

How UP emerged as X-factor in Op Sindoor success against Pakistan



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War is the ultimate auditor of military capability. It strips away the layers of bureaucratic optimism and the polished presentations of defence expos. In the span of 88 hours in May 2025, Operation Sindoor delivered its verdict. For decades, we had spoken of Atmanirbharta-self-reliance as a strategic aspiration. When the guns fell silent on May 10, it was clear that self-reliance was no longer an aspiration. It was a survival imperative.

And it had a new address: Uttar Pradesh.

As someone who shepherded the BrahMos programme from a drawing board concept to the world's fastest cruise missile, I view the conflict as a validation of an industrial philosophy. The

success was not accidental, it was the result of a convergence of technological maturation, political will and industrial ecosystem building centered on the Gangetic plains. The perception of Uttar Pradesh as a mere hinterland died when the BrahMos was unleashed and it carried the signature of the Uttar Pradesh Defence Industrial Corridor or UPDIC. The creation of the UPDIC changed the topology of our security map. Linking Lucknow, Kanpur, Jhansi, Aligarh, Agra and Chitrakoot was a strategic decision to weaponize India's demographic dividend. In modern warfare, you cannot fight with a missile that lacks a spare part supplier or a radar that lacks a maintenance hub. You need an ecosystem where a microchip fabricated in Noida is integrated into a seeker head tested in Lucknow, mounted on a launcher assembled in Kanpur and loaded with ammunition produced in Aligarh. By April 2025, this ecosystem was operational, moving UP from 'hinterland' to 'heartland'. The BrahMos was the star of Operation Sindoor. The engagement at Nur Khan airbase (Chakdala) near Islamabad serves as the definitive case study. A BrahMos struck the heart of the Pakistani air force's capability. The story behind that strike is one of industrial resilience. Recognizing the need for volume and redundancy, we aggressively expanded production into Uttar Pradesh. The integration and testing facility in Lucknow became a critical node. During the conflict, the Lucknow hub-supported by a network of MSMEs across the state-ensured a throughput that kept the squadrons armed. We were able to rapidly replace missiles fired in the opening strikes, ensuring follow-on operations did not stall due to 'ammo hunger.' The BrahMos involves thousands of components, from the ramjet engine to the seeker head. In UP, we indigenized the supply chain for many of these sub-systems. When Pakistan attempted to disrupt our logistics, the decentralized nature of UP's manufacturing-spanning 4,000+ MSMEs-meant there was no single point of failure.

However, Operation Sindoor was not just about striking; it was about surviving. Pakistan's retaliation involved Fatah ballistic missiles and a swarm of drones, including Turkish YHA and Asisguard Songar combat drones. This was India's first full-spectrum drone war, and the survival of our forward operating bases depended entirely on the Air Defence network. Here, too, UP's contribution was decisive. Electronics production units in Noida and Ghaziabad worked round-the-clock to provide the high-reliability radar components and secure data links required for the Akash missile system to intercept incoming threats. Furthermore, private startups in the UP corridor provided the 'agile' response needed for counter-drone warfare. Noida also emerged as a silent warrior in the electromagnetic spectrum. The Integrated Air Command and Control System (IACCS), which allowed for the seamless coordination relies on real-time data processing engineered in some software and hardware labs of the NCR and its extensions into UP. The Secure Communication Links that protected our data from interception were fortified by encryption standards much of it developed in these clusters. Resilience is also about logistics. Our ability to bounce back was the true metric of power. This is where Uttar Pradesh's geography became decisive. Kanpur became the artery of sustainment; its ammunition factories ensured that the howitzers did not fall silent. The state's central location allowed for the rapid movement of critical spare parts for Rafales and Mirages to the front lines. UP acted as a sponge that absorbed the shock of demand and released the capability of supply.

This transformation was driven by focused political leadership. Chief Minister Yogi Adityanath's stewardship of the Defence Corridor moved beyond the 'ribbon-cutting' culture to focus on the nuts and bolts-land acquisition, power supply for MSMEs and easing regulatory hurdles. The political backing created an environment where a private startup in Lucknow could bid for a BrahMos component contract, and the state government acted as the guarantor of stability. It is pertinent to mention here Defence Minister Rajnath Singh and CM Yogi jointly flagged off the first batch of BrahMos missiles from the Lucknow facility on October 18, 2025. This major achievement happened in just five months since inauguration, demonstrating the project's ability to transition from launch to full production in record time. The lessons for UP are clear: we must move up the value chain. Having mastered missile bodies in Kanpur and electronics in Noida, the next phase must focus on propulsion, advanced materials and artificial intelligence. The war showed that the future is unmanned. UP has the potential to become the drone manufacturing capital of India, integrating the software talent in Noida with the fabrication capability in Agra and Kanpur. Ultimately, weapons do not fight wars; people do. The most valuable asset Uttar Pradesh contributed was not a missile, but a mindset. The Defence Corridor has created high-value employment where an engineer tightening screws on a BrahMos seeker in Lucknow or writing code in Noida knows they are directly contributing to national security. Operation Sindoor demonstrated that India possesses the capability to fight a limited, high-intensity conflict with decisive results. It proved that the BrahMos, deeply integrated into the UP manufacturing ecosystem, can be produced, sustained, and replenished in large numbers.

The 88-hour confrontation is now history, but its lessons are shaping our future. Uttar Pradesh stands at the center of this transformation. We have moved beyond the era where the state was merely a recruitment ground for soldiers. Today, it is the arsenal of the Republic.

As I look back, the image that stays with me is the supply chain in synchronized rhythm-the trucks rolling out of Kanpur, the code being compiled in Noida, the missile bodies taking shape in Lucknow. Operation Sindoor tested our missiles, our doctrine and our courage. It also tested our industry. And Uttar Pradesh passed with distinction.



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