



Digital Border Governance in Indo–Bangladesh Relations

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ABSTRACT

The digitalization of border control is today considered one of the hallmarks of border management for the modern world. With the advent of the Comprehensive Integrated Border Management System (CIBMS), along with the India-Bangladesh international boundary, there has been an important paradigmatic transition, moving from manual personnel based surveillance at the border into a technologically driven process. This article will provide an analytical critique of how digitalization of border management can affect border management policy for both countries. A combination of policy declarations/announcements by governments as well as recent scholarly articles/publications have provided primary source materials to draw upon within this article. It is posited by this article that the implementation of CIBMS represents a significant structural shift in the overall border management process. Although the system represents a critical upgrade in the management of the border, questions have emerged regarding the expansion of surveillance systems, infrastructure sustainability, as well as the ethics of governance. Digitalization of border management is situated in the larger management of the region. Its impact on the relationship between India and Bangladesh in 2026 is critically examined.

Introduction

Borders in the twenty-first century are not defined by fences, patrol, and checkpoints alone, but by a plethora of sensors, algorithms, drones, and integrated command centers. Among the most complicated



and lengthy international borders globally, the India-Bangladesh border has also become a key location for the development of such border control mechanisms, which have traditionally faced issues of irregular migration, smuggling, trafficking, and movement of insurgents, among other challenges.

Digital border management is now becoming a reality in India as it rapidly implements its Comprehensive Integrated Border Management System (CIBMS) to indicate a definite shift from physical to virtual border management. The CIBMS initiative reflects the national trend of improving technology in all areas of the country's defense infrastructure. As such, the consequences of India adopting this new form of border management extend well past improvements in the efficiency of managing its borders. They also relate to how institutions operate; they affect the manner in which border forces interact with the people of India and they contribute to the strategic story line of India-Bangladesh relations.

This article is aimed at examining the implications of the implementation of CIBMS in redefining the border management between India and Bangladesh. This article argues that with the technological integration in the border management between the two nations, new issues of governance arise, and they need to be effectively managed to maintain stability between the two nations.

From Physical Barriers to Digital Architecture

Traditionally, the management of the Indo-Bangladesh border has been maintained through physical barriers such as the deployment of the Border Security Force (BSF) and the construction of physical barriers. Although the construction of physical barriers was effective in controlling infiltration at some sections of the border, the topographical challenges, such as riverine and marshy terrain, restricted the overall utility of the barriers.

The Indian Government launched the first trial of CIBMS with intelligent fences, thermal imaging cameras, ground sensors, laser fences, radar, and control rooms. The main advantages of using smart-fences over traditional physical barriers are the ability to detect intrusion through IoT and subsequently be able to react quicker to the situation. According to PIB (2019), the key objective of developing the CIBMS system was to develop a complete and integrated border management system which could work effectively regardless of the topography or adverse climatic condition. Therefore, the shift here is beyond just the enhancement of technology, but represents a paradigm shift in how borders will be governed. Traditional border governance is about physical presence and deterrence whereas digital border governance is about invisible monitoring infrastructure to allow for predictive surveillance and central



coordination. Smart Border Systems as stated by FICCI (2021) utilize hardware, software and communication systems to create a layered security architecture where previously there were individualized defensive mechanisms.

Digital Governance and Security Modernization

In this context, digital border management forms part of the broader agenda of national security modernization. The focus on tech-savvy ness in the management of the Indian borders finds support from global trends, whereby countries are increasingly relying on artificial intelligence and big data analytics to manage the security challenges of the contemporary world. Therefore, CIBMS is an important investment in the concept of technological sovereignty..

CIBMS seeks to integrate surveillance systems to central control rooms to facilitate inter-agency coordination and intelligence-based operations (IDSA, 2020). This is expected to provide better visibility to the agencies concerned. An analysis in the article published in IJISRT (2024) suggests that the use of technology in border management can improve the precision of operations by eliminating blind spots.

Digital governance is also expected to introduce the concept of institutional transformation. The agencies concerned will have to transform themselves to operate in the new technological environment. This will necessitate specialized training for the agencies concerned. An article published in IJNRD (2024) suggests that the effectiveness of the system depends as much on institutional capacity building as on the technology used.

Therefore, CIBMS should not be seen as a mere installation of equipment; it should be seen as a governance reform project that is altering administration, operational, and strategic practices.

Implications for Indo-Bangladesh Relations

The installation of digital surveillance systems at the border has implications for the relationship between India and Bangladesh. There has been a significant increase in cooperation between the two nations ever since 2014. This cooperation extends to various areas such as counter-terrorism activities, connectivity between the nations, as well as economic cooperation. This reform must be carried out while considering the larger spirit of cooperation between the nations.

Digital border management can prove to be beneficial in the long term for the stability of the relationship between the two nations. Digital surveillance can reduce violent conflicts between the nations. This is because the introduction of technology can minimize the need to employ physical confrontations. This



can reduce the chances of violent conflicts that may arise due to accidental border crossing. Digital surveillance can provide a more controlled form of border management.

Digital border management can also raise concerns related to over-securitization. According to discussions in EJSSS (2023), the introduction of surveillance systems can impact the larger socio-political scenario at the border. The border population tends to be associated with both nations. There are cultural as well as economic ties between the nations.

That's why, it is necessary to highlight that digital border management needs to be carried out within a diplomatic framework that is based on the principles of transparency. It is necessary to highlight that measures to build confidence are required to avoid the misconception of technological upgrades as aggression.

Governance Challenges and Ethical Considerations

Smart Border Systems like CIBMS do not simply improve the effectiveness of surveillance at borders. CIBMS can also create problems for governments.

One of the biggest challenges CIBMS has to deal with is how to manage all the data collected by Digital Borders Systems. Since smart fences use many different types of sensors as well as other imaging technologies they will have an enormous amount of data to process.

The second issue with CIBMS is cost. The infrastructure required to support smart fencing systems including the maintenance, up grades, and high tech staff required to run them are costly. FICCI (2021), noted that "smart border systems need to be financially sustainable."

Finally, CIBMS creates ethical questions about the overall design of smart border systems. As mentioned previously there are many concerns regarding the impact of surveillance on both civil liberties and national security. EJSSS (2023), points out that "there should be a sense of responsibility/accountability in digital governance" when developing smart border systems.

The 2026 Context: Why Digital Border Governance Matters Now

In 2026, the global security discourse has become associated with a new era for the world through the technological transformation. Technology's increasing presence in borders demonstrates how technology is now at the centre of each state's sovereign authority. This technological aspect of borders is an



important element in India's decision to invest in a Comprehensive Integrated Border Management System (CIBMS) which allows the modernization of India's border security systems while enabling India to meet the emerging standards for Smart Border Systems across the globe.

Due to both the high population density and economic interdependence in this area as well as the geopolitical importance of this region, the Indo-Bangladesh border presents an ideal case study to analyse the phenomenon of Digital Border Governance.

Since technology is now taking on a more significant role in managing borders, the issue is no longer if or when digital border governance will develop into a larger system but rather how such a large scale system will be effectively managed.

Conclusion

Digital Border Governance in the Indo-Bangladesh Border Territory represents a paradigm shift in how border security is practiced. The use of CIBMS (Comprehensive Integrated Border Management System) Technology represents a paradigm shift in how borders are safeguarded. The government of India has replaced traditional forms of border security such as barriers or personnel with more integrated technologies that utilize computerization.

However, there are many challenges associated with the application of this new form of border Security. Issues associated with surveillance, economic feasibility, cyber attacks on computers and the impact upon humans represent some of the problems. In 2026, the role of digital Infrastructure will be very important to establishing national sovereignty. Therefore, the Indo-Bangladesh border will be an area where technology plays a key role in the creation of a border. If digital border governance can establish a secure border while preserving the dignity of the people who live at the border then it will be considered a success.

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