# BIPSS Commentary



# Artificial Intelligence and National Security: Can

# **Bangladesh Build Strategic AI Capabilities?**

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# Introduction

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Source: The Daily Star

In recent years, artificial intelligence (AI) has emerged as a key driver of change across sectors transforming economies, reshaping governance, and altering the way societies function. Among its most significant and far-reaching implications is its growing role in national security. From military modernization and border surveillance to intelligence analysis and disaster response, AI is increasingly being integrated into the core of national security planning by countries around the world. This shift is not limited to global powers. Regional and middle-income countries are also

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recognizing that AI is not just a matter of technological advancement—it is fast becoming a matter of strategic relevance. The ability to develop, adapt, and apply AI tools for security purposes can determine how well a country protects its sovereignty, manages emerging threats, and remains prepared in a complex and fast-changing security environment.

For Bangladesh, this presents both an opportunity and a challenge. As the country aspires to play a more active role in regional affairs and strengthen its internal security architecture, AI could offer valuable support in areas such as counterterrorism, maritime security, cyber defense, disaster preparedness, and strategic planning. However, the development of AI capabilities—especially in a national security context—requires more than just access to technology. It calls for a clear vision, strong institutional coordination, investment in research and talent, and safeguards to ensure responsible and ethical use. At present, Bangladesh is still at an early stage in understanding how AI fits into its broader national security strategy. While digital infrastructure is expanding and interest in innovation is growing, there remains a gap in terms of integrating emerging technologies into security policymaking and defense planning.

This commentary aims to explore whether Bangladesh is in a position to build strategic AI capabilities in support of its national security objectives. It will examine the global trends shaping AI in defense and security, assess Bangladesh's current landscape, and identify the key steps needed to develop a coherent and forward-looking approach to AI in the national interest.

#### The Evolving Role of AI in National Security

Major powers such as the United States and China are setting the pace. The U.S. Department of Defense's Joint Artificial Intelligence Center (JAIC) and China's Next Generation AI Development Plan both show how AI is being woven into national power strategies.<sup>2</sup> These countries are deploying AI across a wide spectrum—from battlefield automation and surveillance systems to cyber operations and logistics. However, this is not only a race among great powers; a

<sup>&</sup>lt;sup>2</sup>Zacharie Tazrout. 2021. "United States: The Latest News about the Pentagon's AI and the Joint Artificial Intelligence Center." ActuIA. August 10, 2021. https://www.actuia.com/en/news/united-states-the-latest-news-about-the-pentagons-ai-and-the-joint-artificial-intelligence-center/.

growing number of middle-income countries are also investing in AI to modernize their defense sectors and increase strategic autonomy.

AI is reshaping the definition of national power. In addition to traditional military strength, states are increasingly judged by their ability to act intelligently, quickly, and securely in digital domains. As information warfare, autonomous systems, and cyberattacks become more common, the strategic edge is now tied to digital resilience and algorithmic capability. This shift presents both an opportunity and a challenge for developing countries like Bangladesh.

To understand how a country with similar constraints and regional dynamics is approaching this challenge, one can look to India—a neighboring country that has begun to systematically embed AI in its national security architecture.

**Case Study-India's Strategic AI Push in Defense:** India's experience demonstrates how a developing country can initiate meaningful progress in building AI capabilities tailored to its security environment. In 2018, the Indian Ministry of Defense formed a Task Force on Artificial Intelligence to explore the integration of AI into national security. This led to the establishment of the Defense AI Council (DAIC) and the Defense AI Project Agency (DAIPA), both aimed at fostering innovation and coordination across government, the private sector, and academia.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>"Artificial Intelligence (AI) in the Indian Defence: Developments, Regional Implications, and Policy Options for Pakistan - Strafasia | Strategy, Analysis, News and Insight of Emerging Asia." 2019. Strafasia | Strategy, Analysis, News and Insight of Emerging Asia. 2019. https://strafasia.com/artificial-intelligence-ai-in-the-indian-defencedevelopments-regional-implications-and-policy-options-for-pakistan/.



#### Source: IMPRI

India's strategy focuses on building indigenous AI solutions rather than relying solely on foreign vendors. Public-private partnerships have played a crucial role, with defense-tech startups working alongside military institutions on AI-based solutions for surveillance, automated reconnaissance, and data analysis. One initiative has been the use of facial recognition systems in counterinsurgency zones, aimed at identifying suspects and monitoring movement patterns. India is also developing autonomous drone systems and AI-enabled situational awareness platforms for use in border areas and disaster zones. India's experience also highlights the importance of institutional clarity. With designated bodies responsible for AI in defense, the Indian government has ensured that innovation is guided by policy, not just experimentation. This structure is essential for coordination across civil-military domains and for mobilizing resources in a focused manner.

Bangladesh, too, faces a complex security landscape that includes cross-border issues, terrorism, maritime challenges, and growing cyber threats. AI can assist in many of these areas—but only if there is a clear understanding of where and how it should be applied. India's example suggests that even incremental, targeted investments in AI—if embedded in a national vision—can yield tangible benefits. As Bangladesh seeks to modernize its security strategy, learning from regionally relevant models like India's can offer practical guidance.

## Why AI Matters for Bangladesh's Security Landscape

Artificial Intelligence (AI) is no longer just about automation or data crunching—it is increasingly becoming the invisible scaffolding behind modern national security strategies. For a country like Bangladesh, positioned at the intersection of climate vulnerability, geostrategic competition, and digital transformation, the stakes are especially high. In this context, AI is not a luxury; it is a necessity to intelligently navigate a growing array of 21st-century security threats—many of which are hybrid, fast-evolving, and data-intensive.

**Border Security**: India's deployment of AI-powered surveillance systems along its borders, including smart fences and drones, has enhanced monitoring capabilities. Bangladesh could adopt similar technologies to better manage its extensive borders with India and Myanmar, improving detection of unauthorized crossings and smuggling activities.



Source: The Defense News

**Counterterrorism and Hate Speech Monitoring**: Indonesia's use of AI-driven Natural Language Processing (NLP) tools during the 2024 regional elections effectively identified and mitigated online hate speech.<sup>4</sup> Implementing comparable AI systems could aid Bangladesh in monitoring extremist content online, thereby enhancing counterterrorism efforts.

<sup>&</sup>lt;sup>4</sup>"Artificial Intelligence (AI) in the Indian Defence: Developments, Regional Implications, and Policy Options for Pakistan - Strafasia | Strategy, Analysis, News and Insight of Emerging Asia." 2019. Strafasia | Strategy, Analysis, News and Insight of Emerging Asia. 2019. https://strafasia.com/artificial-intelligence-ai-in-the-indian-defencedevelopments-regional-implications-and-policy-options-for-pakistan/.

**Maritime Surveillance**: Organizations like OceanMind utilize AI and satellite data to combat illegal, unreported, and unregulated (IUU) fishing.<sup>5</sup> Given Bangladesh's significant maritime interests in the Bay of Bengal, integrating such AI technologies could strengthen maritime law enforcement and protect marine resources.

**Disaster Response**: The SURF-IT project in Bangladesh is pioneering AI-based surge forecasting models to improve disaster preparedness and response.<sup>6</sup> These models can provide more accurate predictions of natural disasters, enabling timely evacuations and resource allocation.



Source: CLARE

<sup>&</sup>lt;sup>5</sup>"Artificial Intelligence (AI) in the Indian Defence: Developments, Regional Implications, and Policy Options for Pakistan - Strafasia | Strategy, Analysis, News and Insight of Emerging Asia." 2019. Strafasia | Strategy, Analysis, News and Insight of Emerging Asia. 2019. https://strafasia.com/artificial-intelligence-ai-in-the-indian-defencedevelopments-regional-implications-and-policy-options-for-pakistan/.

<sup>&</sup>lt;sup>6</sup>"Spatial Surge Forecasting Using Artificial Intelligence and Community Knowledge for Inclusive and Transformative Early Actions (SURF-IT) | Uttaran." 2025. Uttaranbd.org. 2025. https://uttaranbd.org/ccwg-projects/spatial-surge-forecasting/.

**Cybersecurity**: The increasing sophistication of cyber threats necessitates advanced defense mechanisms. AI can enhance cybersecurity by detecting anomalies, predicting potential breaches, and automating responses to cyber incidents. Bangladesh's draft Cyber Security Ordinance 2024<sup>7</sup> reflects a growing recognition of these challenges.

### Bridging the Capability Gap: Where Bangladesh Stands Now

Despite growing interest in AI, Bangladesh still faces critical gaps in institutional, technical, and human resource readiness. While the Bangladesh Computer Council (BCC) has been actively involved in ICT training initiatives. For instance, through the Bangladesh Korea Institute of Information and Communication Technology (BKIICT), established in 2005 with support from the Korean International Cooperation Agency (KOICA),<sup>8</sup> BCC has been providing various ICT training programs. These include diploma and postgraduate diploma courses, as well as specialized training for government officials, women, and physically challenged individuals.

Regarding infrastructure, the BCC has established a Tier-IV National Data Center at Bangabandhu Hi-Tech City in Kaliakair, Gazipur.<sup>9</sup> This facility is among the largest in the world and is designed to provide uninterrupted services to various government offices. While these efforts demonstrate significant progress in ICT development, it's important to note that the integration of these initiatives into national security planning remains an area for further development.

In higher education, universities like MIST and BUET have introduced AI modules, and partnerships like the Huawei-BUET ICT Academy and Grameenphone Academy are offering certifications in AI and cloud computing.<sup>10</sup> Yet, most universities still lag in producing research or

<sup>&</sup>lt;sup>7</sup>"The Daily Star." 2024. The Daily Star. December 26, 2024. https://www.thedailystar.net/tech-startup/news/cyber-security-ordinance-2024-progress-or-pitfall-3785116.

<sup>&</sup>lt;sup>8</sup>"BKIICT-BCC." 2025. Bcc.gov.bd. 2025. https://bkiict.bcc.gov.bd/page/about?utm

<sup>&</sup>lt;sup>9</sup>"Bangladesh's First Cloud Data Center Starts Operations." 2024. Datacenterdynamics.com. February 13, 2024. https://www.datacenterdynamics.com/en/news/bangladeshs-first-cloud-data-center-starts-operations/.

<sup>&</sup>lt;sup>10</sup>"Huawei-Buet ICT Academy Launched to Develop Tech Talents." 2022. The Business Standard. March 23, 2022. https://www.tbsnews.net/bangladesh/education/huawei-buet-ict-academy-set-develop-talent-ecosystem-389878.

graduates ready for defense-tech roles, and there is limited collaboration between academic institutions and the military.

The country also underperforms in AI-related R&D investment—spending less than 0.03% of its GDP—well below regional peers like India.<sup>11</sup> This underinvestment, combined with policy delays and a lack of cohesive national AI strategy, weakens Bangladesh's ability to develop strategic AI capabilities for security. Though UGC in 2024 recommended AI integration in public universities and the ICT Division has hinted at a national AI policy, implementation remains slow. Without significant reforms and defense-industry-academia collaboration, Bangladesh risks falling behind in leveraging AI for national defense and resilience.

#### **Cybersecurity and AI: The New Frontline**

Bangladesh's digital infrastructure has faced significant cyber threats, notably the 2016 Bangladesh Bank heist and the 2023 government data breach exposing over 50 million citizens' personal information.<sup>12</sup> In response, the Cyber Security Ordinance 2025 was enacted, recognizing AIgenerated cybercrimes and establishing a national cybersecurity council. However, the country's cybersecurity framework still lacks advanced AI-driven threat detection and real-time response capabilities.

Estonia offers a compelling model for Bangladesh. After enduring extensive cyberattacks in 2007, Estonia developed a robust AI-based cyber defense strategy, integrating real-time threat monitoring and secure digital identities. The establishment of the NATO Cooperative Cyber Defense Centre of Excellence in Tallinn further underscores Estonia's commitment to

<sup>&</sup>lt;sup>11</sup>Jahangir, Mr, Dear Mr, and A Jahangir. 2024. "Subject: Submission of the Final Report of the Study on 'Expanding Private Investment in the Context of LDC Graduation.'"

https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/page/6fc21888\_1122\_4f28\_b548\_75c698b5b7 8e/Final%20Report.pdf.

<sup>&</sup>lt;sup>12</sup>data, Personal. 2023. "Personal Data of 50 Million Bangladeshis Leaked on Government Website." Aa.com.tr. 2023. https://www.aa.com.tr/en/asia-pacific/personal-data-of-50-million-bangladeshis-leaked-on-government-website/2940505.

cybersecurity.<sup>13</sup> By adopting similar AI-enabled threat intelligence platforms and fostering publicprivate partnerships, Bangladesh can enhance its cyber resilience and protect its digital assets more effectively.

### Building Strategic AI Capability: What Bangladesh Needs to Do

In 2024, Bangladesh introduced its draft National Artificial Intelligence Policy, aiming to harness AI's potential across sectors, including national security. The policy emphasizes ethical AI use, innovation, and integration into various governmental functions. However, to effectively implement this vision, Bangladesh must establish a comprehensive national AI security strategy that aligns civilian and military objectives. This includes creating a centralized AI command structure and fostering civil-military research partnerships to develop AI applications tailored to defense needs. Talent development is crucial. Institutions like the Military Institute of Science and Technology (MIST) and the Bangladesh Army International University of Science and Technology (BAIUST) are pivotal in cultivating AI expertise. Collaborations with international partners, such as South Korea and Japan, can enhance training programs and provide exposure to advanced AI applications in defense.

Furthermore, Bangladesh should engage in global tech diplomacy. Participation in international forums and partnerships, like those facilitated by NATO with Indo-Pacific nations, can provide access to cutting-edge AI research and best practices in cybersecurity and defense. By aligning with global standards and fostering international collaborations, Bangladesh can accelerate its AI capabilities and ensure its national security apparatus is equipped to handle emerging threats.

Lastly, empowering local startups and academia to innovate in AI can drive indigenous solutions for national security challenges. Providing funding, infrastructure, and policy support to these entities will not only bolster the country's defense capabilities but also stimulate economic growth and technological advancement.

<sup>&</sup>lt;sup>13</sup>data, Personal. 2023. "Personal Data of 50 Million Bangladeshis Leaked on Government Website." Aa.com.tr. 2023. https://www.aa.com.tr/en/asia-pacific/personal-data-of-50-million-bangladeshis-leaked-on-government-website/2940505.

#### The Way Forward: From Awareness to Action

To build meaningful and strategic AI capabilities for national security, Bangladesh must move from policy drafts and isolated initiatives to coordinated, long-term action. Key recommendations include formulating a robust national AI security strategy, institutionalizing civil-military AI research partnerships, and accelerating cyber threat intelligence development using AI tools. Equally critical is investing in AI-focused education and training pipelines, enabling the next generation of engineers, defense planners, and policymakers to understand and apply emerging technologies.

However, ambition must be balanced with realism. Bangladesh should adopt a phased development model, prioritizing high-impact areas like border surveillance, counterterrorism intelligence, and disaster response in the short term, while gradually expanding to sophisticated AI applications like autonomous defense systems or predictive threat modeling. This approach ensures resource optimization without overextending institutional or technical capacity.

Finally, Bangladesh has a unique opportunity to position itself as a responsible and forwardthinking AI adopter in South Asia. By committing to ethical AI use, transparency, and international cooperation—especially with partners like Japan, South Korea, or the EU—it can project a model of tech-enabled security governance. With sustained effort, Bangladesh can turn AI from a buzzword into a backbone of national resilience and strategic autonomy.