in Joseon-era Korea under King Sejong the Great in 1441 CE. It is often cited in mainstream hydrological literature as the world's first official, network-based rainfall measurement system, used to assess land taxes fairly.

- **Hydrological Information System:** An organized framework for collecting, processing, storing, and disseminating data related to water (e.g., rainfall, river levels, groundwater). It includes instruments, measurement protocols, data transmission channels, and analytical models to support decision-making.

- **Tipping-Bucket Rain Gauge:** A modern instrument for measuring rainfall. It consists of a funnel that directs rainwater into a small seesaw-like bucket. When the bucket collects a pre-set amount (e.g., 0.2 mm of rain), it tips, emptying the water and sending an electronic signal. Each tip represents a fixed volume of rain. *Example: If a gauge tips 50 times in an hour, and each tip equals 0.2 mm, the rainfall intensity for that hour is 10 mm.*

- **Main Arguments and Substantive Parts**

- **Core Thesis:** The dominant global narrative of scientific progress, framed during the European Enlightenment and solidified in the colonial era, has systematically overlooked or undervalued significant non-Western contributions. India's ancient system of rainfall measurement and evidence-based policy, as documented in the Arthashastra (c. 300 BCE), is a prime example of this neglect. This lack of recognition stems not from a lack of historical evidence but from the absence of dedicated, credible research units on the history of science and technology within Indian universities and premier institutes like IITs and IISc.

- **Key Supporting Evidence from History:**

- **Standardized Instrument:** The text describes a "wide-mouthed, standardized" clay bowl used as the gauge.
- **Prescribed Placement:** The gauge was to be placed at the entrance of a state granary, a specific government facility ensuring uniformity across locations.
- **Defined Unit:** The "drona" was a standardized unit of measurement for water weight/volume.
- **Regional Data Collection:** The text explicitly enumerates expected annual rainfall for six distinct agro-climatic zones of the subcontinent (Himalayan foothills, Gangetic plains, western/southern coasts, drier inland zones).
- **Direct Policy Linkage:** Actual rainfall data was used as a proxy for economic conditions in an agrarian economy to determine tax rates, state relief, and subsidies. Farmers in drought-stricken regions received relief "calibrated to what the gauge recorded."

- **Counterarguments and Rebuttals :**

- *Potential Counterargument:* The Arthashastra is a theoretical treatise, not proof of actual implementation.
- *Rebuttal:* The text specifies *mandatory* measurement, not a local discretion, and an integrated system of data flow into state policy, suggesting a high likelihood of practical enforcement as part of a sophisticated administrative machinery.
- *Potential Counterargument:* The drona and the method might not be equivalent to modern precision measurement.
- *Rebuttal:* The critique is about the *systematic, evidence-based approach* and its priority in human history, not about technological equivalence. The intent and integration with governance are what make it remarkable.

Historical Evolution of the Issue

Pre-Independence (Colonial Era):

- The British colonial education system was designed primarily to produce clerks and administrators to serve the empire, not to foster critical research into indigenous knowledge systems.
- A Eurocentric narrative of science was actively promoted, framing measurement, rationality, and systematic observation as unique "Western contributions to civilization." Indigenous systems were often dismissed as primitive, religious, or unscientific.
- Early Indologists translated texts like the Arthashastra but often lacked a scientific or technological lens, focusing more on philology, law, or statecraft.

Post-Independence (1947-1990s):

- The initial focus of the new Indian state was on nation-building, economic development, self-sufficiency (Swadeshi), and building modern scientific institutions (IITs, ISRO, etc.).
- While pride in India's ancient past (e.g., zero, Ayurveda, astronomy) was a part of national identity, rigorous, institutionalized research into the *history of science and technology* remained weak. The emphasis was on "doing science," not "studying the history of Indian science."
- Few universities established dedicated departments or credible research units in this field. The article argues that this situation persists to the present day.

Present Day (2000s onwards):

- Growing global interest in decolonizing knowledge and re-evaluating non-Western scientific traditions.
- Sporadic but uncoordinated efforts by individual scholars, but still lacking a "coordinated national programme."
- The article calls for a national programme involving new critical translations, peer-reviewed publications in top journals, and curriculum reforms to give Indian students an "honest picture" of their civilization's scientific standing.

COMPREHENSIVE U.P.S.C. ANALYSIS: UNRAVELING INDIA'S ANCIENT SCIENTIFIC HERITAGE

1. KAUTILYA'S ARTHASHASTRA & PRAGMATIC GOVERNANCE



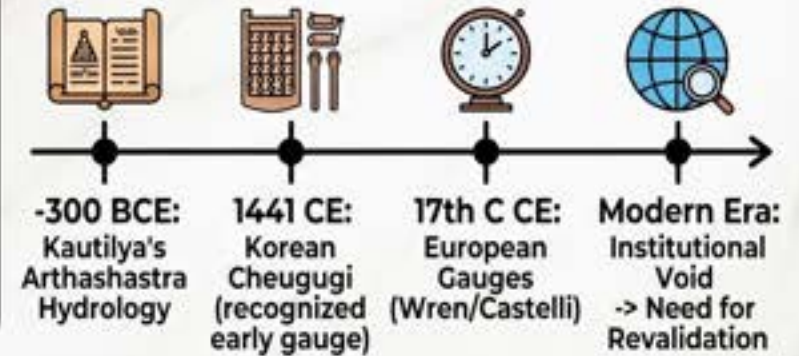
Blueprint for Statecraft
Empirical Data on Rainfall & Agriculture.
'Drona' measurement unit (co-it)

2. PIONEERING HYDROLOGY & MACROECONOMICS



Institutionalized State Observation.
Linked rainfall data to taxation and disaster relief.
Preceded European gauges by centuries.

3. TRACING THE TIMELINE



2. PIONEERING HYDROLOGY & MACROECONOMICS



Institutionalized State Observation.
Linked rainfall data to taxation and disaster relief.
Preceded European gauges by centuries.

4. THE WAY FORWARD: ACADEMIC & GOVERNANCE SHIFT



Decolonizing Science Narratives.
Fusion of Classical Sanskrit and Modern Methodology.

5. UPSC LINKAGES & MULTIDIMENSIONAL IMPACT





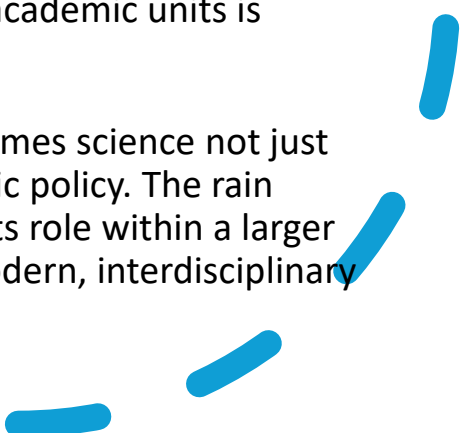
- **Logical and Philosophical Base**

- **Empiricism and Pragmatism:** The underlying logic is that effective governance requires empirical data. The Mauryan state operated on the pragmatic assumption that rainfall is a measurable, predictable, and policy-relevant natural phenomenon. This challenges the notion that pre-modern societies relied solely on religious or mystical explanations for natural events.

- **Challenge to Eurocentric Epistemology:** The article's main philosophical thrust is a post-colonial critique of how "science" is defined. It argues that the dominant epistemology (theory of knowledge) unfairly privileges the Western method of experimentation and instrumentation (post-17th century) while ignoring systematic, state-sponsored observation and data application from other cultures, which constitutes a valid, alternative scientific practice.

- **Institutional Neglect as a Structural Problem:** The philosophical assumption is that knowledge production is not neutral. The lack of research on India's scientific history is not an accident but a consequence of colonial institutional design and post-independence policy blind spots. The failure to build dedicated academic units is framed as a structural barrier, not a mere oversight.

- **Science as a Social and Administrative Tool:** The article re-frames science not just as abstract theory or lab work, but as an integrated tool for public policy. The rain gauge's significance lies not in its mechanical complexity but in its role within a larger socio-administrative system for taxation and welfare – a very modern, interdisciplinary perspective.



Multidimensional Analysis

Social:

- Reclaims a lost scientific heritage, boosting cultural self-esteem.
- Challenges the social hierarchy that often separates "traditional" knowledge from "modern" science.
- Can make science education more relatable by connecting it to local history and practical governance (tax, relief).

Political:

- Directly impacts the debate on **decolonization** of education and knowledge systems.
- Can foster a national narrative of a rational, scientific, and administratively sophisticated ancient polity.
- Risk of political appropriation for narrow ideological goals.

Legal:

- Ties to the constitutional duty to develop a "scientific temper" (Art. 51A).
- No direct legal conflicts. May inform cultural property or heritage protection laws.

Ethical:

- Core issue of **epistemic justice** – giving due credit where it is historically merited.
- Requires historians to balance evidence and avoid exaggeration (the ethics of scholarship vs. advocacy).

International:

- Positions India as a contributor to global science, not just a recipient/imitator.
- Facilitates new collaborations (e.g., history of hydrology).
- Can be used in cultural diplomacy (soft power).

Economic:

- Minimal direct economic impact, but indirect benefits via improved science education and innovation mindset.
- Could spur niche tourism (e.g., heritage of science and governance sites).





- **Linkages with NCERTs**

- **Class 6 – History (Our Pasts-I):** Chapter on 'Kingdoms, Kings and an Early Republic' and 'Ashoka, The Emperor Who Gave Up War' provides the political context of the Mauryan Empire. The analysis adds a crucial layer of *administrative and scientific* detail to the political narrative.

- **Class 11 – Ancient India (R.S. Sharma):** Chapter on 'The Age of the Mauryas'. The textbook discusses the Arthashastra as a source of Mauryan administration. The analysis deepens this by focusing on its *environmental and economic* management aspects (rainfall, tax, relief).

- **Class 11 – Introduction to Political Theory:** The chapter on 'Citizenship' and 'Rights' can be contrasted with the Mauryan state's *paternalistic yet data-driven* approach to citizen welfare (tax relief based on objective data).

- **Class 12 – Geography (India: People and Economy):** Chapter on 'Water Resources' and 'Agriculture' directly connects. The historical system provides a long-term perspective on India's dependence on monsoon and the state's role in measuring and responding to it.

- **Linkages with UPSC CSE Syllabus**
- **GS Paper I (History & Culture):**
 - **Salient aspects of Ancient Indian culture:** This is the most direct linkage. The rain gauge system is a salient, non-religious aspect of Mauryan material and administrative culture.
 - **Indian Heritage:** A perfect example of scientific and technological heritage.
- **GS Paper III (Science & Tech, Economy):**
 - **Science and Technology – developments and applications:** The historical development of measurement instruments and data systems.
 - **Achievements of Indians in S&T:** A key, overlooked achievement.
 - **Agriculture – cropping patterns, issues related to direct/indirect farm subsidies:** The *historical roots* of data-driven agricultural policy and tax relief.
- **GS Paper IV (Ethics):**
 - **Ethical governance and probity in public life:** The Mauryan system is a case study in evidence-based, objective governance (using data for tax relief).
 - **Philosophical basis of governance:** The logical and pragmatic (not just moral) basis for state action.



- **Way Forward**

- **Establish a National Mission for History of Indian S&T:** Create a dedicated, well-funded mission under the Ministry of Education/Culture with a 25-year roadmap. Its core units should be housed in leading IITs, IISc, and central universities to foster interdisciplinary rigor.

- **Develop Interdisciplinary Curriculum & Training:** Launch integrated PhD programs (e.g., "Physics & Sanskrit," "Hydrology & Ancient History") with fellowships. Create a network of scholars bridging science, archaeology, and classical languages.

- **Create a Peer-Reviewed Journal & Database:** Publish an international, peer-reviewed "Journal of Indian History of Science and Technology." Simultaneously, create a curated, open-source digital database of primary texts (with translations and commentaries).

- **Revise School Textbooks (NCERT) – Judiciously:** Integrate verified examples (like the Mauryan rain gauge) into history and science textbooks, not as isolated "facts" but as illustrations of **evidence-based governance, measurement systems, and scientific temper**. Avoid exaggeration; present it as one part of a global story.

- **Promote Public History:** Fund museums, documentaries, and popular science writing on this theme to reach citizens beyond academia. Use the example of the rain gauge to show that science is not alien to Indian tradition.





- **UPSC CSE Mains:**
 - **2019 (GS-1):** "Highlight the contributions of ancient India in the field of science and technology."
 - **2018 (GS-1):** "Discuss the main contributions of the Gupta period and the Mauryan period in the field of science and technology."
 - **2017 (GS-1):** "Examine the relevance of the Arthashastra in contemporary times."
 - **2016 (GS-1):** "Describe the salient features of the Mauryan administration."
 - **2015 (GS-4):** "In the context of public policy, discuss the importance of evidence-based decision making."
 - **2014 (GS-1):** "The ancient Indian state was not a welfare state but a regulatory state." Comment.
 - **2020 (Essay):** "The torch of science and technology has always burnt bright in India."
- **UPSC CSE Prelims:**
 - The Arthashastra, Kautilya, Mauryan administration, and units of measurement (drona, nishka, etc.) are frequent themes in Ancient History questions.



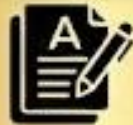
AXIA IAS ACADEMY

UPSC CSE CLASSES

RISE ABOVE THE REST



EXPERT
FACULTY &
GUIDANCE



COMPREHENSIVE
SYLLABUS
COVERAGE




STRATEGIC
TEST SERIES &
MENTORSHIP

ADMISSIONS OPEN

- Prelims + Mains + Interview
- Current Affairs Focus
- Personalized Attention
- Online & Offline Batches

 WEBSITE: axiaiasacademy.com

 CONTACT: +91 6002-417488 