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## EDITORIAL

The Editorial Board takes great pride in presenting the 77<sup>th</sup> Issue of *Bangladesh Army Journal* to its esteemed readers. This prestigious publication continues to serve as a professional conduit through which the officers of Bangladesh Army articulate their thoughts, share scholarly perspectives and contribute to the knowledge that shapes the intellectual foundation of the military community. *Bangladesh Army Journal* remains steadfast in its mission to provide an open and constructive forum for discourse on subjects of enduring relevance to Bangladesh Army vis-a-vis the broader defence forces. Themes encompassing national and regional security dynamics, global strategic paradigms, military training and education, leadership and command philosophies, historical evolution of warfare, emerging technologies, civil-military cooperation and unit-level best practices find their rightful place in its pages.

The present issue is enriched with a compelling selection of articles addressing a wide array of contemporary military themes. It includes artificial intelligence in war fighting, wargame simulations, emotional intelligence in leadership, evolution of unmanned aerial systems, global security issues, tradition versus change in military culture, Army's patronization of schools and colleges, militarization perceptions in the Chattogram Hill Tracts etc. Altogether, these articles reflect the intellectual depth and strategic foresight of the authors offering valuable takeaways for military professionals, educators, researchers and strategic thinkers.

We remain profoundly grateful to **General Waker-Uz-Zaman, SBP, OSP, SGP, psc, the Chief of Army Staff, Bangladesh Army and Chief Patron of *Bangladesh Army Journal*** whose visionary leadership and unwavering commitment to intellectual excellence have been instrumental in enhancing the quality of this journal. We also express our sincere gratitude to the **Chief of General Staff** for his insight, guidance, invaluable time and suggestions given to the Editorial Board to elevate the standard of the time-honoured *Bangladesh Army Journal*.

We sincerely acknowledge the contributions of all the authors who have enriched this issue with their analytical, insightful, thought-provoking and well-researched articles. Sincere appreciation to all those who, in one way or another, contributed to ensure that *Bangladesh Army Journal-77<sup>th</sup>* Issue sees the light of the day in due time. Despite whole hearted endeavours, any inadvertent errors or omissions may remain for which we seek the understanding and forbearance of our discerning readers. The Editorial Board remains ever committed to the continuous enhancement of *Bangladesh Army Journal* and welcomes constructive suggestions that will guide its future course.

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## Geographic Constraints of Necks and Waists and Their Military Implications: Challenges and Ways Forward

Brigadier General Ahmed Zamiul Islam, ndc, afwc, psc, MPhil

### **Abstract**

*Military geography plays a pivotal role in shaping a state's defence policy, security strategy and geopolitical standing. Key geographical features such as narrow corridors, chokepoints and contested territories can serve as both strategic assets and vulnerabilities. The article introduces metaphorical prisons such as 'necks' and 'waist' that bear strategic significance for persuasion of national objectives. During geopolitical tensions, the adversaries may exploit the inherent weaknesses of these geographic constraints and create economic bottleneck for the country, ultimately weakening a nation's defence capabilities. The challenges posed include risks of encirclement, political exploitation, economic strangulation, and heightened regional tensions. Effective mitigation strategies, involving strengthening infrastructures, diversifying supply route, leveraging technological advancements for surveillance, tactical adaptations, diplomatic engagement, and a balanced approach to defensive and offensive military strategies can enhance the security and strategic resilience.*

**Keywords:** *Chock points, slicing, Siliguri Corridor, geographic constraints.*

### **Introduction**

Military geography shapes the human behaviour about how they would act politically, about exertion of power and influence and the way war is fought. Technology brings together people from large distance and in recent days' unprecedented technological evolution made the world more transparent. However, these advancements cannot entirely overcome the inherent characteristics of terrain and geography that people are living with. Eventually, geographical peculiarities prompt one state to take certain actions against another in pursuance of its national objectives. But one must not forget that sustaining such ways and means are always challenging and costlier for both counterparts. As Tim Marshal mentioned, "Geography is always a prison of sorts."<sup>1</sup>

Tim Marshal's prison of geography is inherent and cannot be modified. A strategic corridor flanked by mountains and seas cannot negate the level of vulnerability it emanates and its consequent exploitation by adversary for reduction of political tensions. However, geographical constraints, politically established through the twists and turns of national boundaries often present point of contention between states. These boundaries are simply lines on the maps and impose political obstructions that inhibits military operations.<sup>2</sup> During war peculiarities of boundary cannot restrict manoeuvre unless limited by seas and rugged terrain as states need to survive and pursue strategic objectives. While salient, popularly known as bulges, created naturally in the process of

major operations, can be mitigated by adopting strategies of elastic defence or salient protection mechanism, managing ‘waists’ and ‘necks’ necessitates adoption of more comprehensive strategies. These features pose consistent geographic vulnerabilities that influences state’s defence policy and military strategy. Failure to address the challenges can lead to severe impact on the territorial integrity and national security.

### **Tale of Waist and Neck**

In military strategy, the terms neck and waistline are often used metaphorically to describe specific geographic features that can act as constraints or strategic points. These terms help analysts and strategists visualize and understand the implications of terrain on military operations, logistics, and defence. The ‘waistline’ refers to a narrow geographic zone or mountain pass that act as natural chokepoints, compelling troops or supplies to pass through a confined area, making it easier to block enemy advances or control movement. A ‘neck’, on the other hand refers to a narrow strip of land or a critical chokepoint that connects two larger areas. A neck can act as a natural barrier or gateway, controlling access between regions and making a focal point for military operations. Popular example of a neck is the Siliguri Corridor (also known as the “Chicken’s Neck”) in India, a narrow strip of land connecting mainland India to its northeastern states. Securing a neck allows a military to control access to a region or cut off enemy supply lines as seen in the Battle of Stalingrad during World War II (1939-45), where German forces were cut off at the Volga River neck.<sup>3</sup> Historically, military across the world attempted to control these constricted zones of necks and waists as they present most economical way of forcing opponents to one’s term. Gray asserts that even nuclear weapons, while offering deterrence, do not negate the importance of control over strategic regions.<sup>4</sup>

### **Significance of Geographic Constraints in Military Strategy**

Geographic constraints postured by waists and necks create significant strategic and operational challenges and vulnerabilities, necessitating adaptive strategies to mitigate risks and exploit advantages. The necks and waistlines create inherent vulnerabilities due to their narrowness and strategic importance. They are the key objective for slicing or securing strategic route. Movement through waistlines and necks requires careful planning to avoid ambushes. Adversaries can exploit these vulnerabilities through military, diplomatic, and economic means to encircle or blockade a region. These features influence defensive and offensive planning, logistical movements and often dictate where battles will be fought and how forces can exploit the vulnerabilities of these geographic constraints to leverage offensive action over adversaries. Inferring waistlines and necks as geographic constraints allows military strategists to identify key vulnerabilities and opportunities in a region. By understanding and leveraging these geographic constraints, a military can turn terrain into a strategic advantage or mitigate its disadvantages. During the Liberation War of Bangladesh (26 March-16 December, 1971), identifying Feni as a vital link between northern and southern part of the country, the Pakistan Forces turned it into one of the most well-fortified townships with well stocked bunkers all prepared to fight for a prolong period of time.<sup>5</sup>

## Theoretical Framework

Military planners look at the map to see what geographical features have battle winning potentials. Carl Von Clausewitz (1780-1831) recognized that the terrain could act as a force multiplier, allowing smaller force to effectively resist larger ones. Necks and waists are the areas where a force can gain significant advantages over other. Constricted terrain is also a major source of 'Friction' as it can create unexpected obstructions, delay or complicate coordination. Terrain can influence the identification and targeting of 'Schwerpunkt'. Clausewitz stressed the importance of understanding and leveraging terrain to gain tactical and strategic advantages while mitigating its potential challenges.<sup>6</sup>

Antonie-Henri Jomini's (1779-1869) concepts of interior and exterior lines demonstrated the challenges in manoeuvre and concentrate their power relative to an enemy. These concepts are closely linked with the geographic vulnerability of a state as geography often determines whether a state can exploit interior lines or is forced to operate on exterior lines. Jomini referred interior lines to the situation where a military force operates from a central position relative to its adversaries. This central position allows rapid and efficient movement of the force between different points of engagement, enabling it to concentrate its forces against one part of the enemy's forces at a time and allowing efficient use of resources. In contrast, forces operating on exterior lines take longer to reinforce positions due to dispersion of lines of communication over wider area, often surrounding its opponent and are susceptible to counterattacks from a well-coordinated enemy using interior lines.<sup>7</sup> Main challenges in exterior lines of operations are dispersal of force over a wider area makes it difficult to concentrate force quickly, maintenance of secrecy, early exposure of main effort, and the need for increased coordination requirements.

In reality, forces operating in exterior lines can conduct tactical manoeuvre for slicing narrow necks and waists and thereby isolating forces operating in interior line. For example, during the Battle of the Belunia Bulge fought from June to November 1971, the coordinated manoeuvre of the Mukti Bahini ensured complete isolation of its northern part.<sup>8</sup> Furthermore, the force in interior line can conduct well-coordinated encirclement or penetration to drive away enemy resistance. For example, during the Battle of Cannae (216 BCE), Hannibal (247 BC-183 BC), a Carthaginian general's infantry executed double envelopment tactic to draw the Roman cavalry deeper into the narrow pocket, encapsulated between a river and hills, while holding the flanks and systematically annihilated the Roman forces.<sup>9</sup> Thus, Jomini's concepts of interior and exterior lines of operation are deeply intertwined with managing a state's geographic vulnerability. States with elongated borders, limited strategic depth, or proximity to adversaries are often forced to operate on exterior lines, increasing their vulnerability against simultaneous attacks. Understanding these principles is crucial for both defensive planning and offensive strategy in military operations. The encirclement defence theory, bottleneck defence theory and integrated defence theory can be applied in managing vulnerability (1 for details about Integrated Defence Theory please refer to Box-1).

**Box-1: Integrated Defence Theory- Chicken's Neck**

The Siliguri Corridor, often referred to as the “Chicken’s Neck,” is a narrow stretch of land in India, that connects the northeastern states to the rest of the country. It is a strategically vital region for India due to its geopolitical sensitivity and vulnerability.<sup>10</sup> The defense and management of the Siliguri Corridor involve a multi-layered approach, encompassing military, infrastructure, and diplomatic strategies.

The Indian Army maintains a strong presence in the region, with several military bases and units stationed nearby. The 33 Corps of the Indian Army, headquartered in Sukna (near Siliguri), plays a principal role in safeguarding the corridor.<sup>11</sup> India has raised a specialized Mountain Strike Corps to address threats in mountainous terrains, including the Siliguri Corridor. This corps is equipped to handle potential incursions or conflicts. The Sashastra Seema Bal (SSB) and other paramilitary forces are deployed along the borders with Nepal and Bhutan to prevent infiltration and ensure security.<sup>12</sup>

India has developed robust road and rail networks to ensure rapid movement of troops and supplies.<sup>13</sup> The National Highway 10 and rail lines connecting Siliguri to the northeast are critical for logistics. The Bagdogra Airport near Siliguri serves as a key airbase for military and civilian purposes, enabling quick deployment of forces.<sup>14</sup> Infrastructure projects like tunnels and bridges are being developed to ensure connectivity remains uninterrupted during emergencies.<sup>15</sup>

India considers Nepal and Bhutan as an essential part of its security perimeter. These relationships are crucial to prevent the corridor from being exploited by hostile forces.<sup>16</sup>

India uses satellite imagery and advanced surveillance systems to monitor the corridor and surrounding areas.<sup>17</sup> India’s nuclear capabilities and strong conventional military forces act as a deterrent against any large-scale aggression targeting the corridor.<sup>18</sup> The region is fortified with defensive structures and checkpoints to prevent unauthorized movements. India’s participation in forums like the Quad and regional partnerships helps counterbalance regional influence and potential threats.<sup>19</sup>

**Military and Diplomatic Challenges Postured by Geographic Constraints**

Geographic constraints within a state’s boundary often produce significant territorial disadvantages, particularly for economic development, political stability and military strategy. When these vulnerabilities are exploited by the adversaries, they can limit country’s ability to defend territory and projection of power. These constraints include but not necessarily limited to certain operational and logistical vulnerabilities i.e. vulnerability to encirclement and blockade, difficulties in manoeuvre warfare, asymmetric threats and logistic sustainment.

**Vulnerability to Encirclement and Slicing:** The vulnerability of encirclement and slicing of geographically constrained areas like necks or waistlines arises due to their inherent strategic and infrastructural significance, combined with their physical narrowness. The key communication features, i.e. national communication artery, bridges etc or logistic elements, i.e. pipelines, economic zones etc of necks and waist turn them into important strategic corridors for maintaining lifeline of the country. The probability of exploitation increases when geographical features limit the number of alternative routes, making it vital for both military and civil operations or due to proximity to potential hostile neighbour. The battle of Stalingrad is an example of how such vulnerabilities are exploited by adversaries.<sup>20</sup>

**Difficulties in Manoeuvre Warfare:** Manoeuvre warfare, relying heavily on mobility, surprise, and rapid movement to outmanoeuvre and outthink the enemy, faces significant challenges in geographically constricted zones. These areas limit the ability to deploy forces effectively and execute traditional manoeuvre tactics. Lack of space makes it hard to deploy forces rapidly, execute flanking manoeuvres, limits employment of tanks, artillery and other heavy equipment, and reduces effectiveness of air support. It will thus compel employment of small, isolated units, reducing overall coordination and command effectiveness. Concentration of large force will be easily targeted by the adversary and level of force protection will reduce significantly. For example, the Suwalki gap, characterized by forest, boggy terrain and loamy soil make it a dead-end for military offensive.<sup>21</sup>

**Logistic Difficulties:** Reinforcement and logistic issues in narrow corridors are critical. Narrow zones make supply lines easier to target and disrupt, cutting off essential resources like fuel, ammunition, and food, emphasizing security of supply line. Poor communication networks, lack of railways, and inadequate airfields can hinder the rapid deployment and resupply of forces. Harsh weather condition like heavy rain, floods etc in constricted zones can further complicate logistics and movement.

**Asymmetric Threat:** Geographic constraints make lines of communication extremely vulnerable to exploitation by insurgents and non-state actors. Asymmetric fighters may use the terrain to conduct minor operations at chokepoints utilizing hit-and-run tactics for a prolonged period of time, causing attrition without engaging in direct combat. Presence of buildup areas and rugged terrain in such constricted zones will be congenial for asymmetric operations. Constricted zones are ideal for guerrilla warfare, where small, mobile forces can harass and disrupt larger, less agile armies (for reference from military history please see Box-2). The persistent risk of ambushes, sniper fire, or improvised explosive devices, blending unconventional forces, can create psychological stress for conventional forces, reducing morale and operational effectiveness. Asymmetric tactics are unpredictable, making it difficult for conventional forces to anticipate and prepare for attacks.

**Box-2: “The Street Without Joy”**

The Street Without Joy, a stretch of coastal road in central Vietnam, is an excellent example of how geographic weaknesses can be turned into advantages through innovative military strategy and tactics. During the First Indochina War (1946–1954), the Viet Minh effectively used the challenging geography of the region to their advantage against the French forces. The Viet Minh used the dense terrain to conduct hit-and-run attacks, ambushes and sabotage operations. They avoided large-scale confrontations, instead relying on small, mobile units to harass French forces. They had intimate knowledge of the local geography, including hidden paths, villages, and natural cover. This allowed them to move freely and set up ambushes in strategic locations. They used the swamps and jungles to hide supply caches and bases, which were difficult for the French to locate and destroy. Unlike the French, who relied on heavy equipment and vehicles, the Viet Minh traveled light and used bicycles or footpaths to move quickly through the terrain. The Viet Minh enjoyed strong support from the local population, which provided intelligence, food, and shelter. This made it easier for them to operate in the region. The constant threat of ambushes and the inability of the French to secure the area created a sense of insecurity and demoralization among French troops. The French dubbed the road the “Street Without Joy” because of the relentless and demoralizing nature of the guerrilla attacks. Thus, Viet Minh’s ability to turn the geographic weaknesses of the “Street Without Joy” into advantages played a significant role in their eventual victory over the French. The French, despite their superior firepower and technology, were unable to adapt to the guerrilla tactics and challenging terrain.<sup>22</sup>

Lessons Learnt in the Context of Geographic Constraints:

1. Adaptability of military tactics to the local geography, rather than relying on conventional methods, facilitated the Viet Minh to dominate stronger French forces asymmetrically.
2. Understanding and utilization of terrain’s peculiar characteristics can provide a significant advantage, especially against a technologically superior enemy.
3. Geographic constraints can be exploited to level the proving ground in asymmetric conflicts, where a weaker force can neutralize the strengths of a stronger opponent.
4. Prolonged guerrilla warfare in difficult terrain can demoralize even well-equipped forces, undermining their effectiveness.

**Exploitation of Political and Diplomatic Vulnerabilities:** Adversaries having the strained relationship may exploit the geographic vulnerabilities by forming coalition of states encircling the constrained area to satisfy strategic objectives. For example, Country X restricts Country Y to access to her territory by creating coalition with Country A and Country B having contiguous border. The insurgent groups or proxy forces in the region can destabilise the area, making it easier to impose blockade. During Berlin Blockade in 1948, the then Soviet Union cutoff the land and water routes to force Allied Forces out of the city.<sup>23</sup>

**Economic Strangulation and Psychological Impact:** Blockading a critical corridor can cripple the concern country's economic activities by disrupting the life line, resulting economic hardship. This can also create panic and undermine the moral of the locals as well as the nation as a whole even if the blockade is not fully executed. For example, naval blockade during Cuban Missile Crisis aimed to economically and militarily strangle the Soviet operation on the island.<sup>24</sup>

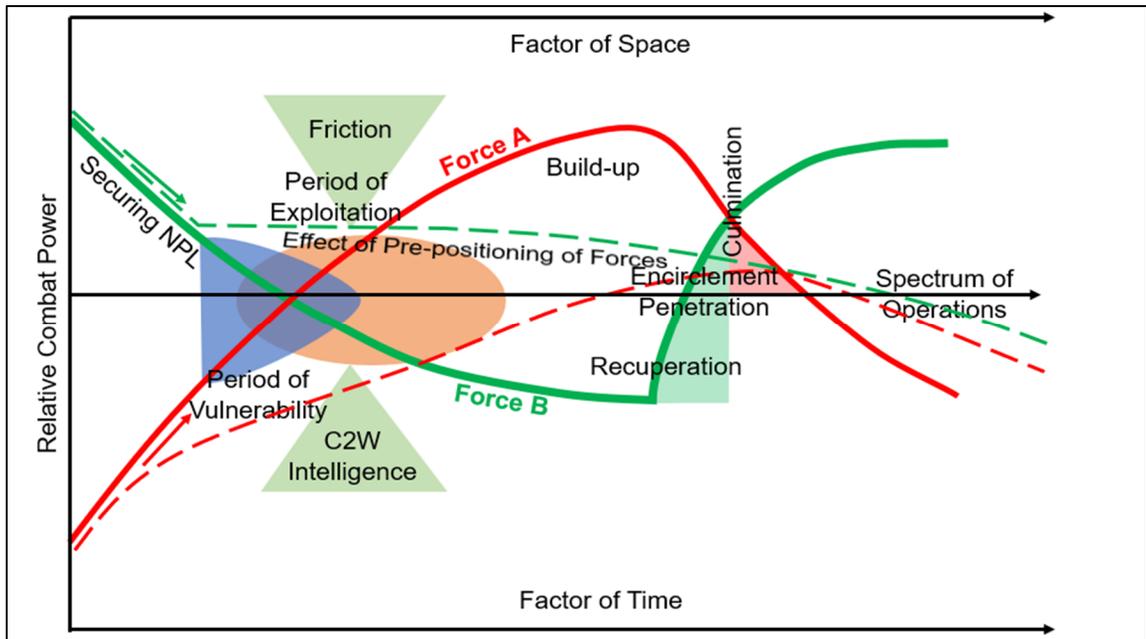
**Collateral Damage and Displacement of Civil Populace:** Military operations in populated areas raise ethical concern of collateral damage and can lead to displacement, casualties, and international condemnation.

**Presenting Defensive Advantages to Counterpart:** Constricted zones often provide natural defensive advantages to the enemy, multiplied by the complexities of man-made features and compel opponent to deploy large quantum of force that could be utilized elsewhere. Enemy forces can easily fortify narrow zones with bunkers, trenches, and obstacles, making it difficult to break through.

### **How Vulnerability is created**

In the complex dynamics of warfare, the vulnerability imposed by geographic constraints can become critically apparent at specific time and space, particularly when the defender's combat power diminishes, overwhelmed or out manoeuvred by attacking forces. This vulnerability often arises from a combination of factors that contribute to the drawdown of the defender's combat capabilities. These factors include attrition, logistic challenges or strategic missteps that leave defender exposed. Once the attacking forces (henceforth Force A) successfully capture key objectives within waist or neck, they often seek to consolidate their gains and build up their strength, further pressuring the defender (henceforth Force B). In response, Force B must strive to recuperate or regenerate their combat power, either through reinforcement or mobilization of additional forces. The goal of Force B is to attrite Force A to reach their culmination as quickly as possible. To achieve this, the defender may employ tactical manoeuvres aimed at recapturing lost terrain while carefully preserving their own fighting power to avoid further depletion. To mitigate the risks posed by geographic constraints of waist or neck, Force B may adopt strategies such as prepositioning dedicated force in critical, constricted areas. These forces are often equipped with self-sustaining capabilities, enabling them to hold their ground for extended periods. This approach can significantly reduce the vulnerability of the defender and limit the ability of Force A to further exploit the gains. Additionally, Force B may rely on operational fire support, including naval gun fire support to maintain control over constricted zones in non-contiguous inter formation boundary. Please refer to Figure-1 for conceptualized process of the scenario where a state's combat force attempts to recapture her lost territory in narrow constricted zone. The interplay of geographic constraints, combat power dynamics, and strategic manoeuvring shapes the outcome of such engagements. The defender's ability to adapt, regenerate forces and leverage fire support can determine whether they can withstand the attacker's advances or succumb to the pressures of the battlefield.

**Figure-1: Culmination of Occupying Force in an Attempt to Capture Geographical Constraints**



Source: Author's self-construct

### Strategic and Tactical Response to Geographic Constraints

**Defensive Strategies:** Pre-positioning of dedicated force with fortification who can adopt layered defence basing on the depth in vulnerable areas, using defence potentialities of terrain features to control threat's ingress is prime necessity for protecting the geographical constricted zones of the country. Troops employed in this role needs to receive specialized training and equipment to suit and sustain the environment. The defensive operations may have to be supported by air mobility and air borne operation, precision guided munitions, drones and naval gunfire support where applicable in addition other operational fire supports. Logistic innovation for resupply and light engineering equipment for mobility are essential for self-sustainment.

**Technological Innovation:** Managing defence of geographically constrained zones requires a combination of technological innovations and adaptive modern warfare strategies to overcome challenges of terrain and the needs for rapid response. Use of drones, satellite imagery and ground sensors can provide real-time intelligence, surveillance and reconnaissance, monitor critical sectors, adaptive planning, guide munitions and deploy force. Secure, decentralized communication can ensure interoperability between individual units in disrupted situation. Satellite communication and AI powered technology can optimise communications network, prioritise critical messages and detect jamming attempts.

**Tactical Adaptations:** Extensive use of improvised devices can ensure effective counter electronic warfare and protection against other adverse technologies. Light, agile units are better suited for operating in constrained zones than heavy mechanized forces. Elite units like commandos or paratroopers can conduct precision operations in difficult terrain. Multilayered defence, combining ground, air and cyber defences creates a robust defensive network. Joint operations planning must ensure coordinating army, air force, and navy units ensures comprehensive coverage of constrained zones. Pre-positioning of stockpiles in secure locations ensures sustained operations. Winning local support through humanitarian aid and infrastructure projects is critical for reduction of the risk of insurgency. Minimizing collateral damage and protecting civilians enhances the legitimacy of defensive operations. Decentralisation of command which is essential to make decisions based on real-time conditions improves responsiveness. Specialised training of troops can ensure anticipation and countering enemy actions in constrained zones.

**Geopolitical and Diplomatic Engagement:** Forming strategic alliances with neighboring states or coalition and diplomatic agreements can help secure concern geographic constraints, share the burden of defending constrained regions and ensure logistic access. For example, the multinational coalition in the Gulf War secured key chokepoints like the Strait of Hormuz to prevent Iraqi aggression.

**Strengthening Infrastructure:** Strengthening infrastructure in geographically constrained areas enhances state's security and mitigate vulnerability during war. Enhanced transport networks including roads, bridges, railways and tunnels ensure smooth movement and resupply in operation reducing logistic difficulties. Multiple infrastructure routes prevent chock points from crippling military operations if the main artery is blocked or destroyed. Developing forward air bases may ensure quick reinforcement, resupply and medical evacuation during crisis.

**Strategic Defence and Fortification:** Hardening of defence positions, by constructing fortified defensive positions or bases, underground bunkers and logistic infrastructure enhances resilience against possible offensive. These infrastructure may be integrated with smart surveillance and early warning systems. Hardening of coastline in the form of coastal defence can stop landing operations. Construction of border fence and anti-infiltration wall can stop early incursion of enemy.

**Preparation Against Protracted War:** Secure infrastructures for holding and preserving stocks of commodities, underground transportation facilities, alternative power source and local production capabilities can largely reduce external dependencies.

**Offensive Strategies:** Offensive strategies in geographically constrained zones focus on overcoming terrain challenges, exploiting enemy weaknesses and achieving rapid, decisive results. Offensive strategies should incorporate conduct of air mobility and airborne operations for rapid deployment of troops or operations behind enemy lines, conduct of outflanking manoeuvre and encirclement, targeting enemy's fortification by precision-guided munitions, use of drones for intelligence, surveillance and reconnaissance. Concentrating overwhelming force at a single point

of time and break through enemy defence using infantry and armoured vehicles if terrain permits, supported by air cover. Where geographical constraints have contiguous boundary with sea or having access through riverine route, amphibious operations, landing and naval gun fire support should be taken under consideration.

## Conclusion

Geographic constraints of necks and waists with strategic significance have important military implications that have shaped the course of history. These natural bottlenecks present both challenges and opportunities. Throughout military history, the capture of geographical corridors has often been a strategic means to influence opponents. They will continue to influence military planners in formulating defence strategies for safeguarding against vulnerabilities as well as developing offensive strategies to overcome challenges.

The study of these features underscore the importance of strategic planning, resource allocation and technical innovation, tactical adaptations to overcome challenges they pose. As military operations evolve in an increasingly complex global landscape, understanding and adapting to these constraints will remain critical for security and achieving strategic objectives. Ultimately, the ability to navigate and leverage these geographic challenges will determine the success of military endeavours in both historic and contemporary context.

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### Brief Biography



**Brigadier General Ahmed Zamiul Islam, ndc, afwc, psc, MPhil** was commissioned from the Bangladesh Military Academy on 20 December 1992 into the corps of Engineers. His professional development has been enriched by numerous courses attended both at home and abroad. He is a graduate of the National Defence College (NDC), Mirpur and the Defence Services Command and Staff College (DSCSC), Mirpur. His academic achievements include a Bachelor of Science degree in Civil Engineering from the Bangladesh University of Engineering and Technology (BUET), Dhaka. Furthermore, he holds a Master of Arts in Defence Strategy from the National University of Bangladesh and a Master of Philosophy (MPhil) in Strategy and Development Studies from the Bangladesh University of Professionals (BUP), Dhaka. He is pursuing higher research study program leading to PhD in International Relations at BUP. Presently, he is serving as the Project Manager of the Construction Supervision Consultant for the Padma Bridge Rail Link Project.

## **Optimizing Regimentation Training for Newly Commissioned Officers: Bangladesh Army's Approach Towards Organizational Excellence**

Brigadier General Humayun Quyum, ndc, afwc, psc

### ***Abstract***

*The regimentation programme for newly commissioned officers in the Bangladesh Army (BA) is a critical foundation-building process that shapes their professional and leadership capabilities. Conducted over eight weeks at the unit, this programme aims to instill discipline, esprit-de-corps, and a deep understanding of unit traditions and responsibilities. Despite its significance, the current regimentation process faces challenges at both the unit and individual levels, including the absence of dedicated supervisory officers, inconsistent training approaches and a lack of professional interest among newly commissioned officers. This paper critically analyzes the existing regimentation programme, identifies its challenges and proposes solutions to optimize it. Through qualitative research, including interviews, focus group discussions and content analysis, the study highlights the importance of a structured, customized and professionally rewarding regimentation system. Recommendations include introducing a unified regimentation framework, appointing dedicated officers and fostering an ideal learning environment to enhance the effectiveness of the programme. The findings underscore the need for continuous improvement to ensure newly commissioned officers are well-prepared for leadership roles and operational excellence in BA.*

**Keywords:** *Regimentation Training, Newly Commissioned Officers, Bangladesh Army, Organizational Excellence, Leadership Development.*

### **Introduction**

The regimentation programme for a newly commissioned officer in the Bangladesh Army (BA) is the foundation-building approach by their parent unit. Bangladesh Military Academy (BMA) is the premier military training institute that provides scientific, systematic and progressive training to the future leaders of the BA. After completing the basic military training at BMA, the newly commissioned officers are posted to their respective units, where they must undergo an eight-week regimentation programme.<sup>1</sup> Regimentation training plays a vital role in shaping a newly commissioned officer's experience upon joining the unit. It aims to groom military personnel and educate them on discipline, esprit-de-corps and selfless service.<sup>2</sup> The junior leaders (JLs) conceive the higher commander's intent and transmit those visions to the ordinary soldiers so that they can get the job done.<sup>3</sup> During the regimentation period, JLs get the best opportunity to communicate with the under-commands (UCs) and perform the duties and responsibilities of every unit appointment.<sup>4</sup> Moreover, Junior leaders' ability to adapt military training for operations in civilian contexts has proven beneficial, as seen during the Quota Movement in July-August, 2024.

Although the grooming of the junior officers continues in different training institutions, it starts mainly during the unit regimentation training. As such, units serve as the foundation for providing regimentation training as the first step in the military career. After joining the parent unit, newly commissioned officers are received in the units more festively and everyone remains cooperative in making him understand what to do and what not to do. Newly commissioned officers can develop their knowledge on profession and unit affairs through regimentation training. As such, the entire regimentation programme of eight weeks acts as a lesson and experience for the whole service life of newly commissioned officers. Although the regimentation process has shortcomings, it has recently projected many positive outcomes in aid to civil power duty across the country and flood duty in Cumilla and Feni.

The regimentation process in BA is conducted through a systematic approach. However, there is still scope for improvement at the unit and individual levels. At the unit level, challenges are the absence of dedicated supervisory officers for conducting regimentation, less experienced battalion appointment holders and inconsistent professional approaches. At the individual level, newly commissioned officers mostly lack professional interest, confidence and understanding of unit administration and traditions. Moreover, units should appoint a dedicated officer as an officer in charge (OIC) of regimentation, provide stable and experienced appointment holders and customize regimentation approaches.

This paper suggests ways to optimize regimentation training for newly commissioned officers pursuing excellence in the BA. First, it will discuss the current system of regimentation in the units. Then, it will highlight the challenges of regimentation at both the unit and individual levels within the BA. Finally, the paper will propose solutions to address the challenges of the regimentation programme. This paper adopts a qualitative research approach using a literature review, content analysis, and analysis of qualitative data collected from interviews with generals, senior officers, and commanding officers (COs). Moreover, to incorporate feelings and experiences regarding the regimentation training, two focus group discussions (FGDs) were conducted. The first FGD involved 56 newly commissioned officers from the 85<sup>th</sup>, 86<sup>th</sup> and 87<sup>th</sup> BMA long courses of the 66 Infantry Division from various arms and services, finishing their eight-week regimentation programme during 2024/2025. The second FGD included 03 COs, 03 officers in charge (OICs) of the regimentation programme, and 02 brigade supervising staff officers from the same Infantry Division. However, the scope of this study is limited as it has only given special attention to infantry regiments.

## **Aim**

To critically analyze the present regimentation training and suggest ways to optimize it for newly commissioned officers of BA to achieve organizational excellence.

## **Regimentation Training: Concept and Significance**

**Concept:** The Regimentation concept of BA was mainly inherited from the British Army. It is orienting a newly commissioned officer to the unit norms, values, traditions and sentiments

nurtured by the military members. It is an organizational system designed to develop moral character and enhance various qualities such as courage, values, professionalism, discipline, commitment and mutual respect.<sup>5</sup> Units are the core functional institution in the Army and officers are trained on these qualities as the unit is the moulding stage of a military career.<sup>6</sup> It is a process where the newly commissioned officers are allowed to feel their troops from a closer distance.

### **Significance of Regimentation**

**Learning Unit History, Duties and Responsibilities:** A leader must know the unit's history and be proficient in administrative duties while working with troops. Any deficiency in this aspect will raise questions about the leader's qualities in the subordinates' minds. JL can learn capabilities, resources, different tasks, present tactics, and current unit rules and regulations through the regimentation process.

**Better Orientation with Unit Life:** Regimentation is the first professional approach an officer used to get exposed to different administrative affairs of the unit during his regimentation period. Fresh from the academy, an officer possesses theoretical knowledge of troop handling rather than practical knowledge of unit life and administration. Therefore, early practical acquaintance during regimentation is required for a smooth transition to command.<sup>7</sup>

**Well Developed Regimental Feelings:** Regimentation aims to foster regimental feelings and enhance commitment amongst the young officers to achieve the desired outcome.<sup>8</sup> The regimentation programme of newly commissioned officers is one of the most significant and traditional events for the units and officers. Their grooming and professional brilliance are critical requirements for optimum performance.<sup>9</sup> It is imperative to develop leadership attributes and broaden the officers' mental faculties to assume higher and more responsibilities.<sup>10</sup>

**Enhanced Leader-Led Relations:** One of the principal imperatives for BA is to prepare good commanders who are well acquainted with UCs and men. Face-to-face communication is the only substitute for creating better IPR with UCs. A newly commissioned officer stays and takes meals in the Sainik line during the regimentation period, which helps him understand the soldiers' mentality.<sup>11</sup> It is an excellent opportunity for a newly commissioned officer to mix up with his UCs while remaining close to them. Also, he experiences their lifestyles, work and how they carry out their duties in different posts.

**Achieving Regimental Cohesion:** The most significant aspect of regimentation is to create group cohesion and unified orchestration of the mindset of all members for the achievement of the organizational goal. It is the index of the association among the members in the unit and the positive attitude towards the UCs. It also refers to the officers' morale and commitment towards the unit activities, including character building, seeking responsibility, physical fitness, etc. It is one of the essential elements that will ensure the unit's success in peace and war.<sup>12</sup>

**Regimentation Training for Effective Deployment:** Regimentation training in the BA is designed to instil discipline, ethical conduct and decision-making under pressure, preparing newly commissioned officers for real-life situations, such as the deployment for the Quota Reform Movement of July-August 2024. Due to better learning during regimentation, Lieutenant Bayezid from the 33 Infantry Division performed exceptionally well by demonstrating better cohesion and strong leader-led relations and rescued more than 350 flood-affected people. However, some challenges arose, including incidents of inappropriate behaviours, such as making TikTok videos and using excessive force against civilians. These issues underscore the need for regimentation training to further equip officers with the skills to effectively manage their soldiers and uphold the highest standards of professionalism in sensitive civilian environments.

**Enhancing Mental and Physical Robustness:** During regimentation, a newly commissioned officer undergoes regular physical training activities and learns to take workloads. Regular participation in morning physical training and afternoon games by regimentation officers develops intimate relations and creates confidence amongst the UCs. Proper regimentation will ensure the newly commissioned officers' physical fitness, mental robustness and better cohesion among the leaders and the led.<sup>13</sup> Moreover, the significant attributes of enhanced mental robustness were critical for the professional conduct of newly commissioned officers during the recent deployments.

### **Existing Regimentation Programme of Bangladesh Army: An Analysis**

**Arranging Ceremonial Reception by the Unit:** The newly commissioned officer is welcomed particularly to the unit with a festive celebration, making him feel that his arrival is an exceptional and valued event.<sup>14</sup> After arrival, the unit officers, JCOs and other soldiers warmly receive newly commissioned officers. This warm reception instills a strong sense of regimental pride in the officer, which he will carry forward throughout his entire service.

**Provide an Initial Brief About the Regimentation Programme:** CO or Second-in-command (2IC) briefs the newly commissioned officer about the aims and significance of the regimentation programme.<sup>15</sup> As per the regimentation training programme, officers should learn the basics of various regimental appointments, such as storemen, clerks, guard commanders, sentry, etc., and their daily duties and responsibilities. Newly commissioned officers during FGD expressed, "Our regimental OIC used to brief us about the tasks to be performed at the very beginning of the day and guide us on what to do or what not to do during this time."<sup>16</sup>

**Organizing Events to Instill the Values of the Bangladesh Army:** Some feel that officers' overall leadership quality, moral values, and ethics have deteriorated, especially among junior officers (JOs). Officers are trained on these aspects during regimentation training, as this is the moulding stage of their career. As such, officers can also learn the values and ethos of the BA during regimentation. However, due to the recent psychosocial changes and BA's deployment in assisting the civil administration, instilling BA's values and considering military life as a source of pride became essential.

**Giving an Exposure to the Troops' Daily Life:** As leaders, the officers must understand their UCs since effective leadership depends on the interactions between the leaders and the UC.<sup>17</sup> The regimentation officers can spend maximum time with the troops in the recreation room. Furthermore, officers take their meals in the Sainik mess and stay with them in the Sainik barracks. These interactions decrease the gap between officers and UCs and increase their comradeship.

**Assigning Regular Duties to Comprehend Functions of Various Appointments:** During regimentation, newly commissioned officers are scheduled to perform various duties of Sainik, Lance Corporal, Non-Commissioned Officers (NCOs) such as Corporal, Sergeant and Warrant Officers (WO)/Junior Commissioned Officers (JCOs). These assignments allow learning on the ground experience of the appointment holders. As such, the FGD participants stated, "While performing the duty of any specific appointment holder, we ask about the soldiers' responsibilities as per SOP. After receiving the brief, we observe the entire process and take necessary notes."<sup>18</sup>

**Organizing Events to Enhance Communication Skills:** Developing enhanced and practical communication skills is crucial for newly commissioned officers, often achieved through diverse assignments. Some units assign the newly commissioned officers to take motivation classes and conduct or speak as anchors in various displays and demonstrations. As such, during the recent BA's deployment to maintain law and order in the country, Captain Ashik handled a problematic impromptu situation with a civilian at the University of Dhaka premises with his enhanced communication skills, patience, understanding and wording.

**Organizing Compulsory Studies to Enhance Knowledge of Professional Books:** Newly commissioned officers study different professional books during regimentation training. Moreover, some units organize study periods to enhance knowledge of basic rules, regulations and BA policies. Similar findings are also found from the FGD, where the participants opined that "We used to learn rules from *AR(I)* and *AR(R)*, Chapter Two of *JSSDM* and policy letters which were beneficial for us to enhance knowledge."<sup>19</sup>

**Organizing Visits to Develop Knowledge of Other Arms and Services:** Some formations organize various visits to different units for the newly commissioned officers.<sup>20</sup> Respondents also stated, "We were given the chance to visit other units, which was effective to learn about the activities of other arms and services."<sup>21</sup> Therefore, these visits enhance the officers' understanding of the broader military structure, operational diversity and the unique contributions of each BA unit.

**Seeking Reports to Understand the Progress:** The officers must submit regular regimentation reports compiling their observations and the lessons learned. Moreover, holding a debriefing in the presence of all unit officers would best acknowledge the efforts put into regimentation. However, the success of regimentation lies in the self-realization/improvement of the officer, not in the report's contents.<sup>22</sup>

## **Key Regimental Features of Contemporary Armies**

Contemporary armies worldwide have developed professional excellence through appropriate training and regimentation (Table-1). The human dimension of warfare often surpasses

technological advancements in combat efficiency. Regimentation is a crucial strength of armies worldwide, as seen in historical examples such as the Bangladesh Liberation War (26 March-16 December, 1971), the Vietnam War (01 November 1955-30 April 1975) and the Indo-Pak War (Oct 1947-48, Sept 1965, Dec 1971, July 1999, June 2023 and May 2025).<sup>23</sup> Moreover, many armies feature topics related to civil-military relations, operations other than war, peacetime deployment assisting civil administration and disaster management.

**Table-1: Key Features of Regimentation in Contemporary Armies**

Serial	Countries	Key Features / Factors / Catalysts
1.	US Army	<ul style="list-style-type: none"> <li>a. Under the Manning System (UMS), soldiers and officers were assigned to regiments for their careers, resembling the British Army from the 1870s.</li> <li>b. This system aimed to strengthen unit cohesion and revive historical identities and traditions within the Army.</li> <li>c. Topics related to civil-military relations.</li> </ul>
2.	Canadian Army	<ul style="list-style-type: none"> <li>a. The Canadian Army historically adopted a regimental culture influenced by the British Army.</li> <li>b. The regimental system present in the Canadian Army is driven by its ability to foster group cohesion and combat readiness.</li> <li>c. They have emphasized that leaders must actively cultivate and uphold values, which can be effectively achieved through a robust regimental culture.</li> </ul>
3.	Pakistan Army	<ul style="list-style-type: none"> <li>a. The Pakistan Army, renowned for its combat experience, strongly emphasizes regimentation and professional development.</li> <li>b. Early in their careers, young officers undergo multiple professional courses in various training institutions, preparing them for diverse and challenging roles.</li> <li>c. Formations facilitate book reviews, study periods and essay competitions to enhance analytical skills and professional knowledge among officers.</li> <li>d. Officers are encouraged to subscribe to at least one English daily newspaper and participate in regimental quiz tests, fostering continuous learning and camaraderie within the ranks.</li> </ul>
4.	Indian Army	<ul style="list-style-type: none"> <li>a. In the Indian Army, the YOs have gone through proper regimentation to develop professionalism and dedication.</li> <li>b. Emphasis is placed on encouraging officers to participate in regimental forums to expand their knowledge and promote extensive reading habits.</li> <li>c. Mental and psychological support from senior officers and commanding officers are provided to the unit regimented officers.</li> </ul>

Source: Adopted from Literature Review<sup>24</sup>

**Key Findings:** The US Army assigns officers and soldiers to regiments for their careers to enhance unit cohesion, fighting spirit, group loyalty and operational effectiveness. The Canadian Army upholds officers' values, morale, group cohesion and combat readiness through a robust regimental culture. The Pakistan Army emphasizes continuous learning and professional development through courses, book reviews, study periods and competitions for young officers. The Indian Army encourages extensive reading to enhance officers' knowledge and skills, supported by senior officers and forums.<sup>25</sup> All contemporary armies commonly emphasize developing newly commissioned officers' mental and psychological faculties during regimentation. Moreover, they conduct special training, exercises, and visits to enhance the civil-military relationship and their exposure to deployment during peace and war.

## **Challenges and Grey Areas During Regimentation**

### **Challenges at the Unit Level**

**Non-Adherence to Traditional Festive Reception:** Traditionally, newly commissioned officers are supposed to get proper reception while joining the units. However, some units do not plan the reception of newly commissioned officers festively; thereby, an initial good impression is not created among them. Moreover, some respondents during FGD opined, "Some acceptable funny acts are traditionally done, such as newly commissioned officers being received by serving unit officers pretending to be runners. However, this practice is sometimes misused by the officers and, thus, creates a bad impression in the newly commissioned officers' minds."<sup>26</sup>

**Absence of Dedicated Regimentation OIC:** Due to the different commitments of the unit, it is often found that OICs for regimentation face many difficulties in conducting the regimentation programme. Some units do not have the posted 2IC training/welfare and the post of 2IC is frequently changed due to other employments of the field officers; therefore, it is impossible to assign a senior or field officer as OIC for regimentation (Figure-1). The deficiency of officers in the units is also viewed as one of the limitations for grooming the officers.<sup>27</sup> During FGD, most respondents opined that during the absence of the OIC, the consistency and flow of the regimentation programme were poor. The change or absence of the OIC also affects the gradual development and momentum of regimentation. Thus, the programme does not become progressive in the true sense.<sup>28</sup> Furthermore, being dealt with by various officers of different psychologies hampers the regimentation officer in multiple ways.

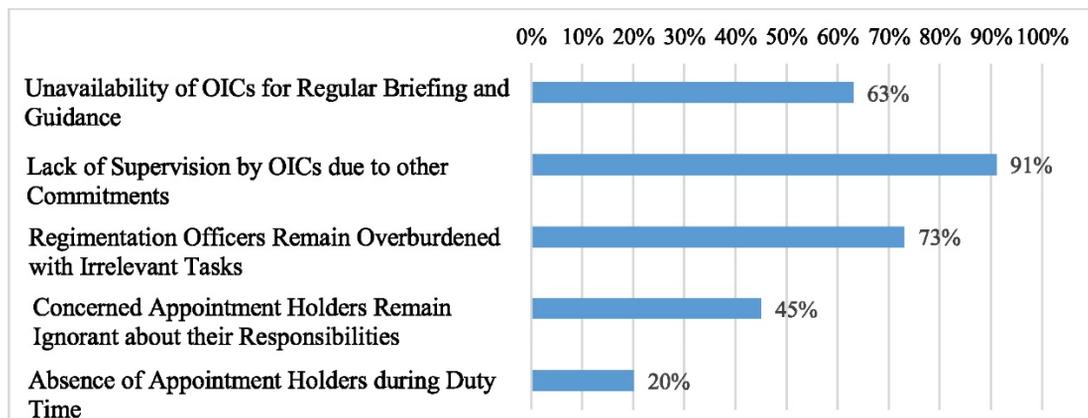
**Interaction with Less-Competent Appointment Holders:** The practical learning of the officers undergoing regimentation depends on the knowledge and efficiency of the concerned appointment holders. However, due to various regimental requirements and lack of foresight during annual career planning, unit appointment holders like store men, fresh NCOs, POL NCOs, magazine NCOs, dispatch clerks, daily NCOs and mostly barrack NCOs are frequently changed or adjusted. They lack equipment maintenance and mostly remain ignorant about the duties and responsibilities of the appointments concerned. Besides, findings from FGD revealed that appointment holders often fail to present a comprehensive brief regarding their prescribed charter

of duties to the officer undergoing regimentation. The appointment holders also show indifference in describing what the problems are, how the issues can be solved and what should be known by the officer if he is appointed as Adjt or QM after regimentation.<sup>29</sup>

**Diversity in Dealing by Different Unit Appointments:** Due to shortages of officers in the units, newly commissioned officers are appointed as staff officers, e.g., Adjt or QM, just after the regimentation. Regimentation offers an excellent scope to learn the duties of staff appointments.<sup>30</sup> However, officers undergoing regimentation are not well prepared by the unit officers for the upcoming staff and command appointments; as such, the units and organizations are affected in the long run.

**Prioritizing Non-Regimental Activities over Regimentation Programme:** Officers undergoing regimentation remain overburdened with various tasks and assignments that do not contribute directly to successful regimentation. During FGD, participants opined those assignments, like writing the names of the unit officers a few thousand times each, copying chapters from *JSSDM*, translating some policies or pamphlets from English to Bangla or vice versa, etc., constitute some of these non-regimental affairs. Moreover, some officers are engaged in events like field fires, closings for competitions, picnic arrangements, continuous sentry duties, etc.<sup>31</sup> Hence, core issues are not prioritized and peripheral problems are prioritized. These extra assignments curb young officers' initiative to mix with the soldiers and utilize the regimentation time to attain professional excellence.

**Figure-1: Challenges of the Units During Regimentation**



Source: Based on FGD, Interviews, and Literature Review<sup>32</sup>

### Challenges at the Individual Level by the Officers under Regimentation

**Negative Psyche and Lack of Interest of the Regimentation Officers:** Possessing a positive attitude is an essential factor that drives human beings to do something with the best effort.<sup>33</sup> Though psychological adaptation is the best approach to getting acquainted with military life, some newly commissioned officers lack motivation and personal interest in their profession

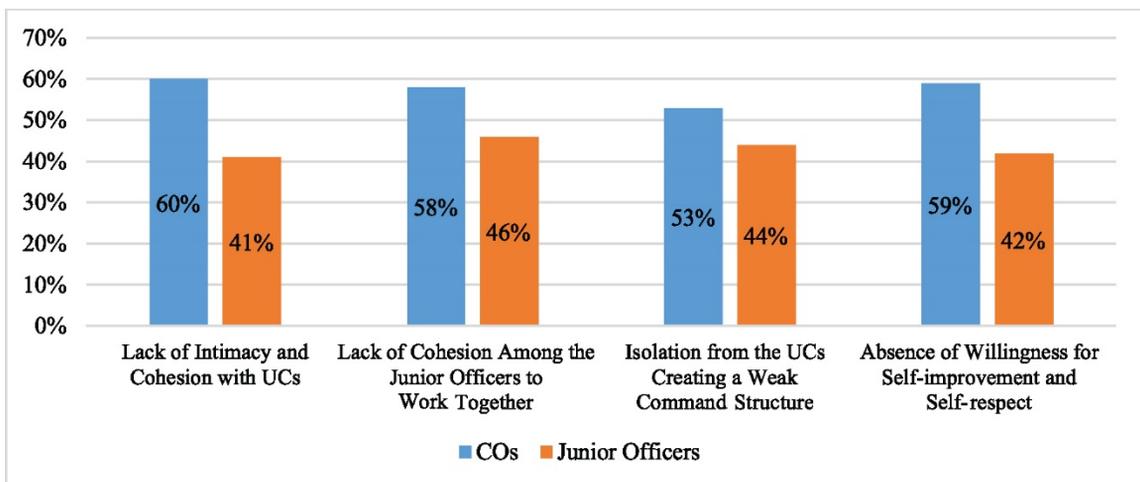
and career right from the BMA.<sup>34</sup> Hence, they show less interest in unit affairs and regimentation from the beginning.<sup>35</sup> Studies also found that JOs lack the willingness for self-improvement and, at times, lack self-respect due to the psychosocial changes (Figure-2).<sup>36</sup>

**Initial Shyness Impacting Relationship with the UCs:** Officers must mix with the troops and closely observe the psyche of the soldiers in the units.<sup>37</sup> However, after completing three years of training with coursemates, newly commissioned officers face some initial problems when mixing with the soldiers.<sup>38</sup> After joining the unit, these newly commissioned officers remain puzzled and lack fluency in conversation.<sup>39</sup> Moreover, JOs are increasingly drawn to isolated life in social media and the internet; thus, they fail to bridge the gap between the leaders and the UC.<sup>40</sup>

**Lack of Self-initiative in Learning Unit Administration:** During the regimentation, newly commissioned officers are assigned various administrative tasks.<sup>41</sup> Respondent officers opined that certain appointments, like QM, Kote/Magazine NCO, battalion daily, A, Q and G clerks, etc., are complex and cannot be mastered in a single day. Though these roles require a proactive understanding of unit administration, newly commissioned officers lack the self-initiative to learn the details of administrative affairs.

**Psychosocial Barriers in Adopting Military Traditions of the Unit:** Military traditions and customs can help an officer lead a distinctive army way of life.<sup>42</sup> Every unit within the military has its unique history and traditions, which can be challenging for newly commissioned officers who have undergone a uniform training system at BMA for three years. In BMA, senior cadets are accustomed to dealing with junior cadets who are younger and less experienced. However, newly commissioned officers need to interact with soldiers, NCOs and JCOs of varying ages and experience levels in the units, which can be challenging initially due to the officers’ psychosocial barriers.<sup>43</sup>

**Figure-2: Challenges of Newly Commissioned Officers During Regimentation**



Source: Based on FGD, Interviews and Literature Review<sup>44</sup>

## **Ways to Make the Regimentation Programme More Effective**

Regimentation should aim at mentorship and hands-on training. Getting rid of psychosocial barriers requires leadership programmes and effective communication. Officers must be supported in adjusting to military traditions and handling varied relationships. A constant learning and durability culture will assist individual and expert growth. A structured approach is necessary, focusing on institutional improvements and individual officer development.<sup>45</sup>

**Arranging Festive Reception Programme on Joining the Unit:** Units should plan festive receptions for the newly commissioned officers to create a good impression and regimental feelings (Figure-3).<sup>46</sup> Some responses during FGD also revealed that festive reception programmes significantly boosted morale and helped foster a sense of belonging among newly commissioned officers. Officers who experienced welcoming ceremonies felt more motivated to engage with the unit's culture.<sup>47</sup> Units can plan military traditions like receiving with the unit brass band, displaying a picture of the newly commissioned officer in Pana flex and arranging a parade in front of the battalion, which would be an inspiration for a newly joined officer.

**Selecting a Dedicated Training Officer as OIC of Regimentation:** Units should ensure dedicated officers for regimentation with specific responsibilities to ensure consistent and uninterrupted regimentation programmes. To address the challenge of officer shortages, increased commitments and overcommitting the UCs should be reduced from the higher headquarters.<sup>48</sup> The process involves streamlining administrative tasks, optimizing training schedules to avoid overlaps, and balancing extra regimental commitments. Moreover, a senior captain or a major could be a better option to nurture the regimentation officer.

**Detailing Experienced Battalion Appointment Holders:** To effectively support the understanding and assimilation of officers during the regimentation period, it is essential to minimize the frequent changes of appointment holders. Stability in these roles allows proficiency and expertise over time, ensuring they can fulfill their duties comprehensively. COs, during interviews, pointed out that units should provide training and briefing to ensure that the appointment holders understand their duties thoroughly and can disseminate effectively.<sup>49</sup> If needed, appointment holders who have performed the job previously or have recently been changed from the appointment may also be employed.

**Customizing Training Programme for Progressive Regimentation:** As newly joined officers in the unit have diversified psychosocial development, an organizational approach is required to groom and nourish them and foster the organizational culture.<sup>50</sup> Higher headquarters must enforce the unified regimentation programme across all units to ensure progressive regimentation and prepare newly commissioned officers adequately for future staff appointments. COs should regularly review and update the framework to address gaps or inconsistencies.<sup>51</sup> Moreover, based on the officers' performance in BMA, COs should give personalized motivations and consult accordingly.

**Focusing Core Regimentation Activities:** It is crucial to eliminate unnecessary assignments that do not directly contribute to achieving cohesion and objectives. Participants in the FGD highlighted that non-core activities, such as repetitive administrative tasks, detracted from essential regimentation duties. They recommended prioritizing core activities to enhance focus and effectiveness.<sup>66</sup> Tasks such as repetitive written assignments and physical duties like continuous sentry duty should be minimized or reevaluated to allow the officers more time to engage with soldiers and address their concerns effectively. The responsibilities of a few appointments, such as A, Q, and G clerk, Kote and Barrack NCO and Quartermaster Sergeant, should be more critical than others; those should be allotted more time.<sup>52</sup> Furthermore, officers undergoing regimentation must not be employed in the unit team for any games/sports competition.<sup>53</sup>

**Nurturing and Fostering an Ideal Learning Environment:** Units should ensure a professional and supportive environment and a conducive atmosphere. Creating opportunities for effective learning.<sup>54</sup> COs should motivate the existing officers, JCOs and soldiers to make a positive impression on the newly commissioned officers so that the regimentation officer starts taking pride in the unit and engaging with the programmes. Moreover, the formation headquarters may request weekly progress reports from regimentation officers for each sub-unit in the manuscript format.

**Harnessing an Ideal Environment Considering Individual Psychosocial Requirements:** During regimentation, one-on-one conversations with COs can reveal the newly commissioned officers' challenges, aspirations and support needs. The unit should start grooming for the JOs joining their first unit. Moreover, to ensure systematic grooming, all the tiers in the unit need to work as a team providing psychosocial support. However, COs should take the lead from the first day of regimentation to implement the EFFECTIVE module efficiently (Figure-3). At the same time, other officers in the unit should ensure a suitable learning environment. An integrated effort will help to groom JOs effectively to meet organizational requirements.<sup>55</sup>

**Figure-3: Effective Module for Regimentation**



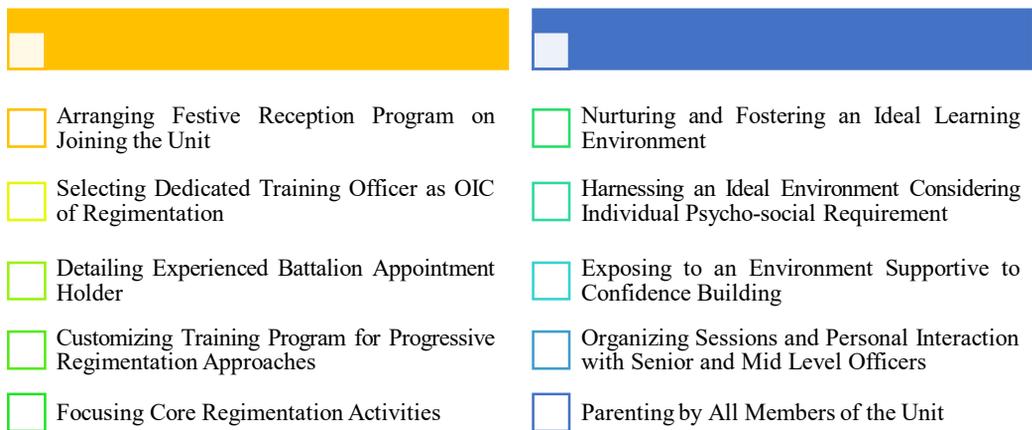
Source: Adopted from Literature Review<sup>56</sup>

**Exposure to an Environment Supportive to Confidence Building in an Operational Role:** Self-confidence enables an officer to become courageous, obedient, respectful and decisive in accomplishing any mission.<sup>57</sup> Therefore, self-confidence among the newly commissioned officers should be raised.<sup>58</sup> COs and 2ICs/company commanders may interact regularly to ensure exposure and enhance confidence. Moreover, to grow his confidence as a leader, the environment should be supportive and teach him about his operational role. Thus, appropriate measures during the regimentation period will reduce the officers’ shyness and ensure cohesive IPR with UCs.

**Organizing Sessions and Personal Interaction with Senior and Mid-Level Officers:** A good officer must know their job to be confident and impart knowledge to UCs.<sup>59</sup> The regimentation programme should increase the duration and depth of training for critical roles utilizing experienced officers, participating in hands-on workshops, receiving detailed briefings from the COs/2ICs, and ensuring that officers comprehensively understand their administrative responsibilities. Focus group feedback indicated direct interactions with senior officers boosted confidence and role clarity. Participants recommended longer and more detailed training for critical roles to improve understanding and execution of administrative responsibilities.

**Parenting by All Members of the Unit:** All members of the units should guide the regimentation. Each officer should encourage and guide other serving officers regarding training, course, and career development. Senior officers can take classes and conduct mentorship programmes for newly commissioned officers to instill various qualities as they remain in the moulding stage.<sup>60</sup> Moreover, to help new officers cope with soldiers, NCOs, and JCOs, the regimentation programme should incorporate the development of leadership and professional qualities among the officers undergoing regimentation.

**Figure-4: Ways Forward for Effective Regimentation**



Source: Author’s self-construct

## **Conclusion**

Regimentation is the fundamental process of integrating new members into the military, incorporating unit norms, values, traditions and sentiments. Service in the unit is a form of learning through doing. During this period, officers can gather leadership skills through observation of the leadership style of senior officers and enrich their knowledge of military and unit affairs by performing various staff assignments, physical training, and directly interacting with the soldiers. Moreover, due to the deployment during the Quota Reform Movement, it has become evident that better-regimented officers perform better in crises.

The regimentation programme is crucial in shaping newly commissioned officers, instilling a strong sense of regimental pride and commitment. Their grooming, training and education must be carefully planned and executed to maximize their best benefits.<sup>61</sup> Newly commissioned officers acquire key leadership skills and a comprehensive understanding of military operations through ceremonial receptions, briefings, hands-on training, and exposure to diverse roles. Additionally, fostering interactions with troops and studying professional materials further enhances their knowledge and camaraderie.

The unit regimentation process encounters difficulties at the unit and individual levels, including the lack of dedicated officers, inexperienced appointment holders and inconsistencies in regimentation methods. Newly commissioned officers are often tasked with duties unrelated to the regimentation programmes. On an individual level, newly commissioned officers might lack interest, confidence, and an understanding of unit administration and traditions. The overall improvement is possible if units assign dedicated officers for regimentation, retain experienced appointment holders and customize regimentation practices accordingly.

## **Recommendations**

Based on facts found in the study, it is imperative to customize the existing regimentation system of BA. Therefore, the following recommendations are proposed:-

- a. After a detailed Army Project Study, a unified regimentation system at the Formation level guided by the BA Military Training (MT) Directorate may be introduced to optimize professionally rewarding regimentation for newly commissioned officers and implemented in the coming year.
- b. A central monitoring/supervisory committee should be formed and maintained throughout the year at Formation/ Brigade Headquarters to supervise the standard of regimentation training as guided by the MT Directorate and Formation Headquarters.

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### Brief Biography



**Brigadier General Humayun Quyum, ndc, afwc, psc** was commissioned in the corps of Infantry in June 1993. He attended a good number of courses both at home and abroad. He is a Graduate from the Defence Services Command and Staff College, and National Defence College Mirpur and attained Masters of Defence Studies Degree from the National University, Dhaka. Besides serving in three infantry regiments he also served as 'General Staff Officer-3 (Operations), General Staff Officer-2 (Intelligence) and Brigade Major' in Infantry Brigade Headquarters and General Staff Officer-1 (Operations) in an Infantry Division Headquarters. He served as Instructor Class B in Tactics Wing, as Instructor Class A in UCSC Wing and as Chief Instructor in Weapon Wing of School of Infantry and Tactics. He has commanded the Ideal Twenty-One and 403 Battle Group. He served as Deputy President at Inter Services Selection Board. He also served as Deputy Commandant, School of Infantry and Tactics. Under blue helmet, he has served as Platoon Commander in UNAMSIL, Sierra Leone, Operation Officer of a contingent and Chief of Staff at Ituri Brigade Headquarters in DRC. To his credit he has a number of articles published in the *Armed Forces Division Journal*, *International Day of UN Peacekeepers Journal*, *Bangladesh Army Journal*, *Bayonet Journal*, *Padakkhep* and other journals. He is pursuing PhD research program as a registered fellow from academic session 2022-23 at the Centre for Higher Studies and Research, Bangladesh University of Professionals. Presently he is serving as Commander, 72 Infantry Brigade, Rangpur Cantonment.

## Perception of Militarization in the CHT: The Reality

Brigadier General Gulam Mahiuddin Ahmed, SGP, ndc, afwc, psc, PhD

### **Abstract**

*There is a notion that, at one point in time, one-third of the Bangladesh army was stationed in CHT. It arose from allegations of large-scale military operations against the tribal population. Therefore, the claim of militarization in the CHT has been scrutinized against the actual facts regarding the troops deployed there. As observed, the claims made by Shanti Bahini and JSS have been repeated by various people and organizations in a similar way over time. However, the accusations of large-scale militarization in the CHT were not based on facts and were likely driven by certain motives, starting in the 1980s and continuing since then. The lack of an official statement about the number of security forces (SF) deployed for the CIO, along with the repeated publication of similar claims by different groups, has led to one-sided information. As a result, these claims are hard to refute convincingly. The idea that “one-third of the army” was in the CHT was based on tribal sources and has been proven false. In reality, considering the size of the army, it is clear that only about one-ninth of the army could have been deployed in the CHT for the CIO before the CHT Agreement.*

**Keywords:** *Misinformation, Disinformation, Insurgency, Chittagong Hill Tracts, Militarization.*

### **Introduction**

The Bangladesh Army has many glorious achievements. One of the most noteworthy is the successful counterinsurgency operations (CIO) in the Chittagong Hill Tracts (CHT). The insurgency in the CHT and the subsequent involvement of the Bangladesh Army are well-known. However, there is a significant presence of “information differences” or “information gaps” regarding the events leading to the army’s involvement. This is primarily because the CHT remained largely off-limits for a long time and the effort to distinguish fact from fiction among the numerous publications and available information on the region was limited. As a result, the CHT issue has remained opaque due to the convergence of various perceptions, whether fact-based or otherwise.

There is a widespread notion that, at one point in time, one-third of the Bangladesh Army was stationed in the CHT. This impression began to develop throughout the 1980s, primarily due to claims of large-scale military operations against tribal people. According to one such allegation made in 1981, 120,800 security forces (SF) were engaged in military activities, including 80,000 army soldiers. A unique feature of these allegations is the significant disagreement from the very beginning regarding the extent of activities and the exact number of SF deployed in the CHT.<sup>1</sup>

One striking aspect in this context is that the acceptability of the obtained information has varied from person to person. It appears that the criterion for accepting such information largely

depended on the nature and source of the information. As a result, on one hand, accurate information has often been disregarded, seemingly due to the perceived untrustworthiness of sources, lack of transparency in SF activities, parochial interests, and propaganda by tribal organizations. On the other hand, unsubstantiated information has been accepted solely due to apparent trust in the specific source.

The first such allegation was made public internationally by Shanti Bahini (SB) in February 1978.<sup>2</sup> In January 1980, the Jana Sanghati Samiti (JSS) made a similar claim to the governments of various countries and international organizations.<sup>3</sup> Consequently, since the 1980s, allegations of large-scale military operations in response to the tribal demand for autonomy in the CHT have been echoed on various international platforms.<sup>4</sup>

However, the opposing claim is also strongly voiced—that the reality is completely different and that there is no basis for such allegations.<sup>5</sup> The then Law Minister, Dr. Kamal Hossain, confirmed that military operations were conducted against Mizo rebels hiding in the CHT. Moreover, *History of Bangladesh Army*, published by the Army Headquarters, provides a brief account of military operations conducted across the country since independence.<sup>6</sup> It indicates that military operations in the CHT before 1976 targeted the Mizo, Razakar, Rohingya and Sarbahara Party. Subsequently, in response to the outbreak of insurgency in 1976, the government deployed security forces, including the Bangladesh Army, in the CHT.<sup>7</sup> As a result, after operations against extremist forces, the army withdrew from Rajshahi, Khulna, Jashore, Tangail and other regions. However, in the case of the CHT, the army was redeployed and its numbers fluctuated based on security needs—initially increasing and later decreasing after the signing of the CHT Agreement.

Given the prevailing perceptions regarding the involvement of the Bangladesh Army in the CHT, which have circulated in various forms over the past few decades, it is essential to critically review the available publications and provide new insights on this issue. This will help organize the information and assist in developing a clearer understanding of the context. Therefore, this paper aims to portray the actual image of the deployment of SF in the CHT since Bangladesh's independence. In doing so, the accusation of militarization in the CHT will be weighed against the information available on the number of SFs deployed in the CHT. A qualitative approach has been adopted for this explanatory review, with data obtained primarily from secondary sources. Additionally, primary sources were used to supplement secondary data, strengthen arguments and refine the study's conclusions.

### **Claims Related to the Number of Security Forces**

There are several reasons for the conflicting understanding regarding the scale of SF deployed in the CHT. Various organizations and individuals have published different accounts of the total number of SF deployed in the CHT over time. Among them, the report published in *The Guardian*, London, on December 20, 1977, is considered one of the earliest published accounts of SF operations in the CHT. In the report, Simon Winchester stated, “So far as one can gather, 12,000 Bangladeshi soldiers, territorials and police now operate in the area [the CHT].”<sup>8</sup>

However, according to a military source, the highest number of Bangladesh Army troops deployed for counterinsurgency operations (CIO) in 1978 was approximately 4,000.<sup>9</sup> The following year, Brian Eads reported in *The Observer*, London, that several thousand officers and troops from one army division, four infantry battalions, the Armed Police Reserve, and the paramilitary Bangladesh Rifles had been assigned to operate in a region similar to Northern Ireland.<sup>10</sup>

In January 1980, the JSS claimed that a total of 57,000 security force (SF) personnel, including members of the Bangladesh Rifles, Police and Ansar were deployed in the CHT.<sup>11</sup> However, this figure could not be corroborated by other sources and was instead refuted.<sup>12</sup> Subsequently, in October 1980, Ulrich Henes alleged large-scale SF deployment in a report published by the International Fellowship of Reconciliation (IFOR) and concluded, “With one armed representative of the Bangladesh government for every eight Hill Tribe people, the Hill Tracts now resemble a vast military camp.”<sup>13</sup> Additionally, in November 1980, Amnesty International claimed, “According to various reports, between 20,000 and 100,000 armed forces have been deployed in the area.”<sup>14</sup> Such a wide range of estimates indicates inconsistencies likely caused by a mixture of fact and fiction, as well as a lack of reliable sources of information.

Wolfgang Mey asserted widespread SF deployment in the CHT at a meeting held in London in 1981, citing Shanti Bahini (1978), Ulrich Henes (1980) and Amnesty International (1980).<sup>15</sup> According to Brian Eads’ report in the same year’s issue of the London-based newspaper *The Observer*, the CHT had 57,000 soldiers and police, or one for every ten tribal members. He most likely used the amount of SF mentioned by JSS the previous year because no source is mentioned and the numbers match.<sup>16</sup>

In 1981, Chakma Rajguru Aggavansa Mahathero claimed that a total of 120,800 armed personnel were stationed in the CHT, including 80,000 army soldiers.<sup>17</sup> Citing a report by the Anti-Slavery Society published in 1983, Patrick Keatley stated in a report published in *The Guardian*, London: “An estimated 100,000 troops, one-third of the country’s armed forces, are operating in the hill tracts.”<sup>18</sup> It is worth mentioning that this was the first instance where the perception of the deployment of “one-third of the armed forces” was introduced. Given that the total strength of the Bangladesh Armed Forces in 1983 was 81,300, Patrick Keatley’s claim was evidently erroneous.<sup>19</sup> Even if the 80,000 paramilitary forces were taken into account, it would not diminish the magnitude of the error. Surprisingly, in a detailed report on the CHT published in 1984, the Anti-slavery Society stated,

Since 1976, there has been a massive increase in military personnel in the district. Some 30,000 regular as well as paramilitary troops had been massed by 1980 and a naval unit had been established on the artificially-created Kaptai lake. Something in the region of one-third of all regular troops are estimated to be operating in the hill tracts. The number of police stations has more than doubled since 1976 from 12 to 28.<sup>20</sup>

The same year, *The Guardian* reported that there were 30,000 government troops in the CHT.<sup>21</sup> On the other hand, citing Survival International, Simon Winchester claimed that the

government had about 120,000 armed men in the CHT, including police and paramilitary forces.<sup>22</sup> In addition, a report published in the *Times of India* in 1988 stated that the Bangladesh government had deployed 50,000 army personnel to conduct operations against the tribal people.<sup>23</sup>

It is observed that among the allegations of a massive military presence in the CHT, the figure claimed by Chakma Rajguru Aggavansa Mahathero (1981) has been widely circulated in later times. The figure he mentioned set a new trend in the alleged number of SF deployed in the CHT and has been reflected in various reports and publications by different individuals and organizations (Table-1).

**Table-1: Alleged Deployment of SF in the CHT (1981-1994)**

Forces	Sources/References				
	Aggavansa Mahathero (1981)	Bangladesh Groep Nederland and Wolfgang Mey (1984)	CHT Commission (1991)	Debbarma & George (1993)	Peace Campaign Group (1994)
<b>Army</b>	80,000	80,000	80,000	80,000	80,000
<b>BDR</b>	25,000	25,000	25,000	25,000	25,000
<b>Armed Police</b>	10,000	10,000	-	10,000	-
<b>Ansar</b>	5,000	5,000	8,000	5,000	8,000
<b>Navy</b>	-	-	1,500	-	1,500
<b>Training Centre</b>	800	800	-	1800	-
<b>Total</b>	120,800	120,800	114,500	121,800	114,500

Source: Aggavansa Mahathero, 1981, p.10; Wolfgang Mey (ed.), 1984, p.147; CHT Commission, 1991, p.35; Debbarma & George, 1993, p.44; Peace Campaign Group, 1994, p.6.

Referring to “sources from among the hill people,” the CHT Commission presented a summary of 114,500 SF deployed in the CHT in 1991. However, the Commission also considered the facts available in *Military Balance* (1989/90), *Military Technology* (1989) and *Military Powers* (1990), and concluded that the number of SF claimed by tribal sources seemed to be exaggerated. On the other hand, “one military officer” in Bandarban told the Commission, “In total there are a little over 4000 army, BDR and police personnel [in Bandarban].”<sup>24</sup> Regarding information on the SF deployed in the CHT, the Commission ultimately concluded that there could be “one member of the security forces for every ten-hill people.” However, in an update published the following year, the Commission revised its stance and observed:

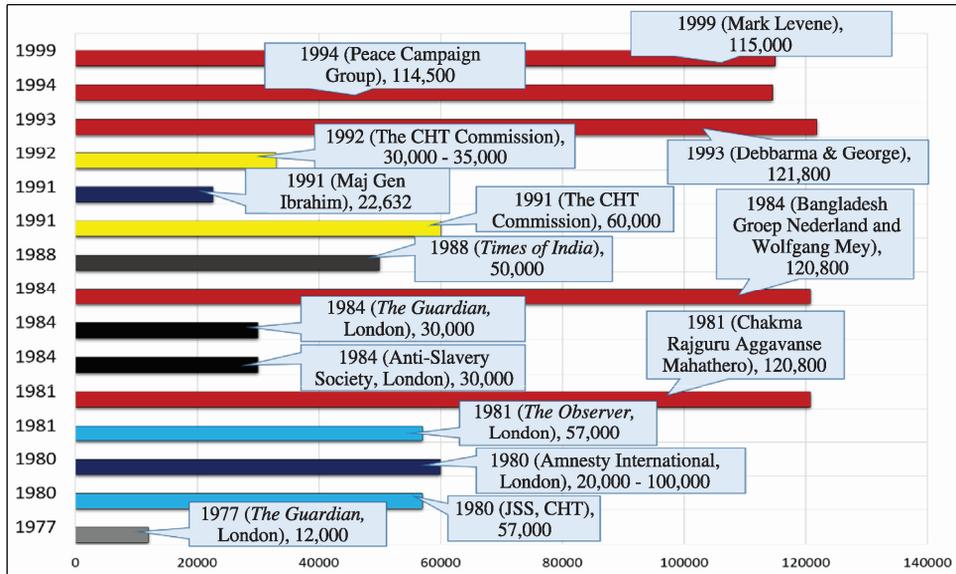
The Commission's estimate of 60,000 (military, para-military and police) in the Hill Tracts (one member of the SF for every 10 hill people) was based on earlier publications and on the number of army, BDR (Bangladesh Rifles) and police camps that members of the Commission had counted on classified maps shown to them during their visit to the Chittagong Cantonment (approximately 230 army camps, 100 BDR camps and 60 police camps). The estimate excluded Ansars and VDP (Village Defence Parties) - both civilian paramilitary forces. Recent information from various reliable sources indicates that 30-35,000 members of the SF might be a more accurate figure. Even that still means that there is one member of the SF to every 20 hill persons, or the equivalent of one SF member to approximately every 4 to 5 hill families.<sup>25</sup>

Nevertheless, a report by the Peace Campaign Group (PCG) published in 1994 stated the same number of SF—114,500 personnel—deployed in the CHT, citing the CHT Commission's 1991 report. However, since the CHT Commission published an update in 1992 modifying the number of SF to 30,000–35,000, and the PCG report was published in 1994, the PCG had the option to use the Commission's 1992 update which would have been reasonable. Thus, it appears that the PCG (1994) relied on outdated data to highlight the excessive number of security forces stationed in the CHT.

It is important to note that, referring to both the CHT Commission and Wolfgang Mey, Mark Levene concluded that there were “an estimated 115,000 army personnel, or almost one soldier for every five or six tribals” in the CHT.<sup>26</sup> Notably, Mark Levene, like the PCG, had the opportunity to utilize the information from the CHT Commission's updated report published in 1992. However, he used the information from the 1991 report instead. Similarly, Bhumitra Chakma has attempted to support the claim of large-scale military deployment in the CHT by referencing Mark Levene.<sup>27</sup> It is evident that, in supporting their claims of large-scale military deployment, they omitted the CHT Commission's updated information. Instead, despite referencing the Commission, they cited a figure that the Commission itself had deemed exaggerated in 1991 and subsequently revised in 1992.

Since 1977, various information about the number of SF deployed in the CHT has been published (Figure-2). However, the figures vary in many cases and in almost all instances, no authentic reference or source was cited. Instead, it is evident that the allegations made by Shanti Bahini, JSS and Chakma Rajguru have been echoed in the statements of Ulrich Henes, Amnesty International, Wolfgang Mey, Patrick Keatley, the CHT Commission, Peace Campaign Group, Mark Levene and others, almost in the same vein. Interestingly, the rhetoric of militarization in the CHT did not stop and instead continues in current days as well. In a report on the CHT published in 2012, the International Work Group for Indigenous Affairs (IWGIA) commented that “one-third of the entire Bangladesh army is deployed in the CHT.” The report also mentioned the deployment of around 35,000 to 40,000 army personnel in the region.<sup>28</sup>

**Figure-1: Alleged Deployment of SF in the CHT (1977-1992)**



Source: Author's self-construct

There is no denying that there is a clear inconsistency regarding the number of SF deployed in the CHT. The disagreement over the number of SF could be attributed not only to the lack of reliable sources of information but also to the specific viewpoints of different individuals or organizations. Therefore, it may not be incorrect to assume that the portrayal of SF deployment reflects the perspectives of those individuals and organizations on the issue of the CHT.

Interestingly, the numbers cited are often attributed to each other (secondary sources), making it difficult to ascertain the primary source. Moreover, the repeated dissemination of almost identical claims over time by different individuals and organizations has led to the circulation of one-sided information about the number of SF deployed in the CHT. At the same time, information has simply been passed from one source to another without validation or fact-checking. People have continued sharing it, regardless of whether it aligns with reality or rationality. Furthermore, the absence of a formal statement on the matter makes it impossible to convincingly dispute these biased claims.

### The Real Picture of Deployment of SF in the CHT

The 'Information – Differences' or 'Information - Gap' or 'Confusion' whatever label is tagged, the grey area regarding the number of SF deployed in the CHT has been created due to lack of published record by any official source. Therefore, for a systematic evaluation of the available facts and a comparison of the figures presented, there is no alternative but to analyse the relevant information published by different sources at various times as well as the nature of SF involvement in the CHT.

## Military Operations Conducted in the CHT

There had been as many eight military operations including the CIO conducted in the CHT area since the independence of Bangladesh (Table-2).

**Table-2: Military Operations Conducted in CHT**

No	Name	Duration	Remarks
1.	Operation BAGER THABA	May 1, 1972 to December 31, 1972	Against Mizo rebels, Razakars and Rohingya terrorists; the modified area of responsibility was adjacent to the Burma border in Bandarban and Cox's Bazar.
2.	Operation IRON FIST	January 22, 1974 to August 5, 1975	For establishing garrisons at Dighinala, Ruma and Alikadam.
3.	Operation DRAGON DRIVE	December 29, 1974 to August 11, 1975	Against Sarbahara Party, in the affected areas of the CHT, Chittagong and Noakhali districts.
4.	Operation DIG OUT	August 6, 1976 to June 30, 1977	Counter Insurgency Operations against the Shanti Bahini.
5.	Operation TRIDENT	July 15, 1977 to March 31, 1979	
6.	Operation POUNCING TIGER	April 1, 1979 to December 31, 1987	
7.	Operation DABANOL	January 1, 1988 to Jul 31, 2001	Counter Insurgency Operations against the Shanti Bahini and duties in aid to civil administration
8.	Operation UTTARAN	August 1, 2001 -	Ongoing (In aid to civil administration)

Source: *History of Bangladesh Army*, Vol. V (Operational Activities), Education Directorate, Army Headquarters, Dhaka, 2015, pp.249-251.

The military operations conducted in the CHT before the outbreak of insurgency were confined to a limited geographical area and targeted specific objectives, mostly in the southern part of the CHT. Even among the first three military operations, the first was conducted against the Mizo rebels, specifically in the border areas with Burma (now Myanmar).<sup>29</sup> The second military operation aimed at establishing three cantonments only.<sup>30</sup> S. Mahmud Ali referred to them as 'three battalion-size cantonments,' each with about half of the authorized troop strength.<sup>31</sup> Thus, it may be assumed that by 1975, there could have been a presence of a maximum of 1,000-1,200 army personnel in the CHT.<sup>32</sup>

The third operation targeted the members of the Purba Bangla Sarbahara Party and was conducted only in the affected areas of the CHT. During the operation, special attention was paid to the customs, traditions and social practices of the tribal people.<sup>33</sup> It is worth noting that the Bangladesh Army became aware of the presence of tribal armed insurgents for the first time during this operation.<sup>34</sup>

Until 1975, the total number of army personnel in Bangladesh was 30,000.<sup>35</sup> Before the establishment of the 24 Light Infantry Division in July 1976, the Bangladesh Army had only one infantry brigade in Chittagong. As a result, all military assignments in the greater Chittagong area, including the CHT, Noakhali, Cox's Bazar and other regions were carried out by a single infantry brigade—the 65 Infantry Brigade—stationed at Chittagong Cantonment. This brigade likely had around 2,000–2,500 troops for conducting military operations.<sup>36</sup> So, it is not difficult to estimate how many troops could be mustered to conduct operations in the CHT during the post-independence period due to the various constraints of the army and the fact that the only infantry brigade, stationed in the Chittagong Cantonment with a vast area of responsibility. The lack of a road network in the CHT and the presence of hills and jungles in the entire area also merit attention. Therefore, considering the total number of troops available in the entire Army, inadequate resources of a post-war army and specific operational area, and limited operational objectives, it is evident that large-scale military deployment in the CHT during the pre-insurgency era was not feasible. However, with the outbreak of open-armed hostilities by the Shanti Bahini (SB), the government had to deploy security forces (SF) in the CHT and the Bangladesh Army became involved in counterinsurgency operations (CIO) against the SB from August 1976. Since there were not enough troops in Chittagong for CIO, battalions were temporarily deployed to the CHT from other parts of the country starting in 1977.<sup>37</sup>

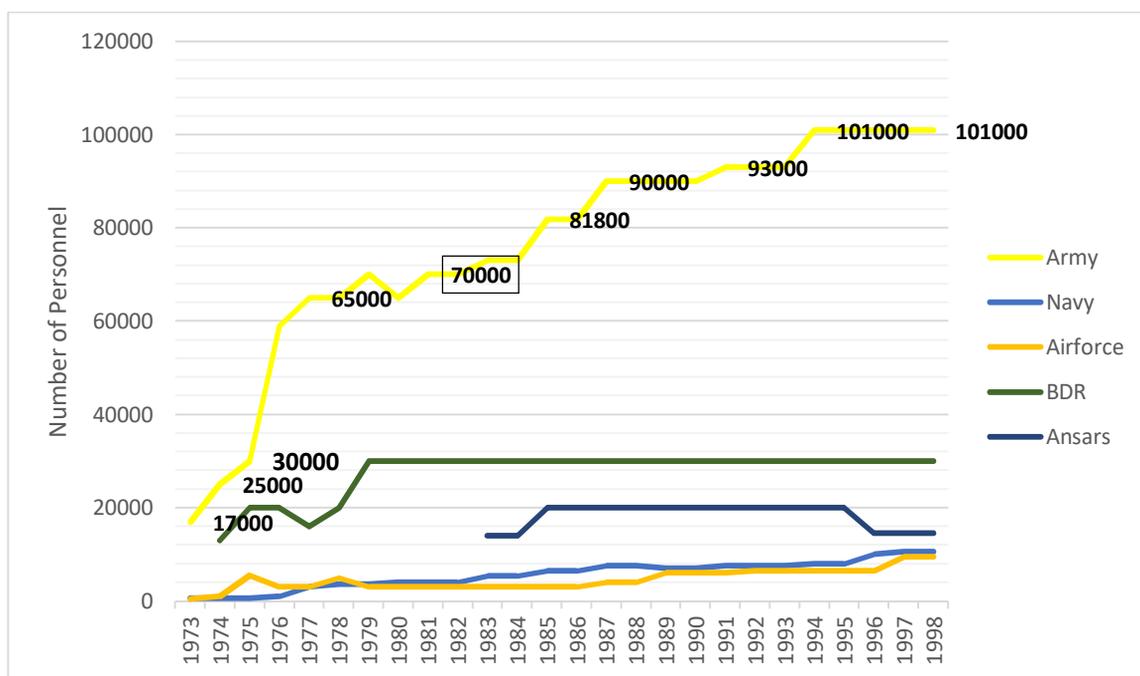
### **The Facts versus the Alleged Figures**

As already discussed, there was no scope for militarization or large-scale military operations in CHT before 1976. With the outbreak of insurgency, the 24 Light Infantry Division, based at Chittagong Cantonment, was assigned the responsibility of conducting counterinsurgency operations (CIO) in the CHT. The division was raised with 69 and 203 Infantry Brigades in 1976, followed by the raising of the 65 Infantry Brigade in 1977 and the 305 Infantry Brigade in 1980.<sup>38</sup> By 1980–1981, a total of nine infantry battalions had been deployed in the CHT.<sup>39</sup> Considering the average strength of an infantry battalion, it can be assumed that, at its peak, the Bangladesh Army had a maximum of 5,000 troops engaged in CIO operations between 1978 and 1981.

Alongside the data from *Military Balance* (Fig. 3), a CIA document reports that the Bangladesh Army had a total of 70,000 troops in 1982.<sup>40</sup> Thus, it is evident that Chakma Rajguru Aggavansa Mahathero's claim that 80,000 Bangladesh Army personnel were on duty in 1981 was inaccurate and may have been made with a different intention.

According to *Military Balance* (1983), the total number of personnel in the armed forces of Bangladesh in 1983 was 81,300, including 73,000 in the army, 5,300 in the navy, and 3,000 in the air force.<sup>41</sup> Therefore, Patrick Keatley’s claim, published in *The Guardian*, London, that an “estimated 100,000 troops, one-third of the country’s armed forces,” were operating in the CHT appears to be uncorroborated. It is worth mentioning that Keatley cited a report by the Anti-Slavery Society published on August 8, 1983, as the source of his claim. However, the detailed report of the Anti-Slavery Society, published in 1984, estimated that there were 30,000 troops, including regular paramilitary forces. Similarly, the claim—published in the 1990s by various individuals and organizations—of over 100,000 security force personnel, including 80,000 members of the army, deployed in the CHT, has proven to be unsubstantiated.

**Figure-2: Number of Security Forces in Bangladesh (1973-1997)**



Source: Military Balance, 1973-1998.

Attention may also be drawn to another aspect of the allegation. In a report published by IFOR in 1980, Ulrich Henes concluded that there was one armed representative for every eight tribal people. In contrast, the CHT Commission estimated in 1991 that there was “one member of the security forces for every ten-hill people”.<sup>42</sup> However, in the following year, the Commission revised its estimate, concluding that the ratio was actually “one member of the SF to every 20 hill persons.”<sup>43</sup> Based on this 1992 update, Henes’s earlier estimate of an 8:1 ratio appears to have been misinformed, especially given that the number of SF increased between 1980 and 1991. Furthermore, in 1999 Mark Levene, citing Mey and the CHT Commission, concluded that there

was “almost one soldier for every five or six tribals.”<sup>44</sup> Mentionable that the opinion of Mey and the CHT Commission was based on the allegation of the tribal sources. In this context, it appears that these tribal sources, including Chakma Rajguru, were either misinformed or had an ulterior motive. Consequently, individuals and organizations that relied on these claims have likely been misled about the actual number of SF deployed in the CHT from the very beginning.

### What Could be the Actual Figure?

In December 1990, a military officer in Bandarban informed the CHT Commission that there were a little over 4,000 Army, BDR and police personnel in the Bandarban area. The officer further added that the Bandarban Brigade was smaller than other brigades previously visited by the Commission.<sup>45</sup> On the other hand, Major General Ibrahim (retd) specifically stated that there were 3,594 members of the security forces in the Bandarban area as of June 1991 (Table-3).”

**Table-3: Deployment of SF in the CHT in 1991**

Deployment Area	Deployed Security Forces				Total
	Army	BDR	Armed Police	Police	
Dighinala	1104	124	78	158	1464
Kaptai	1655	532	416	235	2838
Khagrachhari	3318	2722	780	1230	8050
Bandarban	1330	1470	00	794	3594
Rangamati	3168	1919	511	1088	6686
<b>Total</b>	<b>10575</b>	<b>6767</b>	<b>1785</b>	<b>3505</b>	<b>22632</b>

Source: Major General Ibrahim (retd), 2011, p. 173.

As shown in the Table-3 above, the number of troops deployed in the Bandarban area was relatively smaller than those in the brigades stationed in Kaptai, Khagrachari and Rangamati. Therefore, it is reasonable to assume that the military officer in Bandarban provided an accurate figure to the CHT Commission. Considering there were five brigades in total and the Commission estimated just over 4,000 SF personnel in the Bandarban brigade, it can be estimated that around 20,000 SF members were deployed throughout the entire CHT in 1991. Similarly, the number of SF personnel in the CHT mentioned by Major General Ibrahim (retd) in his book seems to match the estimate given by the military officer to the CHT Commission during their visit.<sup>46</sup>

While observing, “... Bangladesh has deployed one-third of its total army in the CHT,” Amena Mohsin referred to military sources. Referring to the same sources, she stated that there were 19 infantry battalions, 11 BDR battalions, 3 artillery battalions, 1 engineer battalion, 18 Ansar

battalions, and 4 armed police battalions deployed in the CHT.<sup>47</sup> According to official records, by 1990, a total of 19 infantry battalions, 3 artillery battalions, 1 engineer battalion, 12 BDR battalions, 4 armed police battalions, and 18 Ansar battalions had been deployed in the CHT.<sup>48</sup>

A summary of incidents that took place in the CHT indicates that the highest number of atrocities and killings occurred between 1984 and 1988, more than in any other period (Table-4).

**Table-4: Incident of Atrocities by SB (till the signing of the CHT Agreement)**

Year	Killed		Injured		Kidnapped	
	Bengalee	Tribal	Bengalee	Tribal	Bengalee	Tribal
1980	87	8	75	5	57	7
1981	42	2	28	2	3	12
1982	16	7	20	-	51	18
1983	8	-	8	3	15	1
1984	108	7	45	8	18	27
1985	11	14	19	8	25	19
1986	248	33	118	16	33	4
1987	117	19	67	9	17	8
1988	128	16	65	14	131	27
1989	72	47	138	57	22	28
1990	47	20	38	12	18	22
1991	75	15	37	18	21	36
1992	62	43	28	24	15	19
1993	0	0	0	0	5	28
1994	0	0	0	0	9	3
1995	1	1	0	5	0	2
1996	2	3	2	0	16	3
1997	3	3	0	0	5	10
1998	1	5	0	1	7	12
Total	1028	226	688	175	468	286

Source: State up to 1990 taken from Pradipta Khisa, 1996, p.129; state of 1990-1998 taken from *Bangladesh Army History*, Vol 5, Education Directorate, AHQ, 2015, p. 232.

As an inevitable consequence of the atrocities committed by the SBs during April–May of 1988, there was a noticeable increase in the number of SF between July and September of the same year. On the other hand, the number of incidents decreased after 1992, as formal dialogues, which had started in 1985, gained momentum due to the formation of a Parliamentary Committee based on the demands of the Parbatya Chattagram Jana-Samhati Samiti (PCJSS) as well as their strong interest in dialogue with the government and the implementation of ceasefires of varying durations. Because of this, it is likely that the CHT did not require the deployment of additional troops after 1991. This may explain the small discrepancy between Amena Mohsin’s report on deployment in 1997 and the official record of SF deployment in 1990. In other words, the deployment of SF may have remained largely consistent from 1991 until the signing of the CHT Agreement in 1997.

The tribal sources’ information has already shown itself to be inaccurate. On the contrary, the figure indicated by Major General Ibrahim (ret’d), military sources to the CHT Commission and Amena Mohsin proved to be pretty near to the actual figure. Therefore, it can be stated with confidence that in 1991, there were 22,632 troops deployed in the CHT, including 10,575 soldiers. This number remained largely unchanged until 1997.

In other words, there could be a maximum of one member of the SF, deployed for every 22 tribal people in the CHT at a given point in time. Regardless of the Bengali and tribal population in the CHT, it stands at one member of the SF for 43 people.<sup>49</sup> Therefore, there was never one member of the SF against any figure between 5 to 6 and 10 tribal people. Moreover, considering the total strength of the Bangladesh Army in 1991, the highest deployment was only around one-ninth of the army in the CHT at any given point in time.

## **Conclusion**

The assertions made about the total amount of SF deployed in the CHT by Shanti Bahini, JSS and Chakma Rajguru have been repeated in similar ways by various people and organizations over the last few decades. Moreover, neither the allegations nor the tone of support heard from different corners have been based on any authentic source of information. The claims of widespread militarization in the CHT, however, were ill-informed and motivated, driven by a trend that began with certain tribal leaders in the 1980s and has persisted ever since.

The perception of the deployment of “one-third of the army” in the CHT appeared to be based on claims from tribal sources and was proven to be unsubstantiated. Referring to a report by the Anti-Slavery Society published in 1983, Patrick Keatley first introduced the perception of the “deployment of one-third of the armed forces” in a report published in *The Guardian*, London, in 1983. Interestingly, his statement, as well as his observation, was neither supported by the total number of armed forces, including paramilitary forces, in Bangladesh in 1983, nor by the detailed report of the Anti-Slavery Society on CHT issues published in 1984. Moreover, it is evident that

only a maximum of one-ninth of the army could have been deployed in the CHT for the CIO before the CHT Agreement.

Humans naturally sympathize with those they perceive to be oppressed or victims of injustice. In the pursuit of their specific political interests, some people in the CHT seem to have strategically exploited this inherent aspect of human nature. From this perspective, it must be acknowledged that the success of the tribal leaders of the CHT is evident in the extent to which they have spread baseless allegations of militarization in the international arena. Knowingly or unknowingly, part of the society has succumbed to the efforts of tribal leaders and their sympathizers.

### **Recommendations**

A formal announcement could help resolve the discrepancy between fact and fiction regarding the total number of troops deployed for the CIO in the CHT. It would also assist in identifying erroneous and unsubstantiated figures released in this regard. Above all, it is likely to help replace the perception that has existed since the 1980s regarding the “deployment of one-third of the army in the CHT.” Therefore, the competent authorities may consider making the number of troops engaged in the CIO public.

The number of personnel who sacrificed their lives for the cause of peace in the CHT may also be disclosed. This would not only allow us to honour and appreciate their efforts and sacrifices, but it would also shed light on the supreme sacrifices made, the hardships endured and the high levels of commitment displayed by the army for the country.

### **Notes and References**

1. In early February of 1978, a petition signed by Shanti Bahini was distributed to various embassies in Dhaka, where, among other things, there were complaints, “The demand of regional autonomy was taken as a secessionist movement and a massive military operation was carried out in the district; the army and Rakkhi Bahini (Defence Force) people went from one village to another search out illegal arms and resorted to killing, torture, rape, looting, arson, arrests and other repressive measures. To escape torture and persecution hundreds of tribal people had to flee to the forests. These people have eventually formed a resistance party called Shanti Bahini (Peace Force) to resist repression and fight for the right to self-determination.” for details see, ‘Bangladesh: Revolt in Chittagong Hill Tracts,’ *Economic and Political Weekly*, Vol. 13, No. 17 Apr 29, 1978, p. 723.
2. An appeal to the governments of all peace-loving countries, all conscious people, all humanitarian organizations including Amnesty International and the democratic forces of the world to compel government of Bangladesh to stop genocide in Chittagong Hill Tracts, dated: January 16, 1980, Jana Sanghati Samiti. (Henceforth, JSS Memorandum, 1980).

3. Reports from the International Fellowship of Reconciliation (October 1980) and Amnesty International (November 1980) echoed the tone of the JSS as well as the Shanti Bahini. For details of both the reports, see, Ulrich Henes, *The Secret War in Bangladesh, IFOR Report*, International Fellowship of Reconciliation, October 1980, LD Alkmaar, The Netherlands; *Bangladesh: Recent Developments in the Chittagong Hill Tracts and AI Concerns*, Amnesty International, 4 November 1980, London.

The allegation got further audience once Wolfgang E. Mey raised the issue of militarization in the CHT in almost at the same tone at international conferences held in London (1981) and Canada (1983). See, Wolfgang E. Mey, 'Genocide in Bangla Desh: The Chittagong Hill Tracts Case,' paper presented for the 7<sup>th</sup> European Conference on Modern South Asian Studies, 7-11 July, 1981, London; Wolfgang E. Mey, 'The Chittagong Hill Tracts Case: A Bangladeshi Understanding of Human Rights,' paper presented to the Symposium: Anthropology of Human Rights, XI ICAES, 1983, Canada; Wolfgang E. Mey, 'Demand for Progress. About the Perversity of State and Nation-Building in Bangla Desh: The Chittagong Hill Tracts Case,' paper presented to the Symposium: "The Fourth World: Relations Between Minority Peoples and Nation-States", XI ICAES, 1983, Canada.

4. In this context, the observation of researcher Khairul Chowdhury is noteworthy. In his thesis, titled 'Articulation and Dynamics of 'Jumma Nationalism': the case of the Chittagong Hill Tracts, Bangladesh,' he explicitly stated, "I have consulted numbers of books that I have used in this study. I have not come across any mention that the demands of the hill people were met by military response."

Khairul Chowdhury also asserted, "Moreover, drawing on Mey (1984a) she [Amena Mohsin] also notes that a military operation by the Bangladesh army, air force and police was carried out immediately after the demands had been placed (Amena Mohsin 1997b:580). Amena Mohsin's claim is not supported by any other evidence." For details, see, Khairul Chowdhury, *Articulation and dynamics of 'Jumma Nationalism': The Case of the Chittagong Hill Tracts, Bangladesh-A* thesis submitted for MA at Dalhousie University, Nova Scotia, September 2002, p. 107.

5. Amena Mohsin, *The Politics of Nationalism: The Case of Chittagong Hill Tracts*, Bangladesh (Second Edition), The University Press Limited, Dhaka, 2002, p. 58; Amena Mohsin, *op. cit.*, p.172.
6. For details, see, *History of Bangladesh Vol. III: (Operational Activities)*, Education Directorate, Army Headquarters, Bangladesh Army, Dhaka, May 2015, pp. 249-254.
7. Simon Winchester, 'Where Britain may be aiding an armed dictatorship,' *The Guardian*, London, December 20, 1977, p.11.
8. 24 Light Infantry Division was assigned the responsibility of the CIO in the CHT. The division was raised on July 17, 1976. At the beginning, the division had two infantry brigades (the 69 Infantry Brigade and the 203 Infantry Brigade). Later, with the raising of the third infantry

brigade, i.e., 65 Infantry Brigade, 24 Light Infantry Division was converted into 24 Infantry Division. See *History of the Bangladesh Army*, Vol. II (Various Headquarters and Training Institutions), Education Directorate, Army Headquarters, Dhaka, 2015, pp. 302-364.

Major Khandakar Badrul Hasan (Retd.), who served in the Headquarters 24 Infantry Division from July 1977 to April 1981, revealed during an informal talk on October 5, 2021, that there were eight infantry battalions deployed in CHT in 1978. All the battalions, however, were understrength, with an average strength of 400 to 500 men. It should be noted that at the start of CIO in CHT, the officer oversaw counter-insurgency operations in the division headquarters.

9. Brian Eads, 'Terror in the hills threatens thousand,' *The Observer*, London, August 20, 1978, p.1.
10. JSS Memorandum, 1980, *op. cit.*
11. While discussing with a JSS leader who held important position in the party (name cannot be disclosed as permission was not taken) it is learnt that Mr R.S. Dewan submitted this memorandum. The JSS leader opines that Mr. Dewan explained his rationale in the statement which appears to be more or less acceptable in that context.

On the other hand, Major Khandakar Badrul Hasan (Retd.) who had access to this information has stated that there was no scope for huge deployment of troops in 1980. In support of his statement, he explained that according to his memory there were 9 infantry battalions deployed in 1980-81. They were at Dighinala, Khagrachari, Langadu, Rangamati, Kaptai, Bilaichhari, Bandarban, Ruma and Alikadam. Besides there were 6 BDR battalions, 2 Armed Police battalions, 3 Ansar battalions and 2000 district police deployed in thanas, police outposts and district reserves; making a total of 9000-10,000 security forces.

12. Ulrich Henes, *op. cit.* p.5.
13. Amnesty International, 1980, *op. cit.*
14. Wolfgang Mey, 1981, *op. cit.*
15. Brian Eads, 'Massacres feared in Bangladesh,' *The Observer*, London, March 15, 1981, p.10.
16. Chakma Rajguru Aggavansa Mahathero, *Stop Genocide in Chittagong Hill Tracts (Bangladesh)*, Calcutta: Ven. Aggavansa Mahathero, October 1981, p.10.
17. Patrick Keatley, '800 Bangladeshis killed in massacres by Bengali settlers,' *The Guardian*, London, August 9, 1983, p.6.
18. The number of personnel were 73000 in army, 5300 in navy and 3000 in air force. Besides, the para military forces included BDR 30,000 in BDR, 36,000 in Armed Police Reserve and 14,000 Ansar. See, *The Military Balance*, Vol. 83, 1983, Issue 1, pp. 88-89, <https://doi.org/10.1080/04597228308459940>.

19. Anti-Slavery Society, *The Chittagong Hill Tracts Militarization, oppression and the hill tribes, Indigenous Peoples and Development Series, Report No-2*, Anti-Slavery Society, London, 1984, p.57.
20. ‘Chittagong’s hill men struggle to put their case,’ *The Guardian*, London, March 6, 1984, p.7.
21. Simon Winchester, Buddhist Tribe slaughtered in jungle genocide, *Sunday Times*, October 14, 1984. A copy of the report was sent to the Chairman, Center for World Indigenous Studies by spokesman of JSS R.S. Dewan on October 19, 1984. Collected from <https://www.cwis.org/wp-content/uploads/documents/premium/280dp11387.pdf>.
22. Anil Bhattacharjee, 500 tribals killed in Bangla action, *Times of India*, Bombay, November 2, 1988, p.18.
23. ‘LIFE IS NOT OURS’ LAND AND HUMAN RIGHTS IN THE CHITTAGONG HILL TRACTS BANGLADESH, The Report of The Chittagong Hill Tracts Commission, May 1991, Organizing Committee Chittagong Hill Tracts Campaign, Amsterdam, The Netherlands, p. 34.
24. *op. cit.* p. 8.
25. Mark Levene, ‘The Chittagong Hill Tracts: A Case Study in the Political Economy of ‘Creeping’ Genocide,’ *Third World Quarterly*, Vol. 20. No. 2 (Apr., 1999), p.354.
26. Bhumitra Chakma, ‘The post-colonial state and minorities: ethnocide in the Chittagong Hill Tracts, Bangladesh,’ Saradindu Sekhar Chakma (ed.), *Genocide in Chittagong Hill Tracts*, Janoprio Prokashani, Dhaka, 2014, pp. 25-48.
27. Referring to ‘interview with a retired army officer, December 2, 2011’, The International Work Group for Indigenous Affairs (IWGIA) has stated “Although it is difficult to verify the exact number of troops currently deployed in the CHT, military official attest to the fact that one-third of the entire Bangladesh army is deployed in the CHT.” For details, see, IWGIA (ed.), ‘Militarization in the Chittagong Hill Tracts, Bangladesh: The Slow Demise of the Region’s Indigenous Peoples,’ *IWGIA Report 14*, IWGIA, Organising Committee CHT Campaign and Shimin Gaikou Centre, Copenhagen, 2012, p.12.
28. See *History of Bangladesh Army*, Vol. V (Operational Activities), Education Directorate, Army Headquarters, Dhaka, 2015, pp.249-251.
29. *Ibid.* pp. 253-254.
30. S Mahmud Ali, *The Fearful State: Power, People and Internal War in South Asia*, Zed Books, London, 1993, p.190.
31. In an informal discussion with the author on October 5, 2021, Major Khandakar Badrul Hasan (retd) revealed that from 1979 to 1981, the infantry battalions had an average size of 400–500

soldiers. In addition, the officer informed the writer that around half of the soldiers were assigned to the battalions stationed in the three cantonments of Ruma (Bandarban), Alikadam (Bandarban) and Dighinala (Khagrachhari). Therefore, it may be concluded that the infantry battalions were roughly equal in size in 1974–1975.

32. *History of Bangladesh Army* (Vol. V) *op. cit.*, pp. 255-256.
33. An informal discussion with Major Khandakar Badrul Hasan (retd). He further added that based on the information obtained during Operation Dragon Drive, Major General Showkot (the then GOC 24 Infantry Division) briefed Bangabandhu about the law-and-order situation in the CHT at the Circuit House, Chittagong sometimes in 1975. During the briefing the then Secretary of the Ministry of Home was present.
34. *The Military Balance, Asia and Australasia*, 75:1, pp. 48-60, 1975 DOI: 10.1080/04597227508459853, p. 53.
35. The strength of the then 65 Infantry Brigade could not be retrieved. However, according to Lieutenant Colonel M. A. Hamid, psc (retd), The 46 Infantry Brigade, located at Dhaka had 4000 troops in 1975. See, *Tinti Sena Obvutthan O Kichu Na Bola Kotha* (3<sup>rd</sup> edition), Jogajog Publishers, Dhaka, 2005, p.72.
36. So, it may be assumed that the 65 Infantry Brigade could have, maximum 4000 troops. However, Major Khandakar Badrul Hasan (retd.) informed the writer on October 5, 2021 that there could be around 2000-2500 troops in the then 65 Infantry Brigade located at Chittagong Cantonment in 1975. He explained that the brigade had 4 infantry battalions, i.e., 3 East Bengal Regiment, 8 East Bengal Regiment, 18 East Bengal Regiment, and 19 East Bengal Regiment. Out of these 4 battalions, 3 battalions were deployed in the CHT at Ruma, Alikadam and Khagrachari with around 50% of its strength (2 companies of each battalion).
37. See, Major General (Retd) Syed Md. Ibrahim, Bir Pratik, *Parbattya Chattagram: Shantipakria O Paribesh Paristhiti Mullayan (Chittagong Hill Tracts: Peace Process & Situation Analysis)*, Mowla Brothers, Dhaka, 2011 (3<sup>rd</sup> edition), p.165.
38. *History of Bangladesh Army* (Vol. II), *op. cit.*, pp. 302-359.
39. Discussion with Major Khandakar Badrul Hasan (Retd.) on 03, 05 and 06 October 2021.
40. See, *CIA, BANGLADESH: A HANDBOOK*, November 1982, <https://www.cia.gov/library/readingroom/document/cia-rdp83s00854r000200070002-6>, retrieved on 29 August 2019. Also, may be seen, *Asia and Australasia, The Military Balance*, 82:1, 1982, 78-97, DOI: 10.1080/04597228208459928.
41. *The Military Balance*, Vol. 83, 1983, Issue 1, pp. 88-89, <https://doi.org/10.1080/04597228308459940>.

42. The CHT Commission *op. cit.*, p. 35
43. CHT Commission *op. cit.* p. 8.
44. Mark Levene *op. cit.* p.354.
45. The CHT Commission travelled throughout the CHT from 8 December 1990 to 1 January 1991. The Commission visited Rangamati District from December 8th to 10th and Khagrachari District from December 11th to 17th. Thereafter, visited Bandarban District (December 20th to December 29th) and returned to Rangamati, where the Commission stayed from December 29th to January 1st. For details, see The CHT Commission (1991), *op. cit.*, p. 7.
46. The military officer in Bandarban who spoke to the CHT Commission and Major General Syed Muhammad Ibrahim (retd), Bir Pratik, have shared the figure of SF for almost the same time frame: December 1990 and June 1991. The military officer in Bandarban must have told the estimated figure of SF to the CHT Commission during their visit in December 1990. On the contrary, the book of Major General Syed Muhammad Ibrahim (retd), Bir Pratik, was first published in 2001. It is needless to mention that he took the initiative to write the book as Director of Military Operations. As such, it is reasonable to believe that he had access to official records. In that sense, the figure mentioned by him may be considered to have been collected from the official record.
47. Amena Mohsin, *op. cit.*, p.172.
48. *History of Counter Insurgency Operations in Chittagong Hill Tracts (1976-1999)*, Vol-II, Bangladesh Army, Dhaka, 2008, p. 4-27-2.
49. The total population in the CHT was 974, 445 including 501, 144 tribal and 473, 301 non-tribal people in 1991. See, Mangal Kumar Chakma, *Bibarna Pahad*, Bateshwer Barnon, Dhaka, 2009, p.90.

### Brief Biography



**Brigadier General Gulam Mahiuddin Ahmed, SGP, ndc, afwc, psc, PhD** was commissioned in the Corps of Infantry on 19 December 1994. He served as Sector Commander for Sector Juba in UNMISS, GSO-3 (Operations) and GSO-1 (Counter Insurgency) in Headquarters 24 Infantry Division, GSO-2 (Plans) at Military Operations Directorate in Army Headquarters and Colonel Staff at Headquarters Army Training and Doctrine Command. Besides, he takes pride in serving as a Platoon Commander in the Bangladesh Military Academy and Directing Staff in National Defence College. He holds Master's degrees in Military Studies and in Security and Defence Studies from the Bangladesh University of Professionals, Dhaka. He has been conferred upon PhD at Jahangirnagar University, for a critical study on the Chittagong Hill Tracts. Currently, he is serving as Director Overseas Operations in Army Headquarters.

## **Developing Teaching and Management of Army Patronized Schools and Colleges: An Anticipation of Real Benefit**

Colonel Md Masud Rana, psc, PhD

### ***Abstract***

*Teaching in general is a lynchpin that aims at providing good quality service to the students in enabling them to contribute to the work force of a nation significantly. In the 21<sup>st</sup> century, the creative- online query based and Outcome Based Education (OBE) system, cyber security, project and problems solving-based learning will be the touchstone in enhancing quality education. In the technology driven competitive world, there is a need of national education reform outlines (quality framework) to make education modern and appropriate. Under this framework, students shall be evaluated through continuous assessment in subjects, activity-based learning and public examinations. There will be requirement of an empowered authoritative body that would be able to deeply observe, monitor and follow up the outcome of the army patronized school and colleges. Teachers' role will be like 'plug and play' in position in a multi-tasking context of challenges emerging in the days ahead. The aim of army patronized institutions is to portray the overall education system in coherence with national education system. Teachers' training of these institution is felt a must for their Continual Progressive Development (CPD) that needs an effective planning and comprehensive action plan through a scheme of management. Synergic relationship, constant observation and continuous assessment of education framework, leadership alongside decision making, liaison with government training providing organizations (NAEM, NCTB, DSHE, Board of Education's etc.) are the essential components of benign management. There are some lacunas spectacles in effective teachers' training (army arranged 12-35% or government arranged 11-19% and 3-11% master trainers), management, quality recruitment, student intake, academic and co-curricular functions in the army patronized education institutions. Under this parlance, this study tried to unlock the barriers behind teachers training to uplift their qualities and explore benefits for the students. Besides, Bangladesh Army by now has given a competent and confident outlook to the government by running number of educational institutions ranging from university to schools. At that point, this study has anticipated benefits by making some proposals including formation of Directorate General of Army Education Services (DGAES) as effective management body of Army patronized education in strengthening and enabling them to render a stakeholders' friendly service. The study followed mixing of quantitative and qualitative research method in a single study to meet the problem statement.*

**Keywords:** *Lynchpin, synergic, touchstone, scheme, benign, lacuna.*

### **Introduction**

The terms teaching and management are two catch phrases of education. Some of the paradigms of teaching are—it is common sense of activity, it is an art, applicability of knowledge,

system, profession, competence, character and reflection of practice and so on.<sup>1</sup> In the institutions, faculties need to undergo training, conduct research and derive some innovative methods to enrich their professional acumen. The teachers need to prove themselves to be beneficial to their stakeholders in achieving academic goals.<sup>2</sup> In running school and colleges there are two echelons considered as driving force. They are the quality of the teachers and the proper functioning of the management. In near future, teaching is going to be ICT and AI based to make education modern and appropriate. There is a national education framework- education reform outlines to cope with the technology driven competitive world.<sup>3</sup> This outline includes a curriculum where emphasis will be given to reduce memorization and prioritize the experiment and activity-based learning connecting to the objective of career development education at university level.<sup>4</sup> The students will be evaluated through continuous assessment in subjects, activity-based learning method i.e. Bloom's Taxonomy: Cognitive, Affective and Psychomotor Domain and through tactful public examinations.<sup>5</sup> For the effective implementation of this reform both the mentors and mentee will have to handle the technological aids of education where online inquiry, project and problem-solving based learning will be the priority.<sup>6</sup> Proper training of the teachers on these issues will help the students in preparing them in the subsequent study field and benefits them in career making. The success of the students reflects the capability of the teachers and ultimately strengthen the credentials of the organization. The success of the organization collectively depends on parents' involvement, organization (faculties) service and above all students' interest. Any lacking in it produces big pitfall in learning of the students as such no compromise is envisaged in case of teaching - learning process. Besides, the changes in educational pedagogy (education of the 20<sup>th</sup> century) to some extents have also augmented the complexities in lives. The National Curriculum 2012 for class VI to class XII was set in place of the 1995 curriculum.<sup>7</sup> Insiders' perception is that many guardians have acknowledged that the pedagogical changes have compelled them to depend on the teachers' dominance. Therefore, there is some hegemony. Teachers, students, guardians and the management can think and work alike with a view to developing the functioning of institutions requiring a prudent thought.<sup>8</sup>

In our country, the existing teacher education model is inherited mostly from British system of education and is suffering a lot due to its inability to keep pace with time adopting necessary modification in its conceptual based theory and practices. Hypothesis arises in this regard what is the conceptual meaning of the term teaching and management? What are the various trainings that can be deemed appropriate for the development of teaching? How to implement all these parameters developing an effective scheme of management? Answers to these questions are needed to be found out through proper study. At present, the role of teachers is not only confined in teaching. They also need to be a thorough professional, fully equipped with high academic standard, pedagogical skills, ethical and moral values etc. Teachers' role will be like 'plug and play' in position in a multi-tasking context of challenges emerging in the contemporary society. The present condition of expected training for the teachers in Bangladesh Army patronized school and colleges is yet to reach the standard. Education has become a command responsibility of Bangladesh Army.<sup>9</sup>

The commanders are engaged with academia in the position of Chief patron, Governing Body (GB) chairman and principal. On mass education, Bangladesh Army is providing support largely to the community where 1,76,500 (approximately) military and non-military background students (ratio 40:60) study in these institutions.<sup>10</sup> At present, there are 25 Cantonment Public Schools and Colleges (CPSC), 21 English Medium Schools and Colleges (EMSC), 39 Cantonment Board Schools and Colleges (CBSC), 12 Cadet Colleges, 11 Proyash (for Neuro Developmental Disorder Child) Schools and 03 Pre-primary Schools under Bangladesh Army.<sup>11</sup> Presently, in army patronized institutions teachers undergo On Job Training (OJT) (have master trainer 3-11%) and a workshop on quality education (12-35% teachers completed) arranged by individual schools and the organization respectively. Besides, there are scopes of the teachers training under the government arrangement where only 11-19% obtained scope of training. There is no collective and centralized endeavour to increase the scope of government arranged teachers training for quality improvement. No organizational body who can centrally and collectively look after career planning of the faculties served in these institutions. Under this circumstance, how all army patronized institutions can be administered under an appropriate leadership management with a view to making quality and need based teaching everywhere is the primary question of the article. What are the factors that can be considered as the road map to formulate a management body for looking after the activities and functions very closely is the secondary question. How the teaching and management of Army patronized school and colleges can be developed parallelly in receiving benefits should be prudently thought of considering the socio-economic state of the stakeholders of these institutions.

This article has focussed on the present state of training of the teaching faculties in army patronized schools and colleges and the necessity of effective teachers' training. It is anticipated that an entrusted and strong management (leadership) can play the most vital role in preparing qualified faculties as well as proper career planning for the teachers to explore maximum benefits for students. Therefore, three parameters like teachers' quality, teachers' training and a pertinent framework of management are the points of discussion. While doing so it will critically analyse the present state of training for the teachers under organization and the government arranged, need of having quality teachers, national education framework, gaps in case of teachers training and management functions. Finally, some recommendations are presented which may help in decision making point for developing the teaching competency profile and its management functions as a Measurement of Performance or Impact (MOP/I) of army patronized institutions engagement group. The paper has been designed following the mixed methodology of objective assessment with primary information, data, survey, interviews of army officers, eminent people belonging to diverse classes and professions and relevant websites. The elegance of argument helps to articulate an epistemological development of teaching and management system in the existing army patronized educational institutions. This article leaves the scope of further study in future.

## **Teachers' Training Need for the Development of Teaching**

The difference between actual and required human performance at work forms the basis of need.<sup>12</sup> Following are some of the requirements for the development of teaching and management of army patronized institutions:

**To be Prepared for Teaching and Learning of the 21<sup>st</sup> Century:** It is obvious that the teachers' training is needed for their quality enhancement in terms of professional acumen and to prove their worthiness on the participants' learning. Training stands alone on the changed strategy to focus on the holistic approaches to develop the teaching performance.<sup>13</sup> Following are some of the focus areas that should be addressed while planning the training for the teachers:

- a. Training is to be focus oriented, need based, modern (AI, ICT, cyber and system security etc oriented), national framework/curricula oriented and contemporary (the field, type, purpose etc has to be specified)
- b. Training shall be management supported or designed and accounted (the accountability has to be ensured in any form)
- c. It should be planned and conducted systematically in the ways consistent with effective approach of its design (first teachers' induction training, then curriculum training, then Method of Instruction/ Delivery (MOI/D), then questioning method and so on).
- d. Training should effectively be linked with all parameters of training and other parallel government organizational demand and insiders' aspirations
- e. Faculties should be capable of preparing the basis of the students to pursue higher education in line with the objectives of Institution of Quality Assurance Cell (IQAC) under implementation at university level.<sup>14</sup>

**To Understand the Outcome Based Education (OBE):** Presently, OBE is an educational theory that directed at achieving certain outcomes in terms of students learning.<sup>15</sup> It is a bridge between primary, secondary education and higher education. Secondary education builds a foundation where higher education brings students into the career platform. It is a means for the students to develop all round capabilities in them to gain benefits in career making. Here the teachers play a role in preparing them to impart OBE based education to their target group. It acts as the *effect-check* of teachers' teaching.

**Skill Development to Conduct Class in Blending Method on Emergency:** To conduct class with blending online and offline in any emergency like COVID, teachers needed to be competent in operating the tools or teaching aids to explore benefits for the students.<sup>16</sup>

**Teachers’ Skill Development for Hands-on Training:** Students learning to learn can be laconically defined as the growing capacity to internalize and take over the model.<sup>17</sup> Teachers’ training is required for understanding skill such as questioning, observing, supervising, simulating and assignment, project and so on carefully.<sup>18</sup> Students learning to learn involves following:-

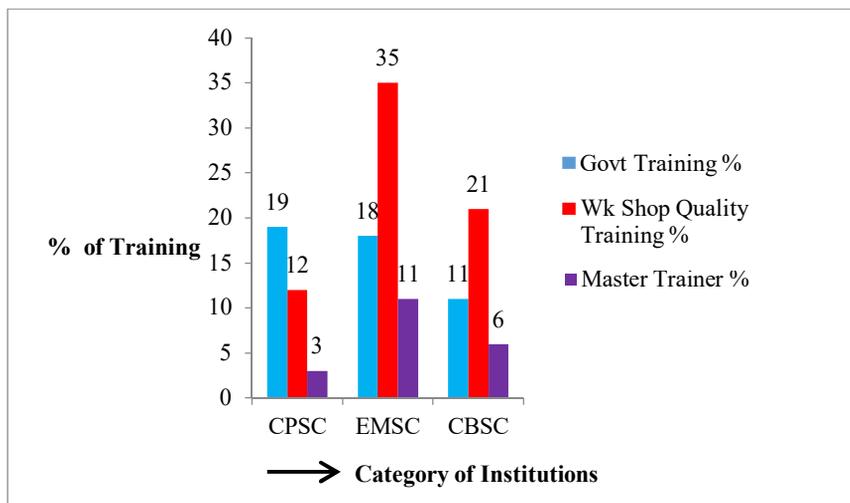
- a. **Firstly:** Involvement in learning and the gradual assimilation of learning of teaching
- b. **Secondly:** Development of capacity to read the learning situation and take account of the factors that affect his work (career) that leads them to problem solving
- c. **Thirdly:** Development of skill of engagement with hands *on training and practical works*

### Teachers’ Training State for Teaching Improvement of Army Run Institutions

**Training Arranged by Government:** To standardize the quality of teaching, every year government arranges training for the teachers in home and abroad. Graph (Figure-1) below has been plotted from a survey on the category of government training like BEd, MEd, PTI, Cluster training, creative system, Multimedia Classroom Management (MCM), Performance based Management (PBM), Professional Leadership (PL), Training Abroad etc. About 11-19% teachers of army patronized institutions got opportunity of training under government arrangement which is less because of lack of liaison with the government training selection body (only Dhaka area school and colleges surveyed).

**Training Arranged by Organization Itself:** Each year with approval of CCC, workshop on quality education is conducted for the teachers of CPSCs, EMSCs and CBSC. By a survey, it is found that 6-35% teachers of CPSC, EMSC and EBSC got opportunity to participate in workshop on quality education training (only Dhaka area school and colleges surveyed).

**Figure-1: State of Training of Army Patronized School and Colleges**

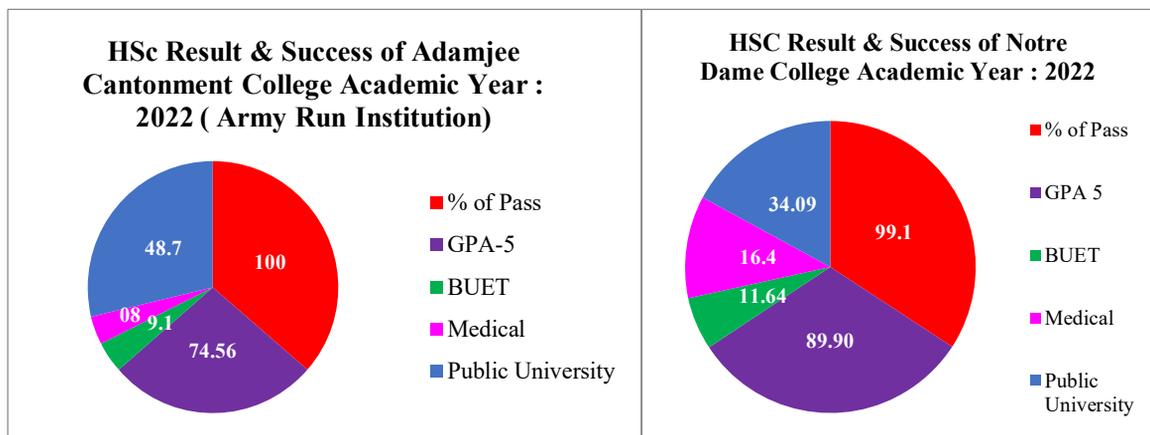


Source: Author’s self-construct

**Institution Arranged On/Off Job Training (OJT) by Master Trainer:** Every institution arranges some OJT for the teachers during vacation or government holidays. Participating in these trainings sometimes creates problem for the teachers because they might have other commitments during vacation or government holidays. Moreover, all school and colleges do not have subject wise master trainer as such it puts in some disorganised pattern of training in the institutions. The survey states that army patronized institutions have only 3-6% master trainer to expedite the OJT. For the above-mentioned reasons, the output of these types training does not meet real expectation.

**Shortfall of Students Success for lack of Teachers Training:** In the year 2022, there were 3230 science group students in Notre Dame College (NDC), (% of pass: 99.91%) and the number was 2403 in Adamjee Cantonment College (ACC) (% of pass: 100%).<sup>19</sup> A comparison of success (only science group students) in case of admission at higher education between ACC and NDC has been made to understand whether army run institutions could reach the benchmark or not. The comparison of success in the case of higher education between ACC and NDC shows that the successes of army patronized institution is yet to reach expectation.

**Figure-2: Comparison of HSC Result and Success of Students of ACC & NDC**



Source: Author's self-construct

### Existing Management Structure (Academic and Leadership) of Army Patronized Institutions- Contribution in Developing Teaching and Management

**Central Coordination Committee (CCC) and its Role:** CCC is formed at the Army headquarters where Chief of General Staff (CGS) is the President, Director of Education (D-Edn) is the Chief Coordinator and one General Staff Officer (GSO)-1 is the Member Secretary of this body. Each year, CCC arranges two coordination meetings where all Principals and GSO-2 of the division headquarters participate. The aim of this meeting is to review the academic syllabus, book selection and any other pertinent policy issue related to academics. Institutions arrange in-house training under the guidelines and decision of CCC.

**Principal's Role and Working with Philosophy:** The foundation of an institution's success is the Principal's professional knowledge and skills, robust professional acumen, sincere efforts and efficiency to transmit knowledge and above all leadership skill to steer his team effectively to attain the mission. In educational institutions, understanding of teaching process and its evaluation is the main administration that needs to be clearly understood by all stakeholders. Ground reality is that to accomplish the administrative activities Principals' involvements on academic effect is yet to be satisfactory specially the teaching – learning phenomena. To earn the good result both in terms of academic and co-curricular, the more involvement of the principals and 'Working with Philosophy' is envisaged by the insiders. In case of army patronized institutions following are some of the works that keep the principals mostly occupied:-

- a. Dealing with admission throughout the year
- b. Reciprocal issues of teachers, staffs and students
- c. Responding to any additional assignment from higher headquarters or government
- d. Implementation of Co-curricular and extra-curricular activities
- e. Meeting a number of guardians everyday on various issues

**Formation Headquarters' Involvement (Education Cell):** General Officer Commanding (GOC) of each area is the chief patron of CPSC, EMSC & CBSC located in his area. Under the area headquarters, there is one officer General Staff Officer (GSO)-2 education working as his staff officer. The number of school and colleges in the formation varies from 2-20. Being the only representative of GOC, sometimes it becomes tough for the GSO-2 education to work meticulously for all institutions. GSO-2 is a junior officer in the rank of Major of Bangladesh Army while the officer in the rank of Brigadier General is posted as the Principal in some institutions. Therefore, it makes some gaps in command and control (C<sub>2</sub>) in patronizing the school and colleges.

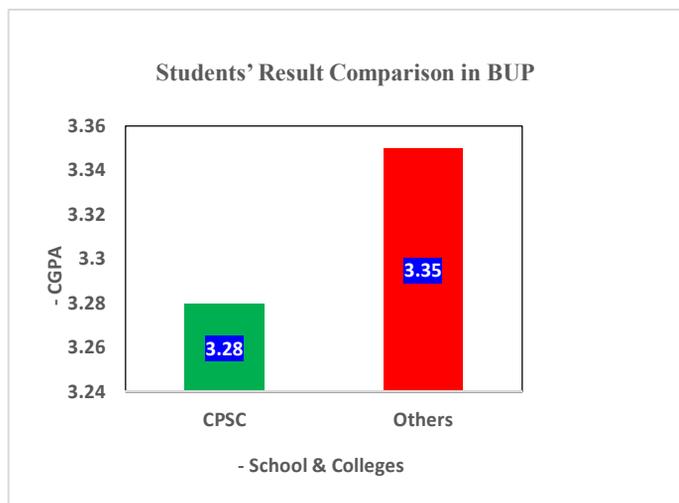
**Functions of Governing Body (GB):** For every institution there is GB formed following the rules of Education Boards. Officer in the rank of Colonel to Brigadier General works as a GB Chairman. Principal is the Member Secretary and there are other 05 members like teachers' representative, guardians' representative, formation representative, (as co-opt) works. GB works according to the SOP, policy guidelines of higher headquarters to meet the points of all stakeholders. All academic and administrative issues are brought to the GB for making viable decisions for the institutions where GB chairman must present despite commanders' very busy schedule.

**Some Gaps in Training and Management:** Following are some of the gaps in case of teaching and management of army run school and colleges:-<sup>20</sup>

**Lacking in Building of Students' Strong Foundation: A Survey Study (Sample size 50):** The best and demanding department of BUP is Computer Science and Engineering (CSE). The

academic result in undergraduate level of the students coming from army patronized colleges is lower than the students coming from other colleges (the graph below). It indicates the deficit of quality of the teachers of CPSC' who are responsible for making the foundation of the students stronger.

**Figure-3: Result of CPSC Students in CSE Department at BUP**



Source: Author's self-construct

**Insufficient Liaison with Government Training Providing Counterparts to Participate in Government arranged Training:** Besides, OJT, only one training (Workshop) is arranged for teachers of CPSC and EMSC where most of the teachers cannot attend because of typical commitment. In Bangladesh, the government training providing educational organization are National Academy for Education and Management (NAEM), Directorate of Secondary and Higher Education (DSHE), National Curriculum and Textbook Board (NCTB) and so on. There is a distinct gap of coordination and communication between the army authority and the government training providing institutions in this regard.

**Need of Common SOP:** To patronize and make parity with all the institutions in terms of equal boundary of success there is a need of having a common SOP (at least for within area institutions).

**Lack in Maintaining Equal Standard of Teaching:** At present, the academic result of all the army patronized institutions both in rural and in urban areas is almost in the same line. But the ultimate success indicator in case of higher education is different. This is because there is gap in terms of standard of teaching among these institutions in different areas. The socio-economic problem of the area, non-availability of qualified teachers and lack of teachers' training, different mind-set of stakeholders etc may be responsible for causing such variation.

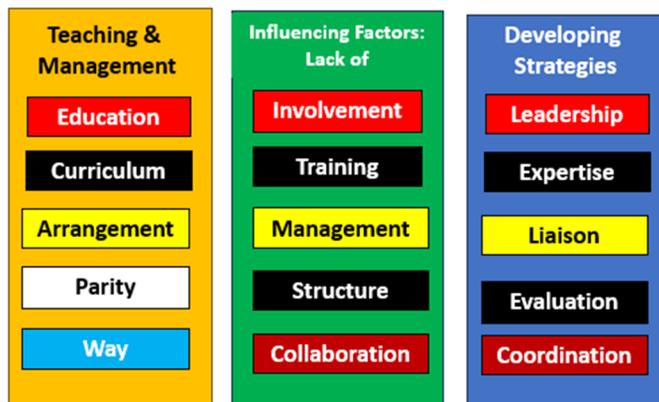
**No Career Planning Arrangements for Teachers:** At present there is no career planning provision or body for posting of teachers of CPSC and EMSC excluding CBSC. It cannot be carried out because of unequal salary of teachers, difference in tuition fees of students, more so there is no such arrangement for making such provision effective. For ensuring better education in all school and colleges, an appropriate career planning for teachers and staff is a requirement.

**Problem behind Commanding the Cantonment Board School and Colleges (CBSC):** CBSCs are under the control of Director of Military Land & Cantonment (DMLC). DMLC appoints Principals from non-military personal. The teachers and staff are recruited by the DMLC office. These institutions are patronized under the rules of Cantonment Act 2018. GOC is the Chief Patron of these institutions too. GB chairman is a military officer. The involvement of the formation command seemingly appeared to be challenging for these organizations.

**Key Elements and Need of a Management Body: Anticipated Benefits**

**Key elements and Developing Strategies of Teaching and Management:** Basing on analysis of all parameters, some key elements for developing teaching and management are envisaged in the Figure-4 below:-

**Figure-4: Key Elements and Developing Strategies of Teaching and Management**



Source: Author's self-construct

**Need:** The process of educational management consists of three basic functions, namely planning, implementing and controlling. The management uses these functions to achieve educational organization goals and objectives.<sup>21</sup> Management is a strong platform for the stakeholders of the organization where its' every action responds to the need and attention of the community people. The management and the stakeholders are inextricably intertwined. The teaching and management are inseparable requirements to form a body of principles which would be the touchstone for effective administrative action for the institutions. To bring benefits, there should not have any gap among the parameters like accountability, responsibility, authority,

commitment, morality, teaching quality and above all the management.<sup>22</sup> The management body may have the following roles:

- a. To bring effective, innovative and timely incorporation of training especially on education, outlines-framework, ICT, AI, system and cyber security and creative education, OBE system to the teaching faculty of army patronized institutions
- b. To promote continuous teaching learning capability and to improve services to the stakeholders
- c. To form a professional attitude towards the institutions with a view to serving faithfully
- d. To integrate deeply into on-going practices of the institutions
- e. To reinforce the provision of decision making and put them into practice in it
- f. To strengthen visible support to the institution in terms of teaching and management
- g. To assist in achieving the objectives of the institution.

**Need of an Authoritative Management Body to Confirm BNQF Implementation:** To make education modern and appropriate, there is a national education quality framework and outlines to cope up with the technology driven competitive world.<sup>23</sup> The outline includes new curriculum where emphasis will be given to reduce on memorization and prioritize the experiment and activity-based learning. For it there will be a requirement of an authoritative empowered body that would be able to observe, monitor and follow up the effect remaining close to the army patronized school and colleges. There is no separate organization in Bangladesh army which may closely look after the implementation of national education framework. So, an appropriate management body to Measure the Impact (MOI) of this outline directly for army patronized educational institution deemed necessary in the present perspective.

**Proposals to Meet the Need:** Synergic relationship, continuous improvement, self-evaluation, leadership, deep involvement etc are the essential components to maximum benefits. Following proposals may be considered for better management of the activities of army patronized institutions:-

### **Short Term Proposals**

**Proposal-1: Posting of an Officer in School & Colleges like Cadet College:** An officer in the rank of Major can be posted to all CPSC and EMSC like that of Cadet College. It may reduce the pressure on the principals.

**Proposal-2: Posting of an Army Officer in NAEM, DSHE, NCTB and so on:** For making necessary liaison and effective communication with government training providing institutions (NAEM, DSHE, NCTB etc) an army officer may be posted on deputation. It will increase percentage of government arranged training for the faculties (presently only 11-19%.)

**Proposal-3: Posting of an Army Officer as Principal in CBSC:** For better and effective command and control of area formation vis-à-vis for academic uplift military officers may be posted to all CBSCs.

**Proposal-4: Appointing a Staff Officer as Academic Focal Point at AHQ, (Education Directorate) and Formation Headquarters:** The proposal is sketched below:-

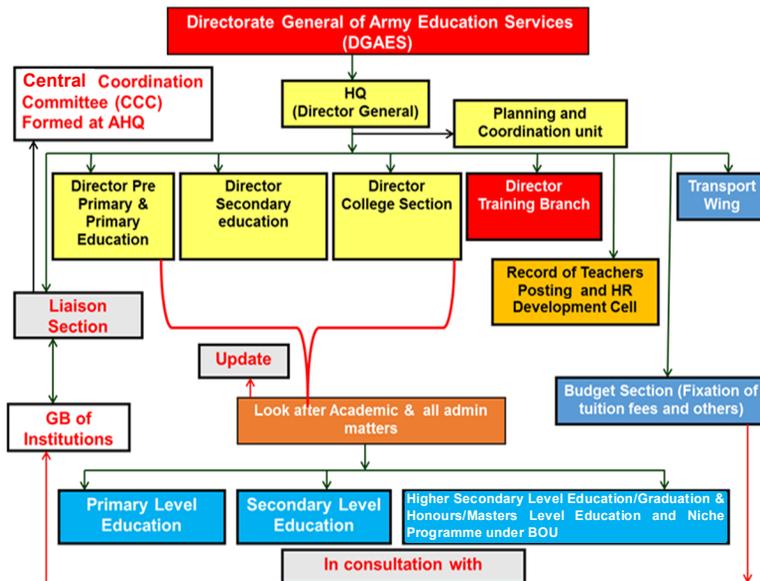
**Figure-5: Short Term Proposal**



Source: Author’s self-construct

**Long Term Proposal: Formation of Directorate General of Army Education Services (DGAES):** There is no short cut to training for acquiring individual’s knowledge and uplifting skill and attitude. A strong body is envisaged to look after the performance, supervise and give feedback of the army patronized institutions their management practices, standard and expectation.

**Figure-6: Long Term Proposal (Formation of DGAES)**



Source: Author’s self-construct

For better and efficient management, alongside decision making, coordination, judgement, development and assessment it is now demand of the insiders to form a separate entity to look after the sector independently. As such a separate Directorate General of Army Education Services (DGAES) headed by a Major General is proposed to look after the functioning of army patronized school and colleges who will look after general education. On formation of DGAES its detail functioning can be outlined separately. There are three main reasons of having strong management body at the command and leadership level of army patronized institutions which are narrated below:

- a. **Firstly, Teachers' Training to Adjust with the National Education Framework:** Developing the teaching professionals by providing time demanding training to contribute significantly to the field of teaching to students. It will authoritatively work for the engagement group as a Measurement of Impact or Performance (MOI/P) for Quality Enhancement.<sup>24</sup>
- b. **Secondly, Establishing Separate Leadership for Mass Education:** The mass education system under army patronization will have a separate leader to guide and harness real benefits for these academic groups in involving with the decision making of Bangladesh army.<sup>25</sup>
- c. **Thirdly, Formulation of a Common SOP:** In maintaining the career planning (career making and development) of teachers' community by integrating them in a common framework (SOP), procedure and understanding in terms of teaching standard, amenities and all other requirements, a common SOP needs to be formulated.<sup>26</sup>

## **Recommendation**

In view of the above discussion this paper makes following recommendation:

**Implementation of Short - and Long-Term Proposals:** A board of officers may be formed to study the feasibility of implementation of the above-mentioned proposals. The structure of the board may be as under:

**Chief Patron:** Chief of General Staff (CGS)

**President:** Director of Education Directorate

**Members:**

3 x Members Representative (Lt Col), from AHQ, (MT, Education and SD Directorate)

3 x Principals (CPSC, EMS and CBSC)

**Member Secretary:**

GSO-2 (Coord), AHQ, Education Directorate

## Conclusion

In the present perspective, in army patronized educational institutions there are some academic and admin issues which need to be addressed such as–lack of teachers training for quality enhancement and effective teaching, maintenance of competitive attitudes among these institutions in case of co-curricular activities, no teachers’ posting provision among these institutions, lack of keeping accountability in case of students’ migration and in case of parents’ posting and absence of common SOP for these institutions. As such an overview of the existing system of management of army patronized institutions with some gaps and difficulties has been studied to find out a comprehensive approach for more benefits of the institutions. Some ways have also been presented as aspiration on better training and management planning for army patronized institutions.

For the development of teaching and management, two proposals like short-term and long-term have been presented to bring a realistic decision point. The aspects of the national education framework-outlines have been mentioned in connecting the future education requirement of an organizational and authoritative body for the military patronized institutions. Formation of DGAES is a road map of management that plots the progress to re-look the development and revise as needed for the better and effective educational output form army patronized school and colleges. Finally, recommendations in support of proposals have been forwarded by analysing all factors for further necessary study on the development of teaching and management of army patronized institutions.

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### Brief Biography



**Colonel Md Masud Rana, psc, PhD** was commissioned in AEC with 12<sup>th</sup> BMA Special Course on December 03, 1998 (July 02, 1997, Antedate Seniority). He has obtained his Honours and Master of Science (MSc) in Physics from the University of Jahangirnagar prior to joining in Bangladesh Army. He has also completed his PhD work on ‘Neutronics Core Safety Parameters of 3 MW TRIGA Mark-II Research Reactor by using the Deterministic Code System SARC2006’, from the Department of Physics, Jahangirnagar University, Savar, Dhaka. He is a graduate from Defence Services Command and Staff College (DSCSC), Mirpur, Dhaka. In his tenure of service, he served in different military organization on diverse appointments like General Staff Officer Grade-1 (Edn) in AHQ, Education Directorate, General Staff Officer Grade-2 at DSCSC and General Staff Officer Grade-3 in ECSME. He also served as instructor class B in Bangladesh Military Academy (BMA) and Military Institute of Science and Technology (MIST) respectively. Besides mandatory courses, the officer has attended French and Arabic Language courses in Bangladesh University of Professionals (BUP) and Alliance Francaise. He attended Senior Staff Course on Education & Management (SSCEM) at National Academy for Educational Management (NAEM) and Law of Armed Conflict Course (LOAC) in Turkey. He has participated in United Nations (UN) Peacekeeping Mission in Liberia as a military observer (UNMO) and in DRC as Chief CIMIC officer. He also served as Principal in Barishal Model School and College, Barisal and in Adamjee Cantonment Public School, Dhaka Cantonment. He has served as a Chairman of the Department of Computer Science and Engineering (CSE), Information and Communication Technology (ICT) and Acting Chairman of Environmental Science of the Faculty of Science and Technology (FST) at Bangladesh University of Professionals (BUP), Mirpur Cantonment, Dhaka. He has supervised number of thesis of master’s degree students. To his credit he has a number of publications and technical papers published in different journals. He conducted courses Waves and Oscillation, Optics and Modern Physics in his own discipline. Besides, he is an adjunct faculty of Military Institute of Science & Technology (MIST), Mirpur, Dhaka where he regularly conducts a course on ‘Radiation Detection and Protection Measurement’ in Nuclear Engineering (NE) Department. He also teaches a Research Methodology course to the students of professional Masters program of Information and System Security (MISS) in BUP. Presently, he is posted as Principal, Bogura Cantonment Public School and College.

## **Improving Emotional Intelligence and Self-Efficacy: An Important Facet of Leadership Development in Bangladesh Army**

Colonel Omar Bin Masud, afwc, psc, G+

### ***Abstract***

*Emotional Intelligence (EI) and self-efficacy (SE) are important leadership traits, but both have received less emphasis in the leadership development of the Bangladesh Army. These traits can be trained and improved through structured and informal methods. The importance of EI in leadership practice is that it is closely linked with decision-making, team-building, and fostering interpersonal relationships, including those between leaders and followers. The relationship between EI and military leaders is based on the core notion that military commanders achieve their task by influencing subordinates toward a common goal. The two elements—mission accomplishment and the art of influence—are inextricably linked to the emotional underpinning of military leaders. On the other hand, SE plays an important role in enhancing self-confidence, resilience and mission success. Self-efficacious military leaders are more willing to take risk and accept challenges, turning success into habitual achievement by overcoming hurdles in mission. To enhance the rate of success in mission execution, both EI and SE play significant role. The study aims to develop an analytical approach for determining the significance of EI and SE as leadership attributes, as well as to highlight the impact these abilities have on military leadership. It also tries to explore practical techniques to improving EI and SE among military leaders of Bangladesh Army.*

**Keywords:** *Emotional intelligence, self-efficacy, military leadership, leadership traits, mission accomplishment, self-confidence, decision-making, behaviour, motivation.*

### **Introduction**

Emotional Intelligence (EI) and Self-Efficacy (SE) are two leadership traits that have also been represented as leadership abilities in leadership studies. EI can be referred to as the ‘ability to feel,’ and SE can be described as ‘belief in own self.’ Both are extremely important for successful leadership practice, and they greatly influence the leader-follower relationship. The critical roles of EI and SE in leadership are evident in decision-making, resilience, interpersonal relationships, team building, and mission accomplishment. Looking ahead, in a more complex nature of future conflict the application of EI and SE will become more relevant for military leaders.

In contrast to the above statement, EI and SE have been loosely focused in the leadership development of the Bangladesh Army. Although the practice of these leadership traits exists, it is done without adequate awareness; consequently, the improvement in leadership abilities regarding EI and SE is considerably less than desired. Additionally, there is no structured approach in Bangladesh Army to evaluate these two leadership traits. The author’s understanding was developed from literature review and personal observations on the subject. Additionally, the idea

has been substantiated with the comments from focused group discussion previously conducted by the author on a similar subject.

The input for the study was obtained from nominated Lieutenant Colonels who have mostly completed their unit command, aiming to receive important feedback, considering the direct involvement of commanding officers with their subordinates. This study, therefore, aims to develop an analytical approach to comprehend how EI and SE independently impact leadership practice and mutually contribute to effective leadership development in BD Army. The study focused on identifying the significance of both EI and SE for the success of military leaders. In addition, some practical approaches to improve these two leadership traits will be discovered as outcome of this study.

## **Understanding the ‘Emotional Intelligence’ and ‘Self-Efficacy’ in Relation to Leadership**

### **Emotional Intelligence (EI): Definition and Key Components**

The earliest description about emotional intelligence was recorded in 1930 in the writing of Edward Thorndike, who described something called ‘social intelligence.’ He defined social intelligence as the capacity to comprehend others, including oneself, and to behave sensibly in interpersonal interactions. The term ‘emotional intelligence’ was first introduced in 1985 and was coined by Wayne Leon Payne. He referred to EI as ‘a faculty of consciousness formerly overlooked.’ Payne stated that suppressing emotions caused many of the problems in the world, and that emotions play a crucial role in our lives. The principal danger, according to Payne, is that while negative emotions are inhibited, desirable emotions are also suppressed.<sup>1</sup>

In 1987, Keith Beasley published an article titled ‘*Emotional Quotient*,’ which was later abbreviated to EQ. He defined EQ as a person’s ability to feel, whereas intelligence quotient (IQ) is the ability to think. Beasley went on to say that people with high EQ are sensitive and that EQ consists of two components: the ability to feel and the ability to articulate those feelings. Salovey and Mayer were some of the first psychologists to research how to measure EI. They wrote an article titled ‘Emotional Intelligence’, which attracted the attention of another psychologist named Daniel Goleman who was also a scientific reporter for *The New York Times*. Goleman was determined to popularize the concept of EI and his book *Emotional Intelligence: Why It Can Matter More Than IQ* became a definitive study on the subject.<sup>2</sup> In contrast to IQ, Goleman thought that EQ could and should be cultivated to maintain healthy relationships with others and yield personal achievement. In 1998, Goleman wrote *Working with Emotional Intelligence*, in which he presented EI as a ‘*soft skill*’ that is equally valuable to technical skill.<sup>3</sup>

EI can be described as the function of four factors: understanding of self, manipulation of self, understanding of others, and manipulation of others.<sup>4</sup> Understanding of self means knowledge of oneself, becoming precisely aware of situations that make one happy or angry, and identifying which external effects cause temptation to behave irrationally. Manipulation of self means knowing that a particular situation would make oneself angry and thus controlling one’s behaviour by

avoiding that situation. Understanding of others means knowing others' behaviour. Manipulation of others means correctly understanding the strengths and weaknesses in behaviour and then getting the job done by approaching at the right time instead of trying discreetly. An attempt to integrate the above idea in the context of war and conflict could be '*know thyself*' and '*know your enemy*.'

### **Link between EI and Military Leaders**

According to Daniel Goleman, "Leadership is not domination. It's the art of persuading people to work toward a common goal." The link between military leaders and EI is inseparable. While defining military leadership, many researchers focused on its connection with EI. Hays and Thomas, the two US West Point graduates, co-authored a book named '*Taking Command*' and defined leadership as 'the art of influencing human behaviour to accomplish a mission in the manner desired by the leader.' The authors emphasized human relations to explain EI and noted that military leaders should not allow personal problems or emotions to interfere with their interactions with subordinates.<sup>5</sup> In the Field Manual (FM), Army Leadership is defined as 'the process of influencing people by providing purpose, direction and motivation while operating to accomplish the mission.' Like the above two definitions, many practitioners have mentioned the *act of influencing* and *mission accomplishment* together to construct the definition of success for military leaders driven by their EI.

### **Importance of EI for Military Leaders**

Sun Tzu, the famous Chinese strategist, who lived during the first half of the fifth century B.C., wrote *The Art of War*, where he emphasized that the power of the military stems from that of the general or leader. Although the central theme of this masterpiece is the strategy of battle, it has dedicated one section to leadership rather than strategy. Tzu, the most recognized strategist in military history, writes extensively about psychology, inspiration and incentive, punishment, and troop care. Tzu did not use the term EI, but he did emphasize the importance of military leaders knowing themselves and others, as well as self-monitoring to ensure that their behaviour is beyond reproach.

Carl Von Clausewitz, a Prussian general in the 19<sup>th</sup> century, wrote a book on military strategy called *On War*. He mentioned that the traits that comprise military genius are high intellect, courage and presence of mind. Clausewitz consistently emphasizes in his description of war that no matter how much preparation is done, battle will always be unpredictable. 'Two qualities are indispensable if the mind is to emerge unscathed from the relentless struggle with the unexpected: first, an intellect that retains some glimmerings of the inner light which leads to truth, even in the darkest hour; and second, the courage to follow this faint light wherever it may lead,' he wrote. Despite not defining EI, Clausewitz's ideas are generally applicable to using EI to cut through the chaos and confusion of combat.

General Stanley McChrystal who oversaw all US and coalition forces in Afghanistan, shared insights regarding leadership in the 20<sup>th</sup> century, highlighting the fact that it is the art of

influencing others, not inherently good or evil. Effective leaders, he claimed, are sincere and sympathetic, but outward characteristics like charisma and good looks might only give the impression of leadership for a short time.

EI is crucial in military leadership for navigating through high-stress environments and enhancing mission success. It aids in operations like peacekeeping and military operation other than war (MOOTW). High EI helps manage work-life balance and counters the challenges posed by technological reliance, enabling military leaders to effectively influence tech-driven subordinates.

### **Self-Efficacy (SE): Definition and Key Components**

According to the dictionary, efficacy is the ability to produce a desired outcome. ‘A person’s belief about his or her ability and capacity to accomplish tasks or to deal with the challenges of life’ is an expanded definition of SE given by scholars. *Self-efficacy* (SE) is an underused concept in communication, though it's been around for a long time. Its understanding is crucial, as SE closely links to the success or failure of mission accomplishment. Because of this integration, SE is relevant to leadership. Leadership SE refers to a leader's confidence in their own abilities to exhibit leadership behaviour including inspiring, making decisions and delegating.

Albert Bandura, the most quoted social cognitive psychologist, first used the term SE in 1960 to describe current social learning theories. He claimed that people are afraid and avoid situations with which they do not feel competent of coping and that they will exert effort and continue in the face of difficulties based on their perceived SE, which dictates their impression of eventual success. An important study in 1993 by Bandura explained *SE belief*, involving four major processes: cognitive, motivational, affective and selection. People’s SE beliefs establish whether they expect to succeed or fail, and they act accordingly. It is difficult to do much when one struggles with self-doubt. Bandura later wrote a book called *Self-Efficacy: The Exercise of Control* in 1997, highlighting SE as a vital leadership quality.<sup>6</sup> Davis shared this sentiment, describing SE as an important intangible leadership trait.<sup>7</sup>

### **Importance of SE for Military Leaders**

It is important for military leaders to believe in their abilities to achieve success in the mission through constant effort. Military leaders must develop SE in a gradual progression. When dealing with subordinates, leaders must project confidence, which in turn raises the trust and confidence of subordinates. For any military mission, whether at the tactical or operational level, the goal is set by the leaders based on their perceived ability. If a leader’s SE is not sufficiently strong, the goal setting will be less than their capability. Conversely, leaders with strong SE will set goals above their current ability, gradually improving the team’s confidence and constantly challenging the elasticity of their own capability. Additionally, self-efficacious military leaders are more risk-taking and love challenges. It becomes their habit to achieve success by accomplishing difficult missions as they make *winning a habit*. Martin Meadows explains five common traits of

persons with a strong sense of self, which can also show why it is vital for military leaders: (i) they see obstacles as something they can overcome and master; (ii) they endure in the face of adversity; (iii) they accept responsibility for their failures and believe they have control over the outcome; (iv) they put in more effort to complete tasks; and (v) they commit to their goals.

### **Reflection of Self-efficacy in Military Life**

SE reflects confidence in the ability to exert control over one's own motivation (*I can finish the IPFT within 16 minutes; I can avoid smoking even when offered*), behaviours (*not showing agitation or attitude in front of senior even when tempted to do so*) and social environment (*remaining sensible in associations where intellectual or status differences create discomfort or temptation*).

SE can be improved through small actions. An evening walk, undertaken to prevent extra weight gain and resulting in physical comfort, builds internal confidence—this phenomenon can be identified as SE improvement. For a person who used to run continuously for ten minutes, if the same individual shifts to nonstop running for fifteen minutes, this ability to run an additional five minutes significantly enhances self-confidence and eventually reflects an improvement in SE.

One cannot consistently reflect high SE in one area while repeatedly showing low SE in another. It is presumed so because SE is a *personal trait* and every individual possesses single pattern of a specific trait. Therefore, when one can control own will, that degree of ability defines the scale of SE, demonstrated by the individual. For example, today, as I plan to run and decide to cover the same distance as yesterday, there is a sense of confidence within me because I did it last time. This confidence might be reflected in other aspects differently but does not indicate a clear lack of confidence from the same person. The true level of self-efficacy is reflected when confronted with a low self-confidence scale.<sup>8</sup>

### **The Interplay between EI and SE in Leadership Success**

SE operates at the cognitive level; as SE develops or increases, it enhances self-confidence. Self-confidence helps control an individual's emotions, guides behaviour, and reflects the application of EI. In another explanation, an individual imposes self-control while applying their ability regarding EI, which is again guided by self-confidence. This self-confidence develops from success, and success is the building block of SE. That is how EI is closely connected with SE; one improves when the other develops. This forms the theoretical construct of the relationship between EI and SE.<sup>9</sup>

The reflection of the above can be obtained from the following anecdote. In the unit environment, young officers or junior leaders are the driving force who take responsibility for most of the unit activities and remain answerable to senior officers. When they receive *negative feedback* from superiors, it hampers their SE development. Conversely, positive feedback helps improve SE progressively. The role of senior officers, especially the Commanding Officer (CO) of the unit, is

significant in the right application of EI. For instance, if the CO does not express satisfaction with the mission accomplished by junior leaders, then the sense of efficacy is not gained. Giving *positive feedback* by the CO is very important since it serves as true motivation for subordinates. Sometimes, it is observed that the CO is not ready to accept any risk and lacks high EI, thereby reacting immaturely to any slothful action or underperformance by subordinates, resulting in an unfavorable environment for SE development of under command in the unit.

## **The Impact of EI and SE in Military Leadership**

### **Decision-Making and Crisis Management**

Decision-making is a common phenomenon for military leaders and serves as a *litmus test* for a leader's success in a mission by motivating all subordinates towards a common goal. Decision-making is a habit developed by a military leader from the early stages of their career. However, as one grows higher in rank, decision-making becomes more complex, and its importance also increases. In the military, most decisions made by leaders are executed on the ground by subordinates; these decisions have a direct or indirect impact on the actions of the followers. It is important to note that decision-making without an emotional component may rely solely on rationality. Such decisions may not effectively inspire subordinates with the right motivation to achieve the objectives. Conversely, decisions founded on both rationality and emotional understanding can help exceed expectations.<sup>10</sup>

While acting as the Commanding Officer of a unit, the author was exposed to many decision-making dilemmas where the application of EI and the projection of SE were critical and challenging. The author was neither aware of EI nor did he know the interrelation between EI and SE. Although the author used his common sense and best judgment, in many instances, he realized that the application of EI was critical for dealing with personnel in the unit, especially in evoking desired performance from subordinates. The author has utilized his personal experiences in the current study when analyzing from a leadership perspective.

On one occasion, after the Division Archery Competition, the unit expected to achieve the best result but only secured the 3<sup>rd</sup> position. The gap between expectation and achievement affected the morale of the entire unit, leaving every member emotionally strained. As the CO of that unit, the author sensed the mood of all members and realized the need for immediate action to uplift the unit's spirit following the recent disappointment. Despite achieving an ordinary result, the author instructed the Second-in-Command to gather all the unit members and celebrate the outcome according to unit tradition. This decision had a visible impact, dispelling the unit members' frustration as if the sun had reappeared through a cloudy sky. Every member expressed joy and happiness, wiping away the weariness from their faces. The CO's application of EI was key in this decision-making process, improving the situation and impacting self-confidence, which can lead to enhancing the SE of subordinates. To equate the relation between *EI* and decision-making the author suggests the following:

$$D=f(EI, R)$$

Where:

D: *Effective Decision Making*

EI: *Application of EI in Right Proportion*

R: *Rationality*

Thus, effective decision-making is the resultant of application of EI in right proportion plus rationality.<sup>11</sup>

### **Inter Personal Relationship and Team Building**

Military leaders with high EI are more attuned to the emotions and needs of their subordinates. Adhering to the basic principle of leadership—*know your men*—requires recognizing and addressing subordinates' concerns, which demands the application of high EI. When a military leader demonstrates empathy, a key component of EI, it allows them to understand diverse perspectives, enabling conflict resolution and promoting team building. Effective communication is the cornerstone of team cohesion. Military leaders with high EI can articulate better, practice active listening, and ensure that their subordinates feel heard.

Consistent encouragement and recognition of individual and team achievements contribute to higher morale and increased self-confidence. Efficacious military leaders can identify and leverage their subordinates' strengths, fostering motivation and ensuring perpetual success in mission accomplishment.<sup>12</sup>

In the Chattogram Hill Tracts, Zone or Camp Commanders must manage their subordinates under extreme physical and mental stress. Commanders who prioritize their people's morale by acknowledging their challenges and providing emotional support have been able to maintain a good fighting spirit enduring difficult situation. Similarly, in United Nations peacekeeping missions, military leaders who have been able to control their emotions, behave rationally, and motivate their men in the face of the severity and uncertainty of armed conflict and the challenges of rugged terrain have proven successful in accomplishing the missions. It requires the demonstration of a higher degree of EI and SE from leadership at different tiers, starting from the Contingent Commander to independent leaders at remote Team Sites.

### **Resilience and Adaptability**

Military leaders with strong SE approach challenges with confidence and perseverance. This belief in their abilities allows them to adapt to changing scenarios, make quick and rational decisions, and inspire the same confidence in their subordinates. Thus, they consistently prove resilient and ensure success in missions. EI also aids military leaders in controlling their own stress and maintaining composure under pressure. Leaders with high EI and SE welcome new ideas and

accept mission risks to promote innovation. Military leaders who can adapt quickly serve as role models, encouraging junior leaders and men to cultivate such resilience.

In Bangladesh Liberation War of 1971, Commander-in-Chief of Mukti Bahini, General MAG Osmani (1918-1984), demonstrated exceptional leadership qualities under extraordinary challenges. He empathized with the emotional struggles of his freedom fighters, many of whom were young and inexperienced. General Osmani's ability to connect emotionally with commanders and fighters, adapt to evolving challenges and inspire confidence underscores the critical role of EI and SE in achieving operational and strategic objectives.

### **Successful Mission Accomplishment**

The link between EI and military leaders is rooted in the fundamental premise that military leaders achieve their missions by influencing subordinates towards a shared objective, necessitating EI. The two elements—mission accomplishment and the art of influence—are intertwined with the emotional foundation of military leaders.

Military leaders with high EI and SE will be capable of enhancing the success rate when leading missions in stressful and challenging conditions. Bangladesh Army has deployed its troops in UN Peacekeeping Operations (PKO). According to Directorate of Overseas Operations statistics dated: 25 January, 2025 Bangladesh is currently contributing 4825 troops on the ground, requiring them to survive in direct conflict scenarios. Besides, Bangladesh Army conducts military operations other than war (MOOTW) to aid civil administration, including the current deployment across the country with magistracy power. Each of these engagements presents undefined challenges for military leaders, especially for tactical commanders, where the application of EI becomes exceptionally crucial for mission accomplishment.

### **Practical Approach for Improving EI and SE into Leadership Development in Bangladesh Army**

To improve EI and SE in leadership development, we can consider multiple approaches: (i) policy-level interventions, (ii) training and capacity building, (iii) continuous assessment and feedback systems and (iv) cultural transformation can be considered. Further details are addressed in the subsequent paragraphs.

#### **Policy-level Interventions**

It may require policy formulation from the appropriate authority to incorporate EI and SE into the core leadership training framework at all levels, from junior leaders to senior command. This should include dedicated modules in the leadership development program on self-awareness, empathy, emotional regulation, and building confidence in decision-making. This approach may be augmented by engaging psychologists, behavioural scientists and leadership experts to design evidence-based training material, including assessment tools. The policy should provide guidelines

for benchmark selection in BD Army to assess the EI and SE of military leaders based on interpersonal relationships and self-management skills.

### **Training and Capacity Building**

This will be an organizational approach to conduct workshops, simulation exercises, coaching, and mentoring. Regular workshops can focus on practical aspects of EI, including active listening and stress management. Similarly, practical learning on goal-setting, negotiating challenges and techniques to instill confidence in oneself and others can help develop SE through workshops. Role-playing exercises can train leaders to understand the emotional needs of subordinates. Additionally, coaching or mentoring with experienced leaders or experts can help individuals improve their EI and SE.<sup>13</sup>

### **Regular Evaluation of EI and SE Competencies**

Proper feedback can aid in enhancing SE for leadership at different levels. Incorporating 360-degree feedback from peers, subordinates and superiors can be effective in ensuring a comprehensive understanding of interpersonal relationships and self-management. Presently, there is no suggested method to measure EI and SE levels in BD Army. Internationally recognized tools like the Wong and Law Emotional Intelligence Scale (WLEIS) or General Self-Efficacy Scale (GSE) can be used for evaluation. This can be reinforced by incorporating evaluation criteria in the Officer's Performance Report (OPR), including grading for EI and SE.

### **Cultural Transformation**

To augment institutional training, a robust organizational culture must be developed, which is possible by giving greater emphasis to practicing EI and SE within the unit environment. To set personal example, the Commanding Officer should bear the highest responsibility in practicing EI and ensuring other officers, including junior leaders, are adequately aware and motivated to acquire this skill and manifest the same through their actions. Subsequently, COs should receive recognition from higher headquarters for the success or failure of EI and SE practice. Cultural transformation should aim to create an environment where individuals feel safe in expressing emotions, sharing feedback, and admitting mistakes without fear of judgment.<sup>14</sup>

### **Conclusion**

The study of EI mostly began after the 1990s, before which people focused on IQ. However, the importance of EI in warfare has been recognized by strategists and military commanders for a long time. As success in military leadership depends on the effective execution of missions, EI becomes crucial in building leader-follower relationships essential for successful mission accomplishments. For a military leader, effective decision-making cannot rely solely on rationality; it must also consider EI. Decisions made through EI, along with rational thinking, can ensure greater outcomes.

Unlike EI, SE is an unfamiliar term in our communication, although the idea of SE was crystallized well before EI as a term was introduced in social learning, around the 1960s. ‘*Mission accomplishment*’ is almost synonymous with ‘*military leadership*,’ and SE is closely linked with the success or failure of a mission. Therefore, it is very important to have a clear understanding of SE, which can influence the outcome of the mission. The best discovery of the research on SE is that people need to believe they can do something so that they can do it, and the idea of SE lies in the construct of this simple belief.

EI and SE have consequences at all levels of leadership, from tactical to strategic. As a result, raising awareness about these two leadership traits among military leaders is critical. It’s encouraging that the importance of EI and SE is recognized at all levels of leadership. The application of EI and SE, both interlinked and mutually complementary, can help motivate subordinates to perform difficult tasks where lives may be at risk. The study suggests that BD Army may consider a structured approach to integrating EI and SE into the leadership development framework. Organizational culture and behaviour must create a favorable platform to improve these important leadership abilities for military leaders.

Feedback is essential to the development of SE, whereas self-management and interpersonal connection evaluation are key factors in improving EI. Therefore, to foster SE among military commanders, recognition, rewards, and other facilitators are crucial in the unit environment. In a similar vein, consistent evaluation can monitor EI growth over time.

## **Recommendations**

To improve EI and SE for military leaders of BD Army, both institutional and organizational efforts need to be synchronized. In addition to this general approach, the author has identified a few specific areas that can be crucial in improving EI and SE for military leaders. As such, *four* recommendations have been suggested in following paragraphs:

- a. Commanding officers may be highly motivated to practice EI and SE, including setting an example for those at various leadership levels within the unit. To monitor progress in EI and SE over time, a quarterly or biannual assessment that incorporates 360-degree feedback may be implemented.
- b. The Officer’s Performance Report (OPR) may include benchmarks for evaluating officers’ EI and SE competencies in the BD Army.
- c. When selecting a Contingent Commander for a UN mission, including Special Force Component, a higher level of EI and SE competency may be considered.
- d. A leadership development program may be redesigned to include training needs of EI and SE for leaders at various level, featuring modules on self-awareness, empathy, emotional control and decision-making abilities.

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### **Brief Biography**



**Colonel Omar Bin Masud, afwc, psc, G+** was commissioned on December 11, 1997, in the Corps of Artillery of the Bangladesh Army. He has served in various command, staff, and instructional capacities. He commanded an Air Defence Artillery Regiment. The officer was a Platoon Commander at the Bangladesh Military Academy and an Instructor, Class A, at the Bangladesh Institute of Peace Support Operation Training. He served as Brigade Major in the 6 Air Defence Artillery Brigade and as a Grade One Staff Officer at the Army Training and Doctrine Command. He also served as the Assistant Personal Secretary (APS) to the Director General of the Directorate General of Forces Intelligence. He is a graduate of the Defence Services Command and Staff College at Mirpur. He also completed the Armed Forces War Course at the prestigious National Defence College, Bangladesh. He has obtained Master of Science and Technology degrees from Bangladesh National University, Defence Studies and Security Development and Technology from Bangladesh University of Professionals. Besides attending a number of courses at home, the officer participated in Peace Support Operation Training in India and Mongolia as an instructor, attended national and multinational seminars and carried out several individual and group research works. He has visited a number of countries in Asia, Oceania, Africa and America. Currently, the officer is serving as a Directing Staff for the Armed Forces War Course at the NDC.

## **Loyalty Versus Flattering - an Enduring Dilemma of Bangladesh Army Personnel**

Colonel Muhammad Nurul Amin, BSP, afwc, psc

### ***Abstract***

*'Loyalty' is one of the most talked about subjects in the Bangladesh Army. It is the highest military virtue upon which all the other qualities evolve. In general, loyalty is the quality of being faithful to someone or something. However, loyalty in the military extends beyond commitment and trust. It traverses the boundaries of nations, organisations, families and religions. Indeed, for military personnel, loyalty to the country is the key to the country's strength. Flattery, on the other hand, is showing or expressing gratifying respect or admiration. It is generally identified with false praise. Flattery is the art of praising that aims to magnify the virtues to exclude the vices. Here comes the importance of understanding the underlying differences between loyalty and flattering in terms of their meaning as well as their application by the Bangladesh Army personnel. Despite its importance, there are hardly any publications on the topic. This paucity sometimes misguides the junior leaders to understand that loyalty is the pride of any Armed Forces. It forms the basis of leaders and led relations. There are very thin differences between appreciation, compliments, praise, encouragement and flattering. Sometimes people get confused. However, a competent leader must understand these. Again, blind loyalty is also not expected. Military men may have disagreements but should express their opinions. They should generate discussions and praise their peers. In this regard, 'knowing the art of reciprocation' and 'inspiring loyalty' act as a magic wand. Following the chain of command, welcoming criticism and remaining loyal in character is the key to diminishing the dilemma. And this will lead the Bangladesh Army to flourish as a more professional Army in home and abroad.*

**Keywords:** *Loyalty, Flattery, Dilemma, Military Discipline, Trust and Blind Loyalty.*

### **Introduction**

Bangladesh Army members are twenty-four hour associates of each other in peace and war. Wartime interdependency has its reflection in peacetime professional as well as personal relations. Here, everyone is tied with a strong sense of loyalty, which symbolises pride. The commanders take pride in having loyal under command and vice versa. Thus, loyalty in the Bangladesh Army has a vertical relation - giving and receiving loyalty. Nevertheless, loyalty and flattening are two words by meaning, often blended in the application. There are instances when Bangladesh Army personnel face a dilemma on how to deal with them. In reality, both attitudes have a contradictory bonding with two different outcomes in the end.

Loyalty in the Bangladesh Army extends beyond commitment and trust. It traverses the boundaries of nations, organisations, comrades, families and, above all, religion. Indeed, for Army

personnel, loyalty to the country is the key to the country’s strength. Flattery, on the other hand, is showing or expressing gratifying respect or admiration.<sup>1</sup> It is generally identified with false praise. Flattery is the art of praising that aims to magnify the virtues to exclude the vices. Here comes the importance of understanding the underlying differences between loyalty and flattering in terms of their meaning as well as their application by all the personnel of the Bangladesh Army.

### Conceptual Dilemma of Loyalty and Flattering Behaviour

In general, loyalty is the quality of being faithful to someone or something and it is the highest military virtue upon which all the other qualities evolve. According to the Greek definition, flattery means “motives of self-interest.” Flattery can also be positive if it is without self-interest. However, there remains the scope for a great deal of confusion in its meaning and applications. Subsequent paragraphs will endeavour to explain it in simple language.

**Levels of Loyalty:** Loyalty may have different levels. For instance, a true soldier is loyal to the nation, army, unit, and comrades. Many find a contradiction in their minds to whom and to which level they should be loyal. Loyalty to the nation is complete allegiance to the Constitution. As army personnel, loyalty to the Army means supporting the military chain of command, which demands total adherence to the spirit and lawful order. Loyalty to the unit can be expressed in the poem of Mario Puzo. According to him, “The strength of a family, like the strength of an army, is in its loyalty to each other.”<sup>2</sup> Loyalty to comrades includes devotion to the welfare of one’s comrades. Mark Twain clarifies it further by saying, “Loyalty to the country always. Loyalty to the government, when it deserves.”<sup>3</sup>

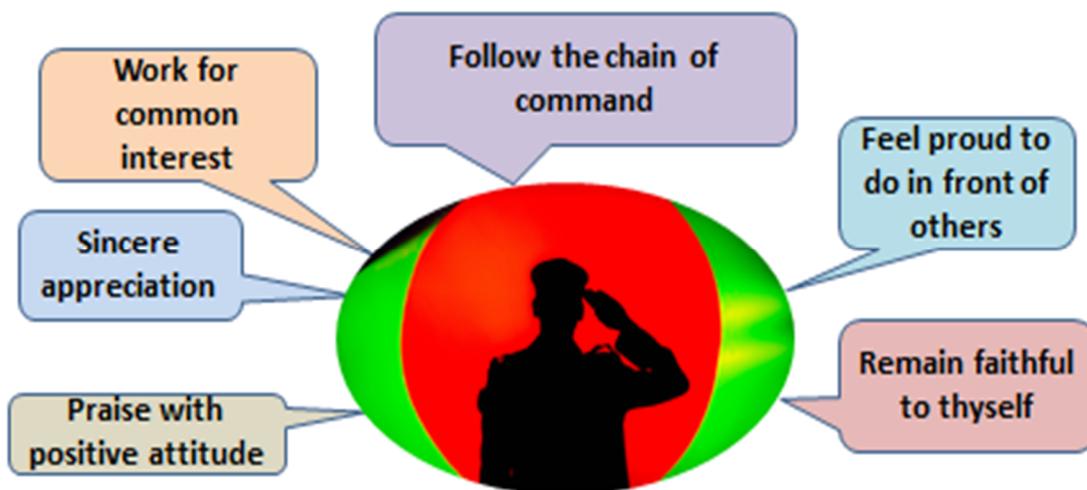
Figure-1: Levels of Loyalty



Source: Author’s self-construct

**Malicious Loyalty:** Many researchers found a unique trend among today’s generation. They obey orders with a smiling face but question at the back. Mainly, when they are not transparent or confident about the ultimate objective. Some do so because of the fear of superiors and others are not confident enough to ask questions. This type of loyalty hampers achieving the organisation’s ultimate goal and slows down progress in the long run. Similarly, there are under commands who obey orders with question marks on their face. They speak up only when the mission is not accomplished as desired.

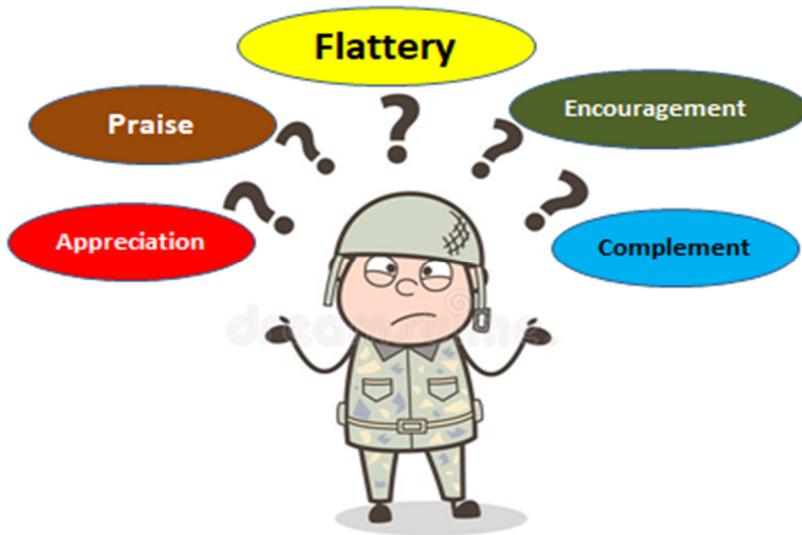
**Figure-2: Indicators of Loyalty**



Source: Author’s self-construct

**Fundamental Dilemma:** Often, the dilemma arises between appreciation, compliments, praise, encouragement and flattering. For example, flattery and appreciation are related to praising the virtues of others. Both originate from the same motive of pleasing others’ self-respect. Flattery is largely vitiated by the tinge of falsehood and primarily aimed at achieving some selfish motive. The difference between compliments and flattery lies in the person’s intent of offering such praise and whether he expects anything in return.<sup>4</sup> Flattery is one kind of dishonest form of praise. In general, the person who flatters has an ulterior motive. Praise comes from the Greek word ‘shine’ and is often spoken of in a spiritual context. Famous philosopher Dale Carnegie expresses it as “Flattery is from the teeth out. Sincere appreciation is from the heart out.” Flattery is outside of an individual and praise is inside.<sup>5</sup> According to the Merriam-Webster Dictionary, “Complimenting” means respecting or admiring the other person.<sup>6</sup> Where compliments offered with earnestness and flattery are insincere. Again, flattery and compliments both offer words of praise to another person. However, the difference between compliment and flattery lies in the intent of the individual offering such praise and whether, in return, he expects anything or not.

**Figure-3: Fundamental Dilemma of Flattery Behaviour**

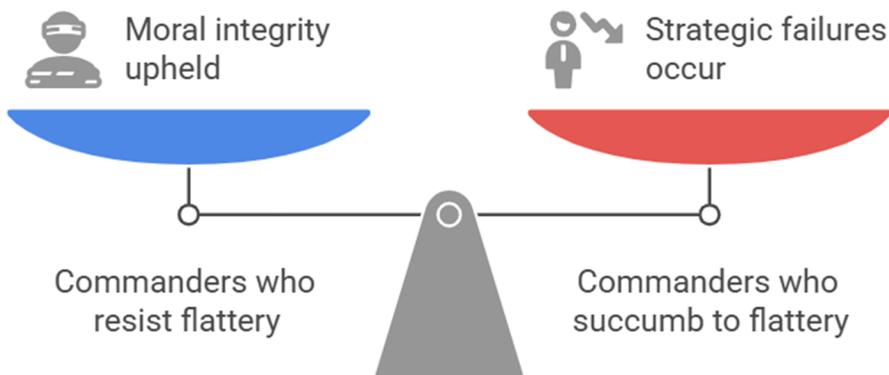


Source: Author's self-construct

### Loyalty Dilemma from Military History

According to Martin Luther King, “Where the battle rages, there the loyalty of the soldier is proved.”<sup>7</sup> However, defining loyalty and flattering behaviour in the war field is tricky. There are ample examples in military history where intelligent commanders waged several successful battles by ignoring or not adhering to the flattery of their under command. On the contrary, history also shows the failure of commanders who fall prey to their flatterer under command. Some of the examples are appended below:-

**Figure-4: Balancing Loyalty vs Flattery in Military Leadership**



Source: Author's self-construct

**World War II:** During the Russian campaign, one of the German tank battalion Captain Heinz Karst, received orders to attack a Russian village and kill all the women. This order was based on reports saying that wounded German soldiers left behind before the retreat had been mutilated by female Soviet partisans. Karst let the women go because he could not prove their guilt. Later, he informed his General, who accepted his decision.<sup>8</sup> Here the subaltern was not penalised for his apparent disloyalty but instead prized for his morality.

**Vietnam War:** A good number of soldiers opposed the Vietnam War because they felt it lacked a clear objective and appeared unwinnable.<sup>9</sup> According to Savage and Gabriel, as a matter of ethical conviction, no General Officers and only a few Colonels or Lieutenant Colonels chose to resign during the Vietnam War.<sup>10</sup> This is a glaring example of the conflicting dilemma of loyalty in the war field.

**Gulf War- 1990:** During the Gulf War, about a hundred officers of the Iraqi Armed Forces refused to take part in the invasion of Kuwait.<sup>11</sup> By doing so, they showed loyalty to humanity. Apparently, they seem to be ‘traitors’, but in reality, they are not ‘blindly loyal’. Nevertheless, unfortunately, all of them were executed later.

**Loyalty and Hitler:** In the historic speech on loyalty, Hitler says- “Loyalty not only in deed but in character. Loyalty in character is unbreakable, a loyalty that knows no ifs or buts. Loyalty in character means absolute obedience that does not question the results of the order or its reasons but obeys for the sake of obedience itself.” However, the German military swore blind allegiance to Hitler in WW II, and its consequence is the burning example.

### **Scenario of Bangladesh Army**

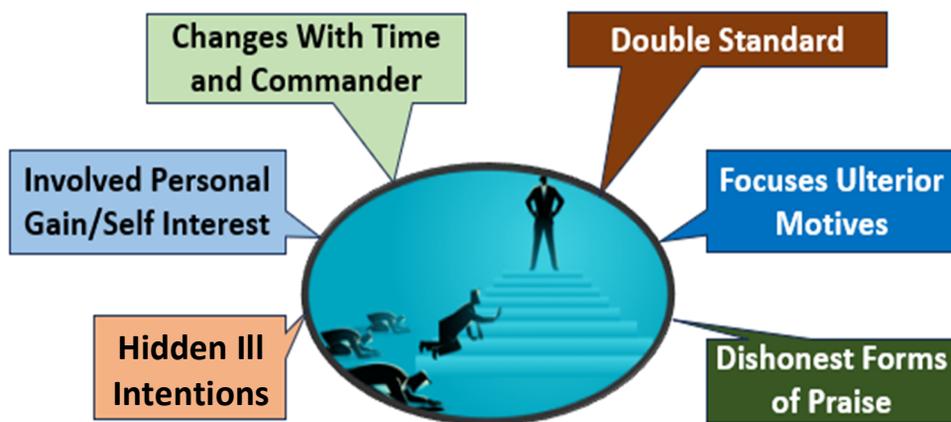
In the Bangladesh Army, loyalty begins at the entry-level. Particularly for the officers, the selection module has the tools to judge it. It becomes concrete through training in the academy/centres. Finally, officers are commissioned and soldiers are recruited with an oath to remain loyal to the organisation and the nation. This makes Bangladesh Army personnel’s loyalty appreciable. However, some still fall prey to the confusion between loyalty and flattery. By nature, human beings like to be praised. Thus, when someone does so, people get tempted. Nevertheless, flattering is being seen in the Bangladesh Army on many occasions. Some do it to get ahead faster than others. Some flatters to gain undue benefits from superiors. The individuals who are not efficient start flattering so that they can minimise their shortcomings. Some flatter their superiors so they can achieve their goals without enough hard work. Usually, weak and lazy individuals want to impress their superior authority by flattering others so that superiors overlook their disability.

The July Revolution of 2024 in Bangladesh, a student-led uprising against the longstanding ruler, illuminated the enduring dilemma of loyalty versus flattery among Bangladesh Army personnel. As public dissent escalated due to perceived governmental corruption and authoritarianism, the military faced a critical decision: uphold allegiance to the nation’s democratic principles or maintain loyalty to the existing regime. Notably, the army’s choice to refrain from

suppressing the protests and instead facilitate a peaceful transition of power underscored a commitment to national interests over personal or political gain. This pivotal stance highlighted the internal conflict between genuine loyalty to the country’s democratic aspirations and the potential for flattery-driven allegiance to entrenched power structures. The events of July 2024 thus serve as a testament to the Bangladesh Army’s capacity to prioritize ethical duty over sycophantic conformity reinforcing the importance of integrity within military ranks.<sup>12</sup>

However, many times it has been observed with great concern that quite a good number of the Bangladesh Army members hesitate to give their opinions due to the fear of the unknown or a sense of insecurity. Some even hesitate to put forward their opinions in person. On many occasions, it has been found that the more under commands flatter their superior, the more likely they are to violate military discipline. This led them to disrespect the authority, enjoy undue privileges, make short-cuts in personal welfare issues, et cetera. There are instances when subordinates at different levels try to impress their senior officers by flattering them. They try to fulfil their desire through flattering. Usually, the individual who lacks the capability or cannot show their desired standards through performance; adopts flattering as a means of short-cuts. Some under-command flatters their superior so that they may get good performance reports, influence their promotions or get their posting in their desired place or appointment.

**Figure-5: Indicators of Flattering**



Source: Author’s self-construct

Many complain that the present generation is different. In fact, the generations are always different! This has surprisingly been reflected by Socrates in 470 B.C. According to Socrates- “The children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannise their teachers.”<sup>13</sup> Even in the United States Army, the young officers and men come from a society whose values do

not support the rigidly conceived military discipline. They are attuned to questions concerning morality and war. More or less, a similar scenario prevails in the Bangladesh Army today. The young officers and men of the Bangladesh Army want to come out from 'Yes Sir' syndrome. They do not believe in blind loyalty and thus it would be unwise to expect the same from them.

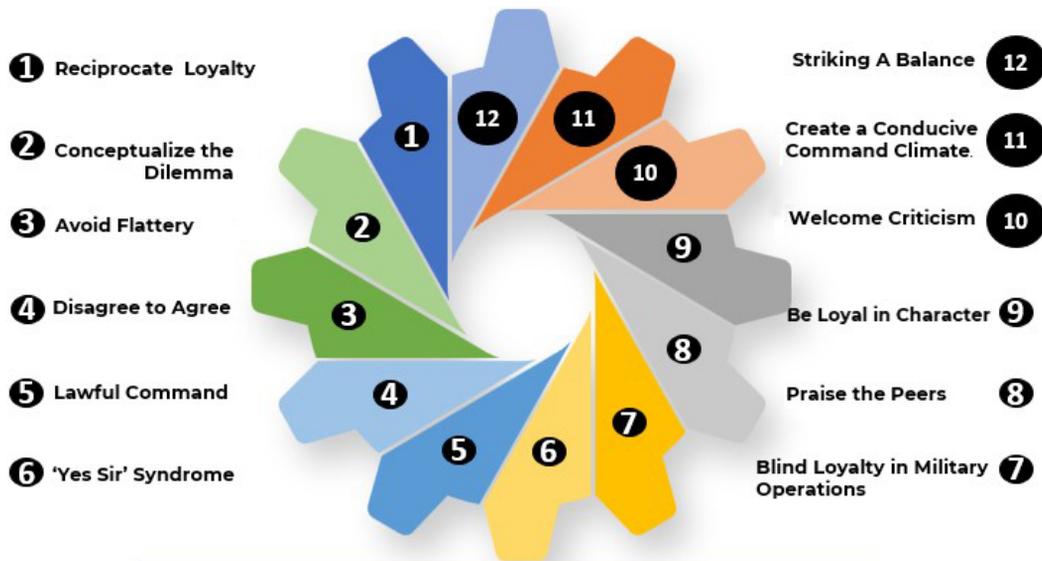
### **How to Deal with the Dilemma to Strike a Balance**

**Reciprocate Loyalty:** Loyalty has two contexts. One is giving loyalty, and the other one is receiving loyalty. As a universal law, when a commander remains loyal to his subordinates, they receive the same without question. In a word, loyalty is reciprocal. Now, the question may arise, being a commander, how to remain loyal to the under command. The single-word answer is- 'trust'. If a commander can inspire trust, he will inspire loyalty. Without trust, he may be able to compel compliance with his orders momentarily, but this will not be the same as loyalty. A commander must build trust in his command relationship. From the subordinates' perspective, they can hardly be disloyal when they have trust in their leaders. Thus, building and maintaining trust is the key to having loyal under the command and establishing a loyal leader-led relationship.

**Conceptualise the Dilemma:** Flattery is generally identified with false praise. In fact, flattery is that art of praising, which aims at magnifying the virtues to the exclusion of the vices. Both flattery and appreciation are related to praising the virtues of others. Both originate from the same motive of pleasing others' self-respect. Flattery is primarily vitiated by the tinge of falsehood and mainly aimed at achieving some selfish motive. Appreciation is based on truth and is without any selfish motive. In practical life, flattery and appreciation do overlap each other. Therefore, it is impossible to accurately assess and measure the amount of praise a person deserves. An opinion starting as appreciation may easily drift into flattery. So, it is the individual art and maturity to differentiate and act accordingly.

**Avoid Flattery:** One of the primary options to avoid flattery is to ignore it. This is the best way when subordinates flatter. Let the subordinates express their feeling in their own way. When they finish, the commander must make them understand that flattery does not influence his decision. This will discourage the under command from flattering in future. Another effective method to avoid flattery is to change the subject. Whenever commanders receive an excessive compliment, they should start discussing something different. This is a silent signal to the subordinates that they do not welcome the flattering comments.

**Disagree to Agree:** Loyal soldiers should give an honest opinion, whether someone likes it or not. However, the debate ends once the commander has made a decision. Loyal under-command gets behind that decision even if they disagree. They put aside their feelings and actively try to implement every decision already made instead of a non-cooperation movement. As Colin Powell said- "Loyalty means executing the decision as if it were your own."<sup>14</sup> Disagreement is not disloyalty. A competent leader must be able to differentiate between the two.

**Figure-6: How to Deal with Dilemma**

Source: Author's self-construct

**Lawful Command:** Loyal to orders and instructions is a fundamental military virtue, without which an Army is merely a mob. However, even in the military, loyalty may not always be absolute. Orders must be based on law and morality. Under command may disobey illegal or immoral orders. According to Huntington, 'Military man does not argue, hesitate or substitute his views when he receives a legal order from an authorised superior. He obeys instantly. He is judged by promptness, not by the outcome of the action. Here, two critical words are 'legal orders' and 'authorised superior'. Without legal order, subordinates may not be as loyal as expected. Similarly, the order has to be from an authorised superior. Otherwise, there remains scope for confusion among the under command. As per the *Manual of Bangladesh Military Laws* (MBML), an unlawful order may not be executed. Such an order can result in the criminal prosecution of the one who obeys it.<sup>15</sup> Obeying unlawful orders blindly out of a false sense of loyalty to the one giving those orders is unexpected in every aspect.

**'Yes Sir' Syndrome:** According to human psychology, people love to listen to 'yes'. The personnel of the Bangladesh Army is no exception to it. Superiors always want to hear yes from under command. However, this tendency may not allow for a conducive working environment. It is harmful to be surrounded by 'yes men.' Rather, it is always better to have an under command who speaks to the power. Always expecting 'yes sir' from subordinates may force them to develop 'malicious loyalty.'<sup>16</sup> There would be disagreement and professional arguments. Commanders should have a positive attitude to learn from their subordinates. Even their mistakes and failures can be sources of new learning. When under command find their superiors trust them

despite some failures, the loyalty state improves. Nevertheless, subordinates must abide by the order and instruction once something is decided upon.

**Blind Loyalty in Military Operation:** Interestingly, blind loyalty can also be appreciated. To get an insight into it, let us identify the situations in which an under command needs to be blindly loyal. In active military operations, orders are passed where the question of life or death depends on instant obedience. For example, while patrolling in Chattogram Hill Tracts (CHT), the commander identifies that they are in a threat-prone ambush site and orders the scouts to open fire. In such a situation, blind loyalty may be an obligation for the scouts. However, it depends on time and space. For instance, the Muktiyodhas were treated as traitors in 1971 by the Pakistani military junta. Nevertheless, they have shown absolute loyalty to the motherland. These are instances where unthinking, instant obedience is necessary to preserve lives.

**Praise the Peers:** Encouraging the under command to keep their morale high- is a command responsibility. Commanders should let subordinates know how much their efforts benefit the Bangladesh Army. In doing so, it is not wise to flatter them individually or as a group. Instead, they should be given a fact-based picture of what they did and how it matters for the development of the Bangladesh Army as a whole. For example, telling the under command, “You did excellent in the brigade level competition,” will not have as lasting an impact as saying, “We made an outstanding effort. We shall improve our efforts for the upcoming division level competition”. The former statement is generic and the latter provides under-command with a clear understanding of their achievement and future action. Thus, commanders at all levels should praise to recognise the performance of their under-command. Offering praise will also reinforce the under command's sense of self-esteem. This will drive them to create a sense of personal satisfaction and awareness that their efforts have a tangible impact on achieving the organisation’s goal.

**Be Loyal in Character:** Loyalty not only in deed but also in character is expected from a soldier. It means absolute obedience that does not question the results of the order nor its reasons. It demands no less heroic virtue than doe’s loyalty indeed. Loyalty in character is unbreakable, a loyalty that knows no ifs or buts. If an authorised superior has issued a legal and moral order, it should be followed by heart.

**Welcome Criticism:** Leaders should not fear criticism but take it as a chance to learn more about themselves. Criticism can help someone to improve his leadership style and avoid making the same mistake again. Leaders who are loyal to their soldiers earn the same from them. Both leaders and led should pay respect and tolerance to each other and commit unswerving to doing what is morally and legally correct. Thus, the subordinates should not hesitate to voice their opinions for shared interest in a group setting. If the situation does not permit, he should give opinions in private. For example, when the commanding officer gives his opinions in a darbar, even if it goes, someone's interest or belief should not react. Loyal soldiers share their opinions, even when they know they may not be initially appreciated.

**Create a Conducive Command Climate:** An effective command climate is crucial for a healthy relationship between the leader and led. Commanders must be committed to the under command to promote a positive environment. It builds a positive relationship if commanders care for their subordinates' requirements and well-being and show genuine concern. Loyalty cannot be compelled; it is inspired. As a leader, one should earn respect, build trust and maintain integrity. Because loyalty is inspired by trust and the personal integrity and character of the leader inspire trust. And that makes a conducive command climate.

## Conclusion

Loyalty is the pride of the Bangladesh Army. It forms the basis of leaders-led relations. As there are very hairline differences between appreciation, compliments, praise, encouragement and flattering, sometimes an individual may get confused. However, a competent leader must understand these. Following the chain of command, welcoming criticism and remaining loyal in character is the key to diminishing the dilemma. Again, blind loyalty is also not expected. One may have disagreements but should express their opinion. They should generate discussions and praise their peers. In this regard, 'knowing the art of reciprocation' and 'inspiring loyalty' act as a magic wand. Inter Services Selection Board (ISSB) and other recruiting agencies must ensure that individuals entering the army have the required values to remain loyal to their superiors and subordinates. And this will lead the Bangladesh Army to flourish as a more professional Army at home and abroad.

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### Brief Biography



**Colonel Muhammad Nurul Amin, BSP, afwc, psc** was commissioned on 08 June 1999 into the corps of Artillery as a proud gunner. He served in many diversified and coveted appointments in his career. This includes five years of service in CHT under operation UTTARAN & DABANAL and two times service in RAB as Operations Officer and Company Commander. He was the Zone Comd of Laxmichari Zone while Commanding a Field Regiment. In staff appointments, he had an opportunity to serve as BM; 66 Arty Bde, GSO-2 (Fmn Trg & Eval); ARTDOC and Deputy President, ISSB. He is privileged to be a proud member of the “Blue Helmet Family” thrice in the capacity of Contingent Member, Military Observer and Staff Officer in FHQ. Besides all mandatory courses, he took a CSRT course in the USA and is a MIRPURIAN. He achieved the Gallantry Award BSP by leading a successful operation at CHT. At present the author is serving as Director, Research and Academics, National Defence College.

## **Preserving Heritage or Embracing Evolution: The Dilemma of Tradition and Change in Military Organisation**

Lieutenant Colonel Abu Md Shahnoor Shawon, psc, Infantry

### ***Abstract***

*Military organisations, exemplified by the Bangladesh Army, grapple with the perennial dilemma of preserving cherished traditions while adapting to the demands of modern warfare. This essay explores this tension through historical case studies, such as the fall of French knights at Agincourt and the success of Germany's blitzkrieg as well as contemporary debates, arguing that the most resilient militaries strike a balance between heritage and evolution. Traditions, such as Bangladesh's Liberation War legacy foster identity and cohesion; however, rigid adherence risks obsolescence as evidenced by historical failures. Conversely, unchecked modernisation can erode cultural foundations. Drawing on different types of change management models, the essay proposes strategies for the Bangladesh Army to integrate its storied past with innovations like cyber capabilities and ethical technology. By honouring heritage as a foundation for progress, militaries can navigate emerging threats while maintaining societal relevance and operational strength, ensuring survival in an era of rapid strategic and technological change.*

**Keywords:** *Military Tradition, Military Modernisation, Bangladesh Army, Change Management, Heritage and Identity, Military Innovation, Organisational Change.*

### **Introduction**

Military organisations stand at the junctions between tradition and transformation, torn between preserving time-tested doctrines and adapting to the relentless march of technological and strategic change. The annals of military history are a tapestry woven with threads of valour, strategy and adaptation. However, they are equally stained with the rigidity of tradition that has, at times, spelt doom for even the mightiest of forces. The dilemma of whether to conserve institutional heritage or evolve in response to new challenges remains one of the most pressing debates in military policy today. As the famous historian Liddell Hart stated, "The only thing harder than getting a new idea into the military mind is getting an old one out".<sup>1</sup> This statement implies that bringing change in the military is also daunting like any other organisation. From the ancient time of the Greek phalanxes to the drone-integrated battlefields of the 21<sup>st</sup> century, the challenge remained the same. Militaries of all time and ages have struggled with the dilemma between heritage that defines their identity or to embrace the evolution demanded by an ever-changing world. This tension is not purely academic, it is a crucible in which the fate of nations has been forged. Bangladesh Army is no exception in this struggle. Like any other military, members of the Bangladesh defence forces frequently debate over the tension between tradition and change. They often assess leaders based on their infrastructural reforms. Paradoxically, tangible changes like infrastructure and welfare enhancements garner praise, while intrinsic shifts in doctrine or culture receive less recognition. This highlights a preference for material over moral progress.

This tension is not new, as history is replete with numerous examples of armies that triumphed by embracing innovation and others that faltered due to rigid adherence to the past. Consider the fall of the French knights at Agincourt in 1415, where the weight of chivalric tradition met the piercing reality of English longbows,<sup>2</sup> or the German Wehrmacht's blitzkrieg in 1940, which shattered the static doctrines of the Maginot Line. The success of German Blitzkrieg and U.S. network-centric warfare underscores that military organisations must balance tradition with innovation to avoid obsolescence. Today's militaries face the challenge of integrating cyber warfare, Artificial Intelligence (AI), and unmanned systems, which are as foreign to traditional tactics as longbows were to knights. Should the Bangladesh Army preserve its rituals or embrace a tech-driven future? Echoing Agincourt and the Maginot Line, this essay argues that resilient militaries treat heritage as a constant foundation and adopt evolution for survival. Misjudging this balance in war's crucible costs lives, not just ink.

This essay will examine the delicate balance between preserving military heritage and embracing necessary evolution. It will explore relevant historical case studies and analyse contemporary debates. Finally, this essay will outline future implications, emphasising strategic approaches for military organisations to harmonise heritage with innovation.

### **The Role and Importance of Tradition in the Military**

Legend has it that during the 19th century, a Russian officer ordered a sentry post established in a remote corner of a military base to guard a sapling he'd planted, fearing it might be trampled. Years later, long after the officer had left and the tree had grown tall, soldiers continued to man the post, saluting the now-sturdy oak without a clue why! Military organisations often face this conundrum, clinging to traditions like that forgotten sentry duty or embracing the evolution needed to stay relevant. It's not exclusively about Russia; it aligns with every military and has been echoed in military lore discussions.<sup>3</sup> The following paragraphs will define Military tradition and outline its importance.

### **Definition of Military Tradition**

A well-accepted academic definition of "military tradition" can be derived from scholarly works that explore the interplay of history, culture and organisational identity in armed forces. One such definition comes from Allan R. Millett and Williamson Murray, prominent military historians, who describe military tradition as "the accumulated practices, values, and institutional memory that shape a military's identity and operational behaviour, often rooted in historical experience and transmitted across generations." This is articulated in their influential work, *Military Effectiveness* (1988), where they analyse how traditions influence military performance across different nations and eras.<sup>4</sup> Military training at Bangladesh Military Academy (BMA) and other institutions emphasises discipline, endurance and professionalism, following the motto "Ever High is My Head" (চির উন্নত মম শির)<sup>5</sup> Some good examples of military tradition followed in the Bangladesh Military are:-

- a. Regimental System and esprit-de-corps.
- b. Guard of Honour and Military Protocol.
- c. Regimental Mess Culture.
- d. Passing out Parade at BMA.
- e. The Legacy of the 1971 Liberation War.
- f. The Army Flag Raising and Unit Anniversary Celebrations.
- g. Military Band and Ceremonial Parades.
- h. Gallantry Awards and Recognition.

### **Importance of Military Tradition**

The Bangladesh defence forces place significant importance on tradition, a cornerstone for discipline, unity, and national pride. Rooted in the 1971 Liberation War legacy, these traditions emphasise sacrifice, patriotism and loyalty to the nation. Ceremonial practices such as the Victory Day parade, the observance of Armed Forces Day and the inclusion of historical battle honours in regimental insignia reinforce a sense of identity and continuity.<sup>6</sup> Additionally, military training institutions like the BMA instil traditional values alongside modern warfare strategies, ensuring that heritage remains integral to operational ethos.<sup>7</sup> These traditions not only honour past heroes but also inspire current and future personnel to uphold the military's enduring principles.

a. **Fostering Identity and Cohesion:** Military tradition forms the bedrock of collective identity and cohesion, uniting personnel through a shared historical narrative. Allan R. Millett and Williamson Murray assert that traditions encompassing practices, values, and institutional memory imbue militaries with a “*sense of purpose and legitimacy*,” which strengthens unit solidarity and discipline.<sup>8</sup> For example, A strong sense of identity and cohesion is essential for any military force, and the Bangladesh military has effectively nurtured this through its regimental system and historical legacy. One notable example is the East Bengal Regiment (EBR), the oldest and largest infantry regiment of the Bangladesh Army. The regiment played a decisive role in the Liberation War of 1971, with many of its battalions defecting from the Pakistan Army to join the Mukti Bahini.<sup>9</sup>

b. **Enhancing Morale and Resilience:** Beyond organisational identity, military tradition bolsters morale and resilience. It offers psychological anchors that sustain soldiers in the face of adversity. John Keegan emphasises the role of rituals and symbols, such as the British Army's regimental colours, which “link the soldier to his comrades and his past,” fortifying resolve during battle.<sup>10</sup> These tangible connections to history, whether through ceremonies, insignia, or storied legacies, provide a sense of pride and belonging that can prove decisive in combat. The Samurai's Bushido code with its emphasis on honour and loyalty, demonstrates how tradition can underpin a force's endurance, even as external pressures demand adaptation.<sup>11</sup>

c. **Provides Purpose and Legitimacy:** Traditions, defined as “accumulated practices, values and institutional memory,” imbue militaries with a sense of purpose and legitimacy, reinforcing discipline and justifying their role within society. This moral grounding enhances soldiers’ commitment. The U.S. Marine Corps’ emphasis on its founding in 1775 and mottos like “Semper Fidelis” instil a profound sense of duty, evident in their tenacity during battles like Iwo Jima in 1945.<sup>12</sup>

d. **Enhances Operational Success:** Tradition can provide a framework of proven practices that, when adopted, bolster modern operational effectiveness, blending historical strengths with contemporary needs. The Prussian tradition of meticulous drill and manoeuvre, inherited by the Wehrmacht, enabled the blitzkrieg’s rapid, coordinated assaults in 1940, overwhelming static French defences.

e. **Cultivates Loyalty and Trust:** By rooting forces in a proud lineage, tradition fosters loyalty and trust among soldiers and between ranks, creating a reliable foundation for performance under pressure. The French Foreign Legion’s tradition of “*Legio Patria Nostra*” (The Legion is Our Homeland) has forged an unbreakable bond among recruits from diverse backgrounds, evident in their cohesion during the 1863 Battle of Camerone.

### **The Necessity of Change in the Military**

According to Sun Tzu (544-496 BC), “In war, there are no fixed principles. Flexibility, adaptation, and innovation are the keys to victory.”<sup>13</sup> Alongside Sun Tzu, prominent military scholars and leaders such as General Dwight D. Eisenhower (1890-1969), General Norman Schwarzkopf (1934-2012) and John F. Kennedy (1917-63), the 35<sup>th</sup> President of the United States, have all been strong advocates for the necessity of change within military institutions. These figures highlighted the need for adaptation and innovation amid evolving warfare and global security dynamics. The Bangladesh Army’s recent focus on modernisation, strategic flexibility, technology and human capital reflects its commitment to meeting contemporary security challenges.

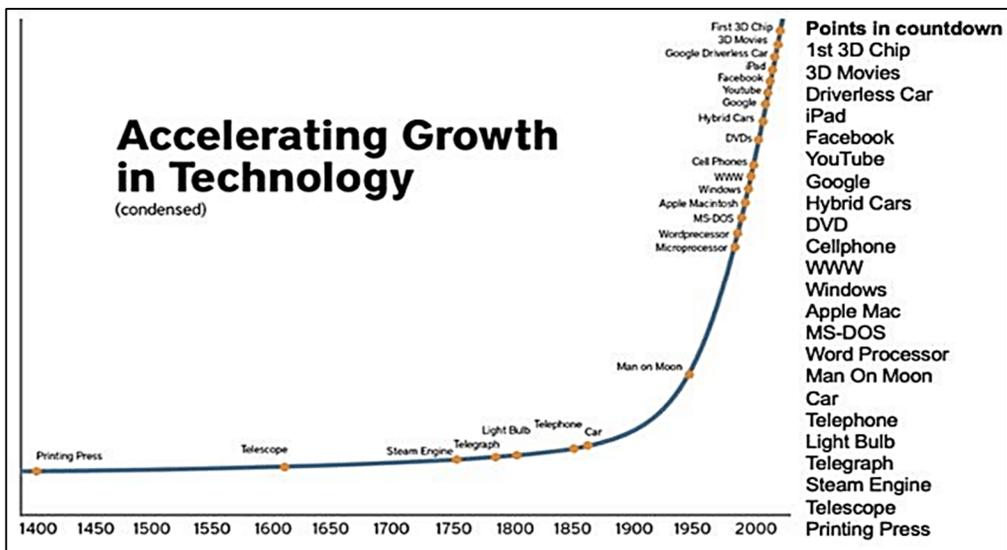
a. **Adapting to Modern Warfare:** Modern warfare demands integrating cyber capabilities, unmanned systems and precision munitions while sustaining conventional readiness. Hybrid and information warfare require agility, rapid decision-making and intelligence-driven operations. Militaries must prioritise interoperability across joint and allied forces in multi-domain conflicts, with success depending on strong leadership, training, and resilience. Sensing the necessity, the Bangladesh Army initiated Forces Goal 2030 to modernise the military forces. This comprehensive plan intends to expand forces, restructure military organisations and acquire cutting-edge equipment to effectively address today’s security challenges.<sup>14</sup>

b. **Enhancing Tactical and Strategic Flexibility:** Military organisations must embrace change to adapt and quickly respond to changing battlefields. Modern warfare necessitates both creative and conventional approaches to maintain operational superiority in the face

of cyber operations and hybrid threats. However, maintaining legacy guarantees that fundamental principles, like discipline and unity within the unit.<sup>15</sup> For example, combining cutting-edge technologies like drones with traditional command structures can maximise decision-making while honouring established hierarchies.<sup>16</sup> Armed forces can create flexible frameworks that respect their history while addressing modern issues by carefully balancing tradition and evolution.<sup>17</sup>

c. **Incorporating Technological Advancements:** The graph in Figure-1 shows how technological advancements have had exponential growth in recent decades. The printing press and other early inventions date back centuries, but contemporary innovations like smartphones and AI are appearing one after the other with growing speed. Similarly, this trend has also impacted the military. Change in the military is occurring more quickly than before. Military success increasingly depends on integrating cutting-edge technologies. The Bangladesh Army has bolstered its artillery capabilities with modern equipment like the Turkish rocket systems, enhancing firepower and battlefield flexibility. Similarly, many other platforms are acquired to keep pace with technological advancements.<sup>18</sup>

**Figure-1: Accelerating Growth in Technology Over the Years, Present Era (PE)**



Source: <https://www.researchgate.net/publication/353714693> A Technology Countdown Approach to Historical Timelines

d. **Training and Human Capital Development:** Modern military forces require highly skilled personnel capable of handling sophisticated systems. The Bangladesh Army has prioritised advanced training, sending personnel to countries like China, Turkey, Russia, USA, Canada, Pakistan and India. This international exposure enhances the expertise and readiness of its troops. Over the past decades, there has been an unprecedented rise in the

organisational structure of the Bangladesh Army. The raising of many military outfits, such as divisions, brigades and units are a remarkable addition to meet the Forces Goal 2030.<sup>19</sup>

e. **Responding to Emerging Security Threats:** Beyond traditional warfare, militaries must address non-conventional threats such as cyberattacks and terrorist attacks. The Bangladesh Armed Forces recognise the importance of integrating AI to bolster national security. Implementing AI-driven systems can enhance threat detection and response capabilities, positioning the military to counteract modern challenges effectively. The threat of biological or digital warfare from any country is a serious reality in today's interconnected world. Therefore, developing countries like Bangladesh should be proactively prepared to maintain resilience and national security.<sup>20</sup>

f. **Balancing Tradition with Innovation:** Maintaining military traditions promotes solidarity and morale, but it should be kept in mind that being overly strict can impede advancement. Bangladesh Army should adopt cutting-edge technologies and contemporary equipment. At the same time, it should uphold fundamental principles and traditions. In that way, Bangladesh's Army can strike a balance between honouring its rich history and welcoming innovation. This strategy makes sure the force is resilient and forward-thinking.

### **Examining the Dichotomy of Tradition and Evolution in Military Organisation: Insights from Historical Case Studies**

The Roman Army thrived for centuries because of its ability to adapt, integrate new weapons, tactics, and foreign soldiers into its ranks. Yet, its eventual decline was partly due to stagnation, as it failed to keep pace with the mobility and flexibility of Gothic and Hunnic warriors.<sup>21</sup> Similarly, in the 19th century, the General Staff system was a mark of military efficiency. However, it turned into a liability when the strict operational planning of the Prussian General Staff system clashed with the chaotic realities of industrialised warfare during World War I.<sup>22</sup> On the contrary, the U.S. military's post-Vietnam reforms emphasised manoeuvre warfare and joint operations, paving the way for its overwhelming success in the Gulf War.<sup>23</sup> These examples illustrate a recurring theme: Militaries that resist change frequently become obsolete, those that strike a balance between tradition and modernity typically win. The following paragraphs will portray some of the distinct historical case studies.

a. **Japan's Military Crossroads: Samurai Swords VS. Steamships (1868):** The Samurai's adherence to Bushido, emphasising honour, loyalty and sword-based combat, defined Japan's military tradition. However, it left Japan's military unprepared for modern threats. Commodore Perry's arrival in 1853 with steam-powered gunboats starkly revealed the obsolescence of these methods, forcing Japan to confront the urgent need for military modernisation. The subsequent Meiji Restoration (1868) marked a radical military transformation as Japan adopted Western military practices, modern firearms and industrialised warfare.<sup>24</sup> This shift allowed Japan to rise as a global military power,

evidenced by its victory over Russia in the Russo-Japanese War (1904-1905), which is illustrated in Figure-2. While the Samurai ethos persisted in Japanese military culture, the ability to evolve ensured Japan’s survival and dominance in the early 20<sup>th</sup> century.

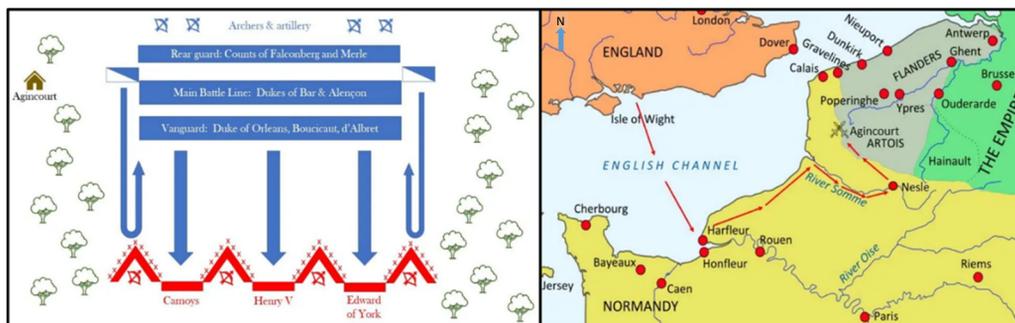
**Figure-2: Japan’s Military Transformation from 1600 to 1905**



Source: Author’s self-construct

b. **Chivalry’s Fall at Agincourt: Tradition Overwhelmed by Innovation:** Take, for instance, the Battle of Agincourt, 25 October, 1415, a clash that epitomises the peril of unyielding adherence to heritage. The French army, steeped in the medieval cult of knighthood, marched onto the muddy fields of northern France with heavily armoured cavalry and a disdain for the lowly archer.<sup>25</sup> Their identity was rooted in the glory of mounted charges, a tradition that had once dominated European warfare. Yet, King Henry V’s (1386-1422) English forces, outnumbered but agile, wielded the longbow, a weapon dismissed by the French as uncouth and unworthy of noble combat.<sup>26</sup> The result was catastrophic: thousands of French knights perished, mired in mud and pierced by arrows, their heralded tradition rendered obsolete by a foe willing to evolve. Figure-3 shows the long route taken by King Henry (on the left) and the battle formation (on the right). Agincourt stands as a haunting reminder that heritage, while a source of pride and cohesion, can bind militaries to the imperatives of innovation.

**Figure 3: Agincourt Campaign Map Created by Paul Watts Based on a Map of Northern France and Flanders in 1383 by Hel-Hama**



Source: <https://medievalhistory.info/the-battle-of-agincourt/>

c. **Blitzkrieg Unleashed: Germany’s Fusion of Evolution and Prussian Legacy:** In May 1940, Germany’s blitzkrieg transformed warfare by integrating tanks, aircraft, and

infantry into a swift, coordinated force. This deliberate departure from the trench-bound stagnation of World War I trapped both Allied and Central Powers in obsolete tactics. Meanwhile, France again relied on static defence and clung to a marvel of engineering born from the trauma of 1914-1918, the Maginot Line.<sup>27</sup> The German advance bypassed this monument in mere days, proving that evolution can topple even the most entrenched traditions. Therefore, the entire French preparation proved disastrous against Germany's blitzkrieg in 1940 (see Figure 4).<sup>28</sup> Yet, the blitzkrieg's success was not without its nod to the past. The Prussian legacy of discipline and manoeuvre still pulsed through the Wehrmacht's veins, suggesting that the most effective militaries blend heritage with progress together.

**Figure-4: German Army Bypassing the Maginot Line**



Source: [https://www.reddit.com/r/mapporcirclejerk/comments/144bo0r/why didn't they build the maginot line next to/#light box](https://www.reddit.com/r/mapporcirclejerk/comments/144bo0r/why_didn_t_they_build_the_maginot_line_next_to/#light_box)

**d. The Strategic Dilemma: Counterinsurgency, Conventional War and Future Threats:** Modern military conflicts also illustrate this dilemma. The U.S. military's counterinsurgency (COIN) strategy in Iraq and Afghanistan represents a shift from conventional warfare to asymmetric combat.<sup>29</sup> Traditional doctrines emphasising large-scale battles had to be replaced with localised engagement, cultural understanding, and intelligence-driven operations. Yet, critics argue that abandoning conventional military structure and focusing too much on counterinsurgency weakened the U.S. Army's preparedness for near-peer conflicts, such as potential confrontations with China or Russia.<sup>30</sup> This debate continues as militaries globally attempt to balance heritage and adaptability in an era of cyber warfare, AI and autonomous weapons.

## Finding Balance: Honouring Tradition While Embracing Change through Some Accepted Models

The BMA was first established in 1973 at Cumilla Cantonment and later relocated to Bhatiary, Chattogram. This glorious institution exemplifies the synthesis of tradition and modernisation. During its process of expansion to modernise itself, the BMA required a new entrance reflecting its modern identity. The original old black main gate was a symbol of heritage. Therefore, BMA designed a modern gate, keeping the old gate inside it as shown in Picture-1. This deliberate fusion preserved historical significance while embracing progressive change, ensuring the academy's evolving identity remained anchored in its past.

**Picture-1: Main (Rail) Gate of Bangladesh Military Academy**



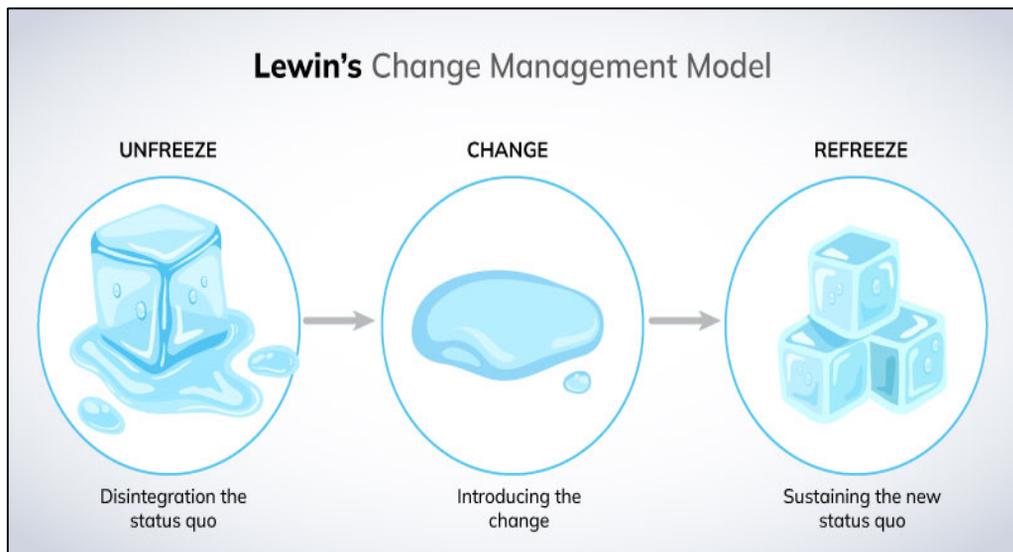
Source: BMA Archive

Scholars have proposed many internationally recognised models to support organisational change. Some of the most prominent models include: Kurt Lewin's (1890-1947) Change Management Model, John Kotter's (b. 1947) 8-Step Change Model, William Bridges (1933-2013) Transition Model: Embracing the Human Element, the ADKAR Model, McKinsey's 7-S Framework and many more. This part of the essay will explore how established frameworks can guide military organisations to honour their heritage while adapting to modern demands. Only the three most relevant models will be analysed.

- a. **Lewin's Change Management Model: A Foundational Approach:** Lewin's Change Management Model offers a classic framework for incorporating change while honouring

customs. The model consists of three stages: unfreeze, change and refreeze, as shown in Figure-5 below. During the unfreezing stage, stakeholders are prepared for change by addressing resistance. This might mean having open dialogues to highlight the necessity of evolution while recognising the value of existing systems. The change phase gradually introduces new practices while ensuring they are in line with core values to maintain continuity and trust. These modifications are ultimately woven into the organisational or cultural fabric through refreezing, which establishes a new equilibrium between innovation and tradition.<sup>31</sup>

**Figure-5: Lewin's Change Management Model**



Source: <https://hrcoursesonline.com/lewins-change-management-model/>

b. **Kotter's 8-Step Process: A Strategic Roadmap:** John Kotter's 8-Step Process for Leading Change offers a comprehensive guide to implementing transformation while respecting established norms. This model is widely studied in the US military. I came across this model for the first time when I did my staff college in CGSC. The process begins with creating a sense of urgency, rallying stakeholders around the need for change without dismissing the importance of tradition. Building a guiding coalition ensures that respected figures, often guardians of tradition, are involved in shaping the vision. Steps like communicating the vision, empowering broad-based action and generating short-term wins help integrate new practices in ways that feel inclusive and respectful of the past. The final steps, consolidating gains and anchoring changes in the culture, ensure that innovations become part of the organisation's identity without erasing its heritage. For instance, a community transitioning to sustainable energy can use Kotter's model to adopt solar technology while maintaining cultural festivals tied to traditional land use.<sup>32</sup> Kotter's 8-step model is shown below in Figure-6.

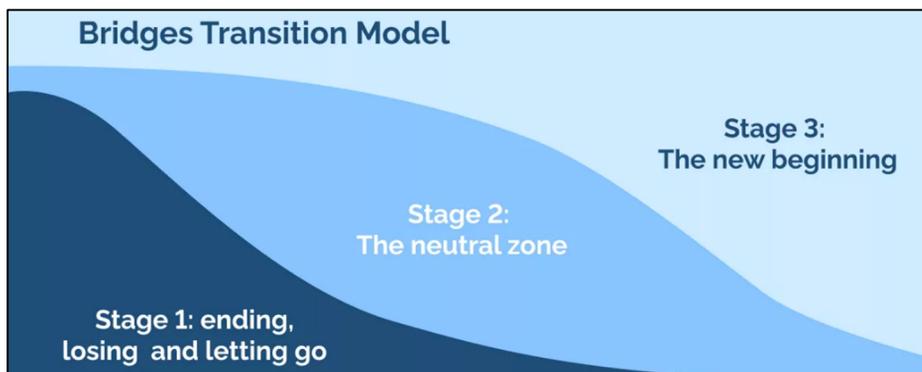
**Figure-6: Kotter’s 8-Step Process**



Source: <https://www.inkstrategy.com/post/the-kotter-model-8-steps-for-managing-change/>

c. **Bridges’ Transition Model: Embracing the Human Element:** William Bridges’ Transition Model emphasises the emotional and psychological dimensions of balancing tradition and change, complementing the structural focus of Lewin and Kotter. The model outlines three phases: ending, neutral zone, and new beginning, as shown in Figure-7. The ending phase involves letting go of old practices, which requires acknowledging their significance to avoid alienation. A religious institution might adopt modern outreach while preserving historical rituals to ease concerns during the unfreezing phase. The neutral zone, a space of uncertainty, fosters experimentation with new ideas tied to familiar values. The new beginning phase integrates innovative practices into an evolved identity, making change feel like a natural extension of tradition. This model is particularly effective in personal transitions, such as individuals blending ancestral customs with modern lifestyles.<sup>33</sup>

**Figure-7: Bridges’ Transition Model**



Source: <https://www.heydaycoaching.com/blog/2016/7/11/william-bridges-transitions-making-sense-of-lifes-changesa-review>

## **Practical Applications Across Contexts of Military Organisation**

The Bangladesh Army's attempts to strike a balance between innovation and tradition can benefit from all of the strategies. Lewin's approach may facilitate the deployment of cyberwarfare technology while maintaining strict training standards. Integrating peacekeeping tactics while maintaining regimental ceremonies could be guided by Kotter's eight-step process. Bridges' methodology may honour family military customs, such as passing down insignias, while assisting soldiers in adjusting to new duties. Success depends on cultural and operational alignment. These models, which emphasise engagement, communication and heritage, can be adapted to the Army's context and taught in capstone courses for young officers.

## **Implications for the Future**

Bangladesh Army, with its glorious legacy of the 1971 Liberation War, should find a balance between customs and its traditions. The Army must incorporate tradition into leadership, training, and community involvement to ensure operational effectiveness. At the same time, it should preserve identity, pride and the national spirit. Some strategies will be outlined in the following paragraphs, where one can see how the advancement with pride, discipline and patriotism can be ensured by integrating modernisation.

### **Preserve Heritage in Modern Training Programs**

The Bangladeshi military should integrate its legendary traditions. Especially traditions which are inherited from the Liberation War of 1971. Those should be integrated into training programs to foster pride and prepare soldiers for contemporary combat. Training modules might combine storytelling sessions about previous conflicts with drone operations or cyber defence simulations. By ensuring that the new generation of soldiers will internalise the values of discipline and sacrifice while learning the skills required for 21st-century warfare.<sup>34</sup>

### **Adopt a Gradual Modernisation Strategy**

The military may implement a gradual modernisation plan. This plan may introduce technologies like digital communication systems or AI-driven logistics. They may be integrated without abruptly discontinuing traditional practice. For example, all infantry units may train in hybrid settings that combine traditional field drills with virtual reality scenarios, allowing soldiers to adjust gradually. This approach will ensure a smooth transition and improve operational readiness. This will also minimise resistance from staff members who value traditional methods by utilising change management principles.<sup>35</sup>

### **Promote Leadership that Balances Tradition and Innovation**

Future military leaders should be equipped to manage the tradition-change dilemma through comprehensive development programs. These could include exposure to global trends like autonomous systems or cooperative multinational exercises, as well as courses on Bangladesh's military history and the philosophy of the Mukti Bahini. Encouraging junior officers to interact

with veterans during overseas training programs ensures cohesive leadership in a changing organisation. This fosters an attitude that embraces the future while paying respect to the past.

### **Strengthen Community Engagement to Preserve Cultural Relevance**

The military should improve ties with the communities it serves to maintain its traditions and align modernisation with social values. Public events that teach young people about the institution's history and foster patriotism include Liberation War reenactments and military history exhibits. At the same time, the military may ask the community for feedback on modernisation plans. This can promote trust and ensure cultural norm compliance. This involvement roots change in public support, bridging legacy and evolution.<sup>36</sup>

### **Prioritise Technology Adoption in an Ethical Way**

The military should incorporate technologies in ways that align with its cultural and ethical framework. Technology use can be guided by clear policies based on the military's dedication to human rights and national sovereignty. The military must ensure that it complements rather than replaces the human element of soldiering as a fundamental traditional value. Training programs must be designed to preserve trust and unity to complement Bangladesh's military objectives and match innovation with its glorious history.

### **Conclusion**

The tension between military tradition and evolution is longstanding. History shows that failure to adapt invites defeat, yet reckless innovation risks disaster. From Samurai to Blitzkrieg to modern counterinsurgency, militaries must balance heritage with progress. As warfare evolves, leaders must avoid being bound by the past or rushing blindly forward. The Bangladesh Army, at this crossroads, must navigate tradition and change to ensure future resilience. Its heritage, rooted in the 1971 Liberation War, fosters identity and cohesion through regimental pride and ceremonies, yet history, from Agincourt's fallen knights to the blitzkrieg's triumph, warns that rigid adherence to the past invites defeat.<sup>37</sup> The Army's modernisation, like Forces Goal 2030, shows a commitment to evolution, but unchecked change risks eroding cultural foundations.<sup>38</sup> This essay argues that blending heritage with innovation, as reflected in the Bangladesh Military Academy's symbolic gate, creates a military that honours its past while embracing the future. This balance is vital for survival in a world of rapid technological and strategic shifts.

Today, the pace of change is faster than ever. Emerging technologies AI, unmanned systems, and hypersonic weapons, are reshaping battlefields in ways that demand organisational adaptation. At the same time, the cultural and psychological foundations of military service discipline, honour, and cohesion remain rooted in tradition. Can armed forces modernise without losing their soul? Should they abandon centuries-old customs to stay relevant, or does tradition itself provide an intangible strength that technology cannot replace? To navigate this dilemma, the Bangladesh Army can adopt strategies like integrating Liberation War stories into cyber training,

phasing in technologies, and fostering leaders who value both the Mukti Bahini ethos and global trends.<sup>39</sup> Models such as Kotter's 8-Step Process or Lewin's Change Management offer frameworks to implement these changes thoughtfully, ensuring traditions are enhanced, rather than hindered, by modernisation.<sup>40</sup> Community engagement and ethical technology use further align progress with societal values, preserving trust and relevance. These steps position the Army to face emerging threats like hybrid warfare while remaining a proud guardian of its legacy.

Ultimately, the choice between tradition and change is not binary but a dynamic synthesis that defines the Bangladesh Army's soul. Theodore Roosevelt's (1858-1919) warning that losing the past's spirit weakens the future resonates here, urging a path where heritage fuels adaptation. By evolving without forsaking its roots, the Army upholds its motto, "Ever High is My Head," standing tall as both a symbol of history and a force for tomorrow. In an era where misjudging this balance risks national security, this commitment ensures the Army's enduring strength and honour.

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### Brief Biography



**Lieutenant Colonel Abu Md Shahnour Shawon, psc, Infantry** was commissioned in the Corps of Infantry on 22 December 2004 with the 51<sup>st</sup> BMA Long Course and received the prestigious Sword of Honour and CAS gold medal. He is a graduate of the National University of Bangladesh and recipient of Kudrat-E-Khuda gold medal. In his illustrious and colourful military career, the officer served in a variety of command, instructor and staff appointments at different levels and organisations. He was the pioneer Commanding Officer of the 66 East Bengal Regiment and previously served in the 32 East Bengal and 16 Bangladesh Infantry Regiment, where he held all key regimental appointments. In addition to his regimental duties, Lieutenant Colonel Shawon has held significant instructional positions, including Instructor Class B at the Tactics Wing of the School of Infantry and Tactics (SI&T) and Platoon/Term Commander at the Bangladesh Military Academy. He also served as a Directing Staff at the Defence Services Command and Staff College (DSCSC), Mirpur. His international experience includes deployments with United Nations peacekeeping missions as a contingent member in MONUSCO in 2011 and as Chief Military Personnel Officer (Chief U-1) at the Force Headquarters of UNMISS in 2021. Academically, he is a graduate of DSCSC, Mirpur and the Command and General Staff College (CGSC), USA. He holds a Master's in Defence Studies from the Bangladesh University of Professionals and a Master of Military Arts and Science in Strategic Studies from CGSC, USA. He is the incumbent Grade-1 Staff Officer in the General Staff Branch (Coordination) at Army Headquarters.

## From Reconnaissance to Warfare: Revolution of Unmanned Aerial System and Strategic Adaptation of Bangladesh Army

Lieutenant Colonel Rownak Azam, psc, G+, Artillery

### **Abstract**

*Unmanned Aerial System (UAS) has become an essential feature of modern conflicts and they are likely to become more important in the future. UASs, commonly known as UAVs, are being considered revolutionary in warfare and extensively used by various state and non-state actors in recent conflicts. UN peacekeeping missions are also using UAVs for its operational purposes. With the paradigm shift in warfare by the UAVs, Bangladesh Army needs to adapt and update itself with the UAS revolution. Recently, Bangladesh Army has been exposed to various non-state actors, both domestically and in UN peacekeeping missions. Acclimatizing UAS to its military doctrine may be a suitable response to this new threat and capacitate Bangladesh Army to efficiently deal with it. In this purview, this paper gives an insight into multifaceted UAS capabilities based on recent conflicts across the world and attempts to identify the adaptive responses of Bangladesh Army to this new threat.*

**Keywords:** *Unmanned Aerial System, Conflict, UN peacekeeping missions, Military doctrine.*

### **Introduction**

War spurs innovation. Recent conflicts across the world reveal a relentless pace of adaptation in warfare. Study of the recent battles dictates that modern warfare is transforming at lightning speed, both technologically and doctrinally. Unmanned Aerial System (UAS) is one of the leading elements of this transformation. UASs, also known as Unmanned Aerial Vehicles (UAVs), are aerial platforms devoid of onboard personnel or passengers. They may be autonomous drones or remotely piloted vehicles (RPVs). Imperial War Museum. Stated that UAVs are capable of flying for long time at a controlled speed and height and have multifaceted role in aviation sector.<sup>1</sup> According to Khan, UAVs have become an increasingly prevalent aspect of contemporary conflicts over the past two decades.<sup>2</sup> If current trends persist, they will likely become even more significant in the future. Some scholars believe that UAV technology has the potential to initiate “unmanned revolution in military affairs,” which would have an impact on military doctrine, organization and force structure. Hasan recognized that UAVs have been considered as revolutionary in military conflicts and global politics due to their combat capability, affordable cost, and compact size.<sup>3</sup> The revolutionary effects of UAVs in recent conflicts are further substantiated by a significant number of experts. *Wall Street Journal* suggests that UAVs are “reshaping battlefields and geopolitics.”<sup>4</sup> Agnes Callamard and James Rogers go even further and assert that the proliferation of drones will soon assist in determining the fate of nations in battlefield.

UAV, though gained attention in recent conflicts, began its journey during the First World War. Imperial War Museum further found that in Vietnam War (1955-1975), it was used for only reconnaissance purpose. However, the multifaceted use of UAV came into being since the War against Terrorism. UAVs were extensively used in recent conflicts i.e. the second Libyan civil war (2019–2020), the Syrian civil war (2011–2021), the Armenia-Azerbaijan conflict (2020), the Russian-Ukraine conflict (2022) and finally, the Iran-Israel conflict (2024). Mukim narrated that UAVs have been employed on UN Peacekeeping Operations and their use has grown considerably as they become increasingly important in supporting Field Missions in the implementation of mission mandates.<sup>5</sup> Khan emphasized that with the paradigm change in warfare, Bangladesh Armed Forces need to adapt and update itself with the UAV revolution.<sup>6</sup> Mukim added that complex operational environment in the United Nation missions suggests integration of UAV for Intelligence, Surveillance and Reconnaissance (ISR) effort, force protection and mission support.

Accordingly, an attempt has been made in this paper to study the use of UAV in recent conflicts across the world. This paper then endeavoured to identify the advantages of UAV in various conflicts and highlight how UAV is taking over warfare. Then it studies the recent examples of countering UAVs across the globe and suggests takeaways for Bangladesh Army.

### **UAV in Recent Conflicts**

Imperial War Museum (2022) traced the origin of UAVs and their use in military back into First World War.<sup>7</sup> During World War I, the United States and Britain developed the first pilotless platforms. However, they were never used in combat during the conflict. Research and development of radio-controlled unmanned aircraft continued during the interwar period. These were used for target practice and training purposes. At this period, they were termed as ‘Drone’. During the Vietnam War, USA used UAVs in various capacities, including reconnaissance, combat decoys and the dissemination of leaflets for psychological operations. Since the War against Terrorism, the use of UAVs has significantly increased. Wuschka, S. (2011) identified that in 1996, the U.S. Secretary of Defence assigned the U.S. Air Force for operating the Predator drone systems for the first time.<sup>8</sup> Since then, use of UAVs in the military conflicts has steadily increased.

**Middle East Conflicts:** UAVs have been extensively employed in the War against Terrorism and subsequent conflicts for reconnaissance, surveillance, and targeted attacks. Recent Middle Eastern conflicts have witnessed significant role played by the UAVs. According to international Medias, in Western Libya military campaign (2019-2020), more than 1,040 drone strikes were recorded in 2019. Ghassan Salamé, Special Representative of the Secretary-General and Head of the United Nations Support Mission in Libya, stated this as “the largest drone war in the world”.<sup>9</sup> The use of UAVs in Syria garnered substantial attention and sparked speculation about their revolutionary potential for contemporary combat. Urcosta, R. B. (2020) reported that using UAVs and electromagnetic spectrum warfare weapons, Russia and Turkey engaged in combat against Syrian opposition groups.<sup>10</sup> Yi added that in Syria, drones were used by all the factions i.e., US, Russian, Israeli, Turkish, and Iranian forces in direct conflicts. Use of UAV has also reported

in Yemen since the US launched attack by UAV against al-Qaeda in 2002. However, many state that UAV marked an evolution, more so than a revolution, in the Nagorno Karabakh conflict.

**Table-1: Summary of UK Air and Drone Strikes in Iraq/ Syria (2014-2018)**

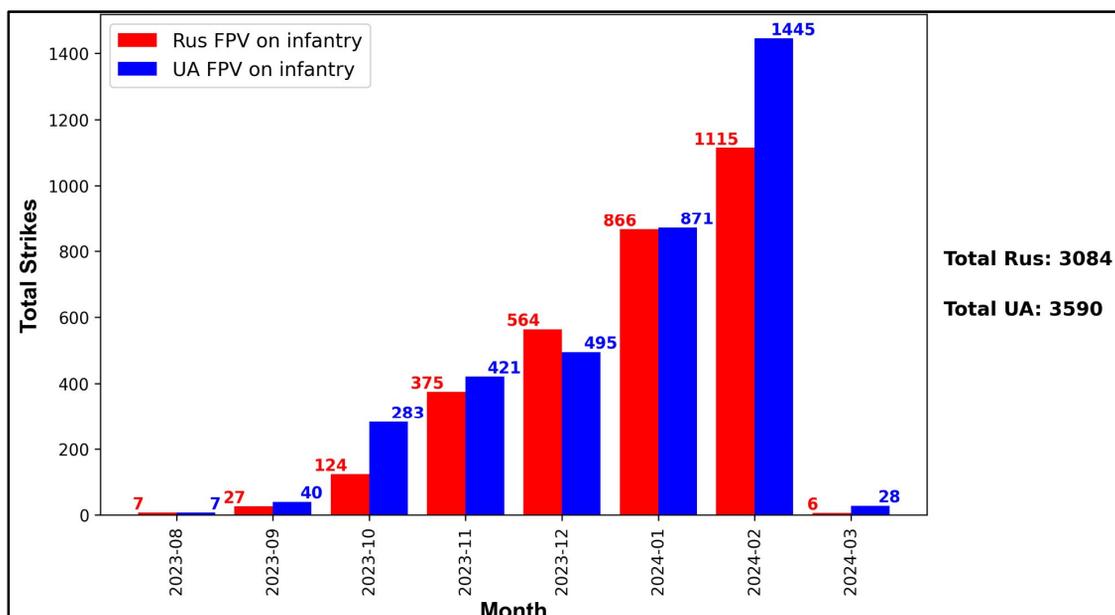
	UK Missions Flown Iraq	UK Missions Flown Syria	Total UK Missions Flown	UK strikes Iraq	UK strikes Syria	Total UK strikes	UK Weapons fired Iraq	UK Weapons fired Syria	Total UK weapons fired
2014 (Oct-Dec)	271	10	281	65	0	65	142	0	142
2015	1,261	272	1,533	402	11	413	707	23	730
2016	1,307	457	1,764	658	68	726	1,466	183	1,649
2017*	599	1,297	1,896*	273	204	477	707	371	1,078
2018	178	1,613	1,791	19	225	244	48	464	512
<b>TOTAL UK</b>	<b>3,616</b>	<b>3,649</b>	<b>7,265</b>	<b>1,417</b>	<b>508</b>	<b>1,925</b>	<b>3,070</b>	<b>1,041</b>	<b>4,111</b>

Source:<https://dronewars.net/2019/02/11/latest-foi-release-from-mod-shows-extent-of-uk-air-and-drone-war-in-syria-2>

**Nagorno Karabakh Conflict:** Azerbaijan’s widespread and efficacious reliance on drones in Nagorno Karabakh Conflict led many scholars to claim that this military confrontation represented a turning point in warfare. Khan highlighted that the 44-day Nagorno- Karabakh war featured a diverse array of air and missile strike and defense platforms. UAVs of various countries like Russia, Turkish, Israeli, and indigenous designs carried out combat flights as well as reconnaissance operations to guide artillery fire.<sup>11</sup> UAV and loitering munition attacks destroyed heavy ground units, including T-72 tanks and advanced S-300 air defenses. Effective employment of drones by Azerbaijan created a tactical sensation, demonstrating the catastrophic impact that UAVs may have on a sizable ground force with inadequate air defense.

**Russia- Ukraine Conflict:** BAJAK opined that UAVs have never been employed as extensively in combat as they are in Ukraine, where both Russians and Ukrainians rely on them to locate enemy targets and direct their artillery attacks. Keating, J. identified in the Oryx blog that, the Turkish-made Bayraktar TB2 combat drone destroyed over a dozen missile systems, six Russian armored vehicles, five artillery systems, and six navy ships in the first few months of the war. UAV has played such a significant role that Keating identified it as the “first war hero of the Russia-Ukraine conflict.”<sup>12</sup> At one point, the tank was crucial. However, drones could now be the more effective weaponry.<sup>13</sup>

**Figure-1: UAV Strike on Infantry in Russia-Ukraine Conflict**



Source: <https://X.com/HartreeFock/status/1763617449818124479>

**Hamas – Israel Conflict:** More than 1,400 people were killed in the October 7 attack on Israel when Hamas seriously damaged the Israel Defense Forces strategically. Drones dropped explosive devices during the Hamas raid, rendering surveillance towers along Israel’s entire border fence with the Gaza Strip inoperable or blind, according to video footage. Narrating the incident, Kaniewski remarked that until now, these structures were considered impenetrable. Propaganda videos from Hamas also depict low-cost drones firing shells at an Israeli tank, even striking a \$3.5 million Merkava 4 tank—one of the most sophisticated tanks in the world. Liran Antebi, an analyst at Israel’s Institute for National Security Studies (INSS), researches the use of drones in international wars. The unexpected and intricate employment of Hamas drones caught her off guard. This demonstrates that despite their archaic technological capabilities, Hamas may be far more lethal in a complex operation than we previously would have acknowledged,” Antebi commented.<sup>14</sup>

**Iran – Israel Conflict:** The proxy war between Iran and Israel intensified into a direct confrontation between the two nations in 2024. Israel killed many high-ranking Iranian officials when it targeted an Iranian consulate annex in Damascus, Syria, on April 1. In retaliation, Iran and its allies used several missiles and over 300 drones to launch attacks within Israel on April 13. According to international medias, Israel allegedly carried out retaliatory strikes in Iran on 19 April, though it did not claim responsibility. However, Iran claimed that they could successfully destroy three UAVs over the airspace of Isfahan.<sup>15</sup>

**UN Peacekeeping Operations:** Mukim stated that recently UN peacekeeping operations are exposed to multifaceted and diverse threats. According to UN official website (peacekeeping.un.org), since 1948 over 3,500 personnel have died while serving in UN peace operations, with 943 fatalities resulted from acts of violence.<sup>16</sup> Between 2013 and 2017, there was a steady rise in peacekeeper fatalities due to violent acts, totaling 195 deaths. These figures exceed a typical or reasonable degree of risk, and they are probably going to increase even farther. Therefore, in order to buck the trend, something must alter. Using UAVs for mission support and peacekeeping forces is one of the most notable changes to UN peacekeeping operations. For the first time ever, UAV was used in UNSMIH at Haiti in 2007. The UN formally introduced UAVs for surveillance in 2013. Since then, UAVs have played a significant role in providing Blue Helmets deployed in peacekeeping missions with real-time imagery, day or night. Mukim revealed that Illegal Armed Groups (IAGs) have used small-scale drones in a few UN missions. There have been numerous reports in MONUSCO in October of the IAGs' extensive and frequent deployment of drones, mostly for reconnaissance purposes. From the standpoint of the UN mission, this suggests a new threat.

**Figure-2: UAVs used by UN Peacekeeping Mission (MONUSCO)**



Source: <https://peacekeeping.un.org>

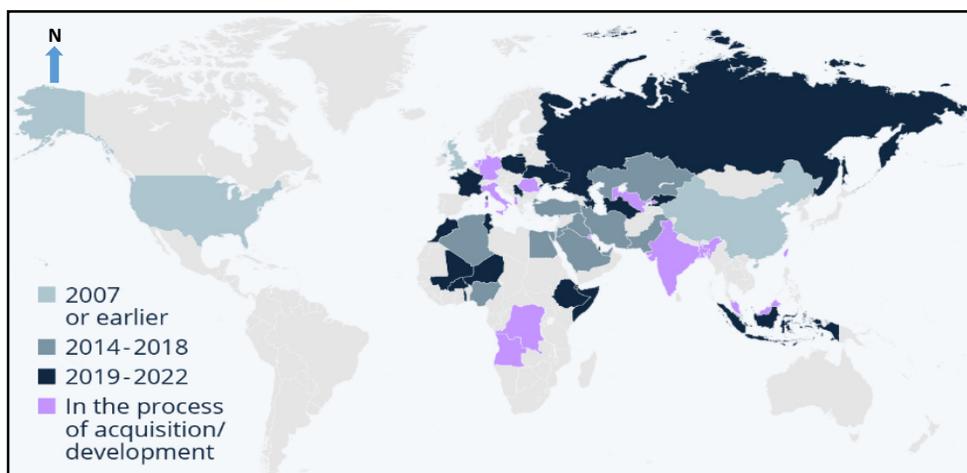
### **Advantages of UAV: How it is Revolutionizing Warfare**

The development of UAVs has allowed a variety of state and non-state actors to conduct military operations in a more efficient and risk-free manner than they previously could.<sup>17</sup> Khan added that recent conflicts throughout the world have demonstrated the multifaceted use of UAVs and their added advantage against traditional weapons. Few of the successful use of UAVs in recent conflicts are stated below:-

**Intelligence, Surveillance and Reconnaissance (ISR):** According to Zenadrone.com, UAVs have been successfully and widely used for ISR purposes. They give ground commanders up-to-date information on enemy movements, topography and target positions. UAVs can capture closer footage without sacrificing the quality of images or movies, unlike satellites and high-altitude aircraft.<sup>18</sup> According to Mittal, Ukrainian combatants in Crimea were aware that a fierce volley of Russian fire would soon follow the sight of Russian drones. UAVs have been widely used for ISR tasks in the recent Russia-Ukraine conflict.<sup>19</sup>

**Combat and Targeted Assassination:** Initially designed for reconnaissance, UAVs have developed a reputation for their effectiveness in combat and targeted assassination. Wuschka, S. found that in 2002, the United States integrated AGM-114 Hellfire missiles onto UAVs for the execution of combat operations. From 2007 to 2011, the number of UAVs performing combat air patrols in Afghanistan and Iraq increased substantially.<sup>20</sup> Following the 9/11 attack, use of Unmanned Combat Aerial Vehicle (UCAV) increased substantially and recent wars are witnessing its revolutionary use. Hecht, E. identified that in Nagorno-Karabakh conflict, Azerbaijan UCAVs successfully destroyed 122 tanks and AFVs, 212 Artillery pieces, 54 Air Defence platforms and 14 radars/ electronic warfare sensors.<sup>21</sup> The ongoing conflict between Russia and Ukraine is showcasing the effectiveness of unmanned combat aerial vehicles in outmaneuvering conventional aircraft. Furthermore, UAV is garnering interest due to its effectiveness in precision strikes. Zachary Cohen asserted assassination of Iranian Major General Qassim Soleimani by U.S. drone strike as one of the glaring examples of it.<sup>22</sup> Moreover, on 12 July 2022, Maher al-Agal, the leader of Islamic State in Syria was killed by US UAV strike in northwestern Syria.<sup>23</sup>

**Figure-3: Countries Operating UCAV for Military Purposes**



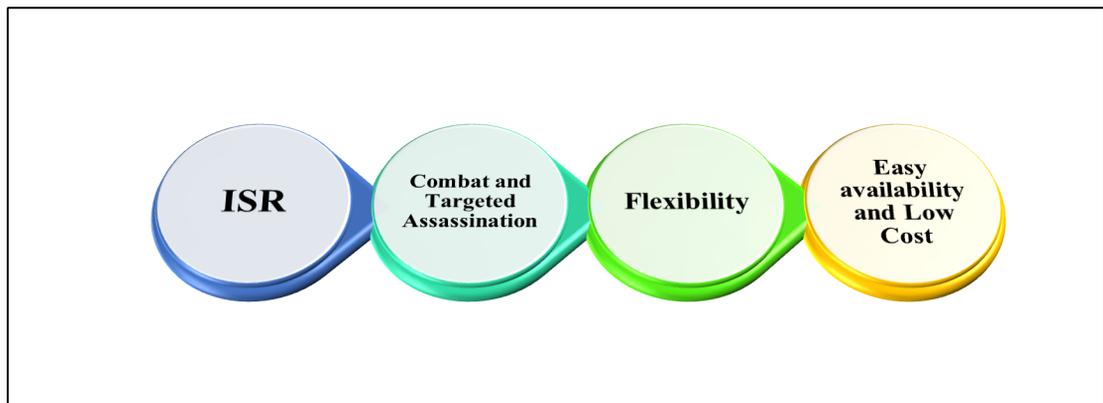
Source: <https://dronewars.com/map>

**Flexibility:** Another advantage of UAV is its unprecedented flexibility. Zenadrone emphasized UAVs multifaceted roles like ISR, combat and combat support, command and control, targeting, geotagging and mapping, logistics, training etc. The concept of air power in

contemporary combat has been revolutionized by UAVs.<sup>24</sup> Compared to jet aircraft, these are smaller, less costly, offer a less stressful environment and, once destroyed, do not endanger the pilots. Regardless of the weather, certain UAVs can remain in the air for up to 30 hours, carrying out repeated activities and precisely scanning the designated region day in and day out.

**Easy Availability and Low-Cost:** Experts indicate that a notable advantage of UAVs is their accessibility and affordability. UAVs are significantly less expensive to procure and maintain than traditional aircraft. American Security Project reports indicate that the MQ-9 Reaper UAV, utilized for attacks in Pakistan, has a unit cost of approximately US \$6.48 million and an operational cost nearing US \$3 million. The F-35 Joint Strike Fighter aircraft has a unit cost of approximately US\$91 million with annual operating expenses nearing US\$5 million and flight costs amounting to \$16,500 per hour. The Russian-Ukrainian conflict has demonstrated an unprecedented utilization of low-cost UAVs. In addition to military UAVs, forces, particularly Ukraine, are employing low-cost commercial UAVs for intelligence, surveillance and reconnaissance (ISR) as well as for use as loitering munitions. Success stories have prompted military think tanks to reevaluate doctrine, tactics, and the necessity for new equipment. Most glaring example probably would be the Hamas October 7 attack on Israel, where they used 35 indigenously developed “Zouari” drones and some other quadcopter drones.<sup>25</sup>

**Figure-4: Advantages of UAV**



Source: Author’s self-construct

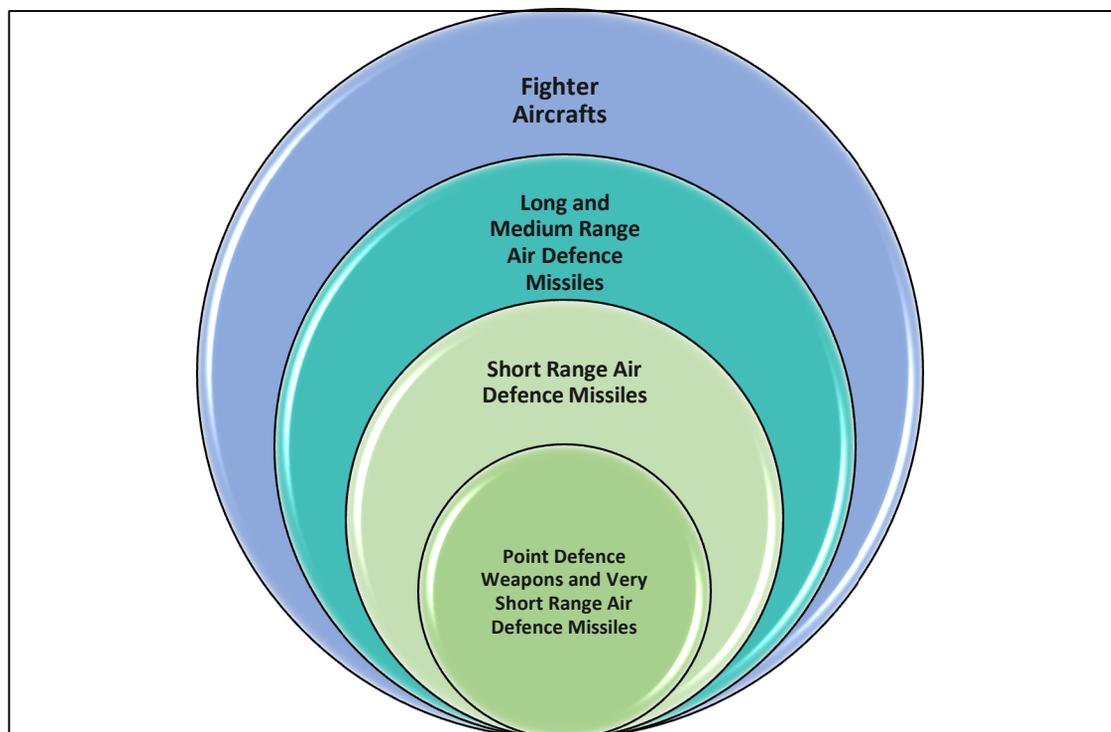
### **Countering UAV: Non-traditional Threat with Adaptive Response**

While UAVs achieved remarkable success in early conflicts, scholars opine that their astounding effectiveness is gradually diminishing over time. UAVs demonstrated significant success in Syria and Libya and they played a transformative role in the Armenia-Azerbaijan conflict. UAVs have maintained their effectiveness in the Russia-Ukraine conflict as well. It is noted by scholars that the narrative surrounding UAV may be reaching its conclusion, suggesting that the advancements in UAV technology represent an evolution rather than a revolution. The Russian military has been engaged in the development of concepts, tactics, techniques and

procedures to counter aerial drones since their involvement in Syria. As the conflict has evolved, these platforms have demonstrated a decline in effectiveness. According to a Ukrainian Air Force pilot interviewed by Foreign Policy magazine, “Turkish TB2s were very useful and important in the very first days of the war, stopping those columns of armored vehicles, but now that the Russians have built up good air defences, they’re almost useless.”<sup>26</sup> Following aspects have positively impacted in defence against UAVs:

**Kinetic Interceptor:** Kinetic Interception refers to engagement accomplished via motion, i.e., missiles or other munitions. Though it was the primary means of countering aerial threats, recent conflicts like Armenia- Azerbaijan and Russia- Ukraine war have proven them to be very costly and ineffective in many cases. For example, the Shahed UAV used by Russians has very few metallic parts and flies low, making it difficult to be detected by radar. While costly S-300 or Buk surface-to-air missile systems are capable of eliminating them, Kyiv would prefer to focus its resources into countering Moscow’s advanced missile systems.<sup>27</sup> Kuzakov found that it intrigued the Ukrainians for using small arms and machine guns to shoot down the low flying UAVs.<sup>28</sup>

**Figure-5: Layers of Kinetic Interceptors Against UAVs**



Source: Author’s self-construct

**Non-Kinetic Interceptor:** Thompson identified that the defensive weapons with the greatest potential for countering UAV threats are predominantly non-kinetic, as opposed to

traditional kinetic interceptors.<sup>29</sup> According to the subject matter experts, three non-kinetic methods are likely to be effective against UAVs in the current decade. Those are discussed below:-

a. **Electronic Jamming:** Jamming is the disruption of transmissions by electronic noise overwhelming receivers in the same frequency. Usually running under command lines from remotely placed pilots, drones also rely on GPS signals to navigate. Target drone is essentially turned off when jamming overpowers these signal streams. According to NATO Secretary General Jens Stoltenberg, in the next days the military alliance will provide hundreds of counter-drone jammers to Ukraine. He judged that these technologies will enable Ukraine to handle the particular threat posed by drones.<sup>30</sup>

b. **High-Power Microwaves:** The guidance systems of intruding UAVs can be disabled using high-power microwaves. Less discriminating than lasers, microwave weapons could be able to disable several drones at once, particularly in a swarm. Designed to stifle UAV functioning at a distance of up to 30 to 35 km, Repellent-1 is such a Russian electronic warfare weapon. Wikipedia reports its usage in Russia-Ukraine War.<sup>31</sup> Only at a distance of not more than 2.5km can “Repellent” suppress UAVs; it is possible to identify small air targets from their control signals at a distance more than 35km.

c. **Laser:** Lasers are similar to electronic jamming and high-power microwaves which can incapacitate non-kinetically by operating at the speed of light. A high-energy laser can incapacitate most UAVs within seconds by elevating their temperature to a threshold level causing system failure. Lasers, unlike jammers and microwaves, are exceedingly accurate; when focused correctly, they kill targeted targets while causing no collateral damage. However, L. Thompson stated lasers to be particularly effective against single target and yet to be proven against swarm of drones.<sup>32</sup> Mehta reported that Israel has developed “Iron Beam” system, which is a complimentary capability to the “Iron Dome defense system.”<sup>33</sup>

**Combined Arms Operation:** Combined arms is a military concept that asks for the combining and synchronization of multiple Battlefield Operating Systems (BOS) to neutralize adversary capabilities. The success of combined arms originates from the balance of each system’s capabilities and limits as well as the synergy of their combined efforts. Recent battles have highlighted the relevance of combined arms warfare in achieving combat success. In Ukraine, particularly in the campaign’s early stages, Russian Land Forces failed to synchronize their weapon systems on the battlefield. Russian air defense systems were not synced with their electronic warfare systems, sensors, or air power. As a result, Russian air defense systems were less effective against Ukrainian UAVs. However, Seth found that, with the progress of the battle, Russian forces effectively integrated their Electronic Warfare systems with the air defence systems and now the number of Ukrainian UAVs’ success have also been greatly reduced.<sup>34</sup>

## **Drones in Asymmetric Warfare – State and Non-State Actors**

UAVs' accessibility and affordability have changed asymmetric warfare. The Second Lebanon War changed UAV fighting and gave them a new role in asymmetric warfare. Antebi stated that this was the first conflict with more unmanned flying hours than human fighter aircraft flight hours and continuous UAV use without situational awareness pauses. Since then, UAVs are being extensively used by the small and weak state and non-state actors.<sup>35</sup> Khan cited Ukraine as a glaring example of how UAV can be a force multiplier for a weaker nation. The Russia-Ukraine conflict exemplifies the asymmetric application of existing technologies that favor the defender through innovative solutions. The utilization of commercially and locally as well as internationally sourced drones is one area that supports the attack and manoeuvre of Ukrainian forces.<sup>36</sup>

Ukrainian kamikaze drones attacked Russian airfields from over 370 kilometers into Russia on August 29, 2023. The strike destroyed two IL-76 heavy cargo planes and damaged two more. The same week, Ukrainian cardboard drones damaged a MiG-29 and four Su-30 jets in Kursk Oblast, Russia. Later, Ukraine apparently destroyed Russian S-400 and S-300 air defense systems in Crimea with small, cheap drones.<sup>37</sup> Small, cheap drones employed in battle lack explosive strength. The recent strikes show that tiny drones can still have asymmetric strategic effects. Stating this, Kaniewski narrated that Hamas attacked Israeli tanks with small, cheap drones in recent conflicts. Thus, state and non-state players in asymmetric battle can benefit from cheaper, smaller drones.<sup>38</sup>

### **Takeaway for Bangladesh**

Bangladesh Armed Forces started its journey through the glorious Liberation War in 1971. Since then it has been known for its high standard of professionalism across the world. Bangladesh is now one of the largest contributors in UN Peacekeeping Missions.<sup>39</sup> Environment in most of the peacekeeping missions is becoming contested as the belligerents are being equipped with modern weapons and attacking the peacekeepers on a larger scale. Hasan highlighted that availability of small UAVs with reconnaissance and suicidal attack capability cannot also be ruled out.<sup>40</sup> Besides, Antebi emphasized that recent conflicts across the world have demonstrated the importance of having Counter UAV capacity by the state actors in an asymmetric war scenario.<sup>41</sup> Hence, Bangladesh Armed Forces must prepare itself against the multifaceted UAV threats, especially by addressing in doctrine, acquiring modern kinetic and non-kinetic means and integrating those for an effective combined arms operation capability.

**Address in Doctrine:** Bangladesh Army may include Counter UAV policy in its doctrine. Various types of UAVs are being used by Bangladesh Army units for surveillance, targeting and training purpose. Besides, members of Bangladesh Army are exposed to environments where the potential adversaries, including in peacekeeping missions, are equipped inexpensive UAVs with multifaceted purpose. The use of UAVs by the non-state criminal organisations also cannot be ruled

out. Khan opined that Bangladesh Army may have an effective counter UAV doctrine, for domestic and for peacekeeping missions, integrated with other services.

**Modernization of Kinetic Interceptor:** Bangladesh Army is equipped with various air defence sensors and platforms for kinetic interception of the aerial threats. However, due to lack of functional and modern sensors, most of the platforms are not sufficiently capable to identify array of UAVs and engage them with kinetic means.<sup>42</sup> Thompson added that recent conflicts like Armenia- Azerbaijan and Russia- Ukraine war have proven age old kinetic interceptors to be very ineffective. Hence, Bangladesh Army should invest on modernizing her air defence platforms for effective interception by kinetic means.

**Integration of Non-kinetic Interceptor:** In recent world, non-kinetic interceptors, such as “Iron Beam” or “Repellant,” appear to provide the most promising capabilities for addressing UAV threats compared to conventional kinetic interceptors. Recent developments suggest that non-kinetic methods such as electronic jamming, high-power microwaves and lasers are becoming increasingly effective in countering UAVs. Seth identified that Russia’s integration of electronic warfare equipment as non-kinetic means with their air defence platforms have substantially increased their success against UAV threats. Hasan opines that Bangladesh Army should also include various electronic warfare platforms as non-kinetic interceptors and integrate those with air defence platforms for effective interception of threat UAVs. Electronic Warfare units should also be equipped with these platforms. Besides, presently held air defence sensors should be modernized so that they can use non-kinetic means to intercept UAVs.

## **Conclusion**

Introduced during the First World War, UAVs have steadily evolved into a fundamental component of contemporary conflicts. If current trends persist, their significance is expected to increase further in the future. Due to their small size, affordable cost and combat capability, UAVs have considered revolutionary in military conflict and world politics. This has already affected military doctrine, organization and force structure. Apart from being used by the state and non-state actors, UAVs are being employed on UN Peacekeeping Operations and their use has grown considerably with time. With the paradigm change in warfare and how they are fought, Bangladesh Army needs to adapt and update itself with the UAV revolution.

The revolution of UAV enables conflicting parties to conduct military operations in a more efficient and less risky way than before. Recent conflicts throughout the world have demonstrated the multifaced use of UAVs and their added advantage against traditional weapons. UAVs have been extensively and successfully used for ISR purpose. However, their effectiveness in combat and targeted assassination gained reputation in recent days. Moreover, UAVs can be used in flexible roles like combat and combat support, command and control, targeting, geotagging and mapping, logistics, training etc. Most importantly, their easy availability and low cost have made

them an important instrument in asymmetric warfare. Ukrainian use of inexpensive UAVs and Hamas attack on Israeli Forces by indigenous drones are glaring example of this.

The revolutionary UAV's effectiveness has waned over time. Some researchers believe that the fairytale of UAVs is coming to an end, and that the revolution of UAVs was simply evolution. Since 2014, the Russian military has aggressively sought to develop concepts, strategies, techniques and procedures to combat aerial drones and as the war between Russia and Ukraine proceeded, UAVs became less effective. Aside from classic kinetic interceptors, non-kinetic interceptors such as electronic jamming, high-power microwaves and lasers have the greatest potential to counter UAV threats. Finally, efficient UAV interception is achieved by proper integration and synchronization with other Battlefield Operating Systems on the battlefield.

Bangladesh Army is exposed to various non-state actors both domestically and in UN Peacekeeping Missions. Operational environment in both the cases are becoming contested as the belligerents are being equipped with modern weapons and capabilities. Besides, recent conflicts across the world have demonstrated the importance of having Counter UAV capacity by the state actors in an asymmetric war scenario. Hence, Bangladesh Army must prepare itself against the multifaceted UAV threats, especially by addressing in doctrine, acquiring modern kinetic and non-kinetic means and integrating those for an effective combined arms operation capability.

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### Brief Biography



**Lieutenant Colonel Rownak Azam, psc, G+, Artillery** was commissioned with 56<sup>th</sup> BMA Long Course in 2007 in the Regiment of Artillery. He served in various capacities of command, staff and instructional appointments. He is a graduate of Defence Services Command and Staff College, Mirpur. He commanded an air defence artillery regiment. He served as a military observer in Ivory Coast under UNOCI. At present, he is serving as the Chief Operations Officer of BANRDB-7 in MONUSCO.

## **The Ethical Dilemmas of Autonomous Warfare: Future Implications and Recommendations**

Major Kazi Ashiqur Rahman, OSP, psc, Air Defence

### **Abstract**

*The rapid advancement of artificial intelligence (AI) in military applications, particularly through autonomous weapon systems (AWS), has ushered in a transformative shift in warfare. While AWS offers operational efficiency, precision, and reduced human casualties, it also presents significant ethical, legal, and strategic dilemmas. The primary concern is whether these systems should have the authority to take human lives without direct human oversight and whether they can adhere to international humanitarian law (IHL) principles, such as distinction, proportionality, and necessity. Ethical challenges arise from AWS's limited moral judgment, the potential for algorithmic biases leading to discriminatory targeting, and the absence of clear accountability mechanisms. Strategic risks include the escalation of conflicts due to the speed and autonomy of AI-controlled systems, the diminishing role of human intervention in warfare and an emerging AI-driven arms race among global powers. Despite ongoing international discussions, the lack of a unified legal framework on AWS regulation poses a significant challenge. Major military powers, including the United States, Russia and China, have resisted binding global regulations, leading to inconsistencies in governance. Addressing these challenges requires a collaborative international mechanism involving states, defense institutions, legal experts, and humanitarian organizations. Essential steps include defining key terms such as "autonomy" and "intelligence" in military AI, ensuring human oversight in AWS deployment, and embedding ethical considerations into system design and operational protocols. Transparent multilateral agreements on arms control, confidence-building measures and shared regulatory frameworks are critical to maintaining security and accountability in an AI-driven military landscape. As autonomous warfare evolves, the global community must strike a balance between technological innovation and ethical responsibility to prevent the unchecked proliferation of AI-driven conflicts.*

**Keywords:** *Autonomous Weapon System, Artificial Intelligence, Machine Learning, Legal Regulations, International Humanitarian Law, Global Governance.*

### **Introduction**

The development of autonomous systems to use in combat is raising valid concerns among ethicists and scholars of warfare and strategy. Autonomy makes systems capable of performing a number of their functions without human supervision, including targeting and engaging with an enemy.<sup>1</sup> Most advanced nations have developed these capabilities to some considerable extent and are investing in research and development to move them forward. Nevertheless, there are a number of issues that could be explored. Especially, the key ethical dilemmas associated with autonomy in warfare; whether the machine or humans are truly responsible for an autonomous machine's actions.

The application of autonomous systems to the battlefield has gained a particularly high profile in recent years, concurrent with advancing robotic, computer, and sensor technologies. This creates multiple pressing and emerging strategic-level narrative dilemmas, including conceptions of warfare with and without autonomous weaponry, the potential implications of employing these technologies in future conflicts and the subtle changes created by the erosion of direct human agency and proximity between the self and the enemy. As the use of these further advances lead closer to fully autonomous systems, the debate has shifted and expanded beyond notions of immediate military utility and current practice to include the ethical, strategic, operational, and legal aspects of such systems.

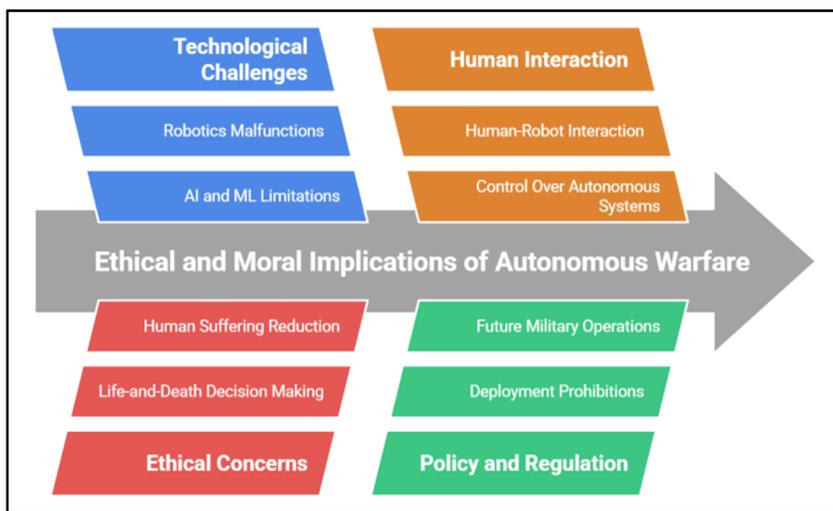
This paper begins by conceptualizing ‘Autonomous Warfare’ followed by the associated ethical dilemmas involved in it. Then this article offers an approach to view the understanding of future implication of autonomous warfare with rele legal and policy considerations within the global context. Finally, as an outcome, the essay will highlight few recommendations to advance our understanding of these increasingly feasible technologies and also to tackle ethical issues and prevent misuse of autonomous military capabilities.

### **The Concept of Autonomous Warfare**

Autonomous warfare is a relatively new concept, referring to a form of combat wherein humans are not directly responsible for the decisions and actions carried out by the given military system. The foundational technologies that have given rise to autonomous systems include artificial intelligence and machine learning, as well as robotics.<sup>2</sup> Weapons with varying degrees of autonomy are currently being developed and tested and are expected to play an important, if somewhat limited, role in future military operations. Rulers, generals and leaders have sought to reduce the human suffering that comes with war for as long as organized violence has been a feature of humanity. Although the vision of liberating the battlefield from risk has contributed to significant ethical and political goodwill that can be mobilized by those who favour them. As of now, weapons capable of making life and death decisions without human input are generally prohibited from being deployed in any combat setting.

Autonomous systems represent the latest stage in the on-going automation process, transferring work from humans to machines, a technological trend that has played out in numerous social domains over the past century.<sup>3</sup> More than a few ethical and moral questions come to mind about the widespread use of autonomous systems for the purpose of waging war. First and foremost, there are concerns about the general concept of an autonomous system and warfare, refining into concerns about programming and potential malfunction and also concerns about the interaction between people and killer robots. While the main point of this essay is the implications associated with future autonomous systems and warfare, it is important to have some context for the concept of autonomous warfare and analyse the moral implications that come with it.

**Figure-1: Implications of Autonomous Warfare**

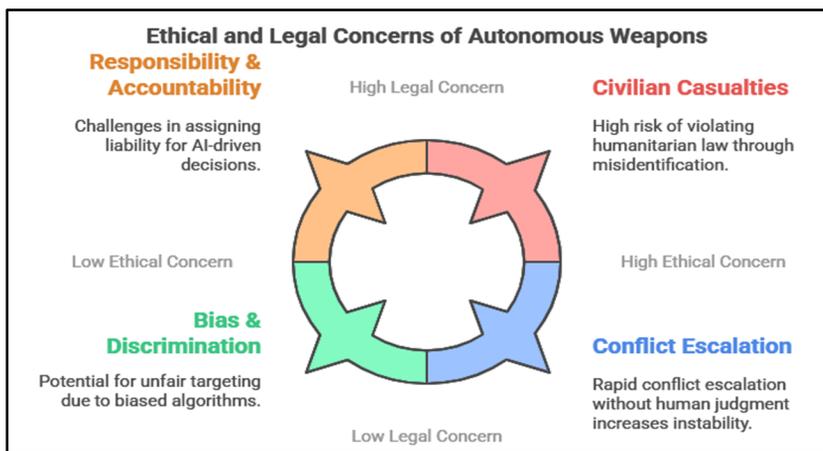


Source: Author’s self-construct

**Ethical Dilemmas in Autonomous Warfare**

The integration of autonomous systems on future battlefields will transform warfare, leading to a paradigmatic change in international relations and conflict understanding. This shift introduces machines as impersonal agents within military operations.<sup>4</sup> However, the development and use of autonomous warfare technology entail significant ethical and legal constraints. The primary ethical issue revolves around establishing accountability as warfare increasingly relies on autonomous systems. This raises questions about the legitimacy of decisions made by machines. Artificial intelligence’s (AI) unpredictable decision-making complicates liability, as its operations rely on binary logic and probabilistic outputs, making oversight challenging.

**Figure-2: Ethical and Legal Concerns of Autonomous Warfare**



Source: Author’s self-construct

**Responsibility and Accountability in Decision-Making:** Researchers and ethicists criticize the inadequacy of responsibility and accountability in autonomous warfare decision-making. Assigning liability is difficult when AI makes harmful choices without human involvement. A study on moral responsibility in these weapons highlights that existing accountability models lack coherence regarding operator and organizational liability, suggesting a multi-faceted approach is needed. This is vital when machines cause death or serious harm, such as in autonomous targeting systems. Machines lack consciousness and cannot bear moral responsibility for actions they initiate. The notion of moral responsibility in warfare ties to Kantian autonomy, emphasizing individuals must be treated as ends, not means.<sup>5</sup> It warns against trusting machines with life-and-death decisions, necessitating human accountability to balance values and risks in decision-making. Past arguments indicate we must minimize reliance on the flawed moral judgment of agents to improve understanding of accountability in autonomous decisions.

**Civilian Casualties and International Law Risks:** The use of autonomous weapons raises ethical concerns due to risks of civilian casualties and violations of international humanitarian law. Critics argue these systems could misidentify targets, leading to unintended consequences and harm. Missile defense systems often struggle to distinguish between enemy rockets and other objects, resulting in attacks on inactive or destroyed targets, operations near civilians, and wrong assaults on allies. This raises dilemmas in just war theory, especially concerning military gains versus collateral damage.<sup>6</sup> Further, military necessity and legitimacy of autonomous systems are in question, as weapons deemed “beyond the pale” could weaken military effectiveness and international relations. Designing systems that accurately differentiate civilians from combatants is critical, particularly when combatants disguise themselves, complicating compliance with humanitarian law.<sup>7</sup> This presents a legal-regulatory gap, where our responsibilities may not match technology capabilities, leading to questions about the legality of automated weapons. Proving violations in international courts is challenging, requiring robust evidence that may be insufficient or absent in cases involving autonomous systems.

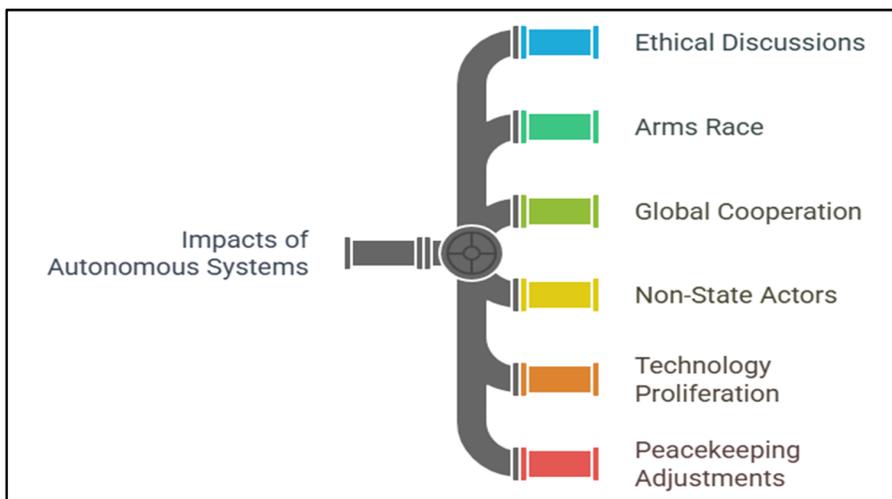
**Potential for Autonomous Systems to Escalate Conflicts:** Deployment of autonomous systems may escalate conflicts due to their rapid and efficient automated responses, leading to swift engagements. Machines may misinterpret situations as conflict-preparedness, reacting autonomously. This could create wildfire scenarios, targeting entire regions in mere moments.<sup>8</sup> Without human judgment, conflicts can be initiated without assessing strike appropriateness. Readiness may signal adversaries, creating a deterrence dynamic that turns autonomous systems into targets. Experts argue that AI and autonomous weapons contribute to global instability, suggesting AI safety should be viewed as a global public good requiring international cooperation. Caution in developing AI weapons is essential to avoid an AI arms race and achieve a peaceful transition to the Age of AI.<sup>9</sup> Considering AI’s impact on conflict dynamics is crucial as its potential for escalation is a primary argument against its military use. Addressing this challenge is vital for future conflict management efforts.

**Issues of Bias and Discrimination in AI Algorithms:** The use of AI in autonomous warfare presents significant ethical challenges, especially leading to unfair targeting and negative impacts on civilians due to biased training data. Addressing justice, fairness and human rights is crucial when implementing these technologies. Disabled individuals, women and people of color are often misidentified by commercial facial recognition AI, highlighting the influence of structural injustices.<sup>10</sup> This complicates ethical military decision-making, where outputs may inadvertently perpetuate discrimination. Many AI systems in law enforcement show racial disparities, leading to calls for their discontinuation. To address these concerns, strategies must aim to minimize biases in military AI through diverse data sets and inclusive design. Policymakers need to thoroughly understand these biases before deploying robotic military systems.<sup>11</sup>

### Future Implications of Autonomous Warfare

**Impacts on Global Security and Stability:** Deployment of autonomous systems could transform traditional security models and predictability in international relations. Ethical discussions on weapon autonomy highlight deterrence strategies and future impacts. Warfare may involve brinkmanship, enabling actors to show resolve through autonomous actions. In historically tense regions, these systems might prompt pre-emptive bans due to concerns about asymmetrical advantages. Proliferation and technology dissemination regarding warfare autonomy must be addressed. The potential for non-state actors to use autonomous systems raises further issues.<sup>12</sup> Global cooperation for regulating autonomy is crucial, as technologies can evolve outside standard channels. Additionally, international peacekeeping must adjust to incorporate AI and Machine Learning (ML) advancements in disarmament negotiations. Autonomous weapons could trigger an arms race, especially given the dual civil/military applications of many technologies. As ML and AI converge, races may occur within specific sub-domains, complicating global security regulation and stabilization as these evolving technologies interconnect.<sup>13</sup>

**Figure-3: Impacts of Autonomous Warfare on Global Security**



Source: Author's self-construct

**Shifts in Military Strategies and Power Dynamics:** AI and robotic systems are improving strategic decision-making by mitigating cognitive biases in human judgment, especially in combat. With extensive data, AI can simulate numerous scenarios, choosing optimal outcomes for better tactical planning. This evolution requires a reevaluation of command control issues, including micromanagement and delays in battlefield information. Early adopters may gain tactical advantages, while autonomous warfare could redefine military strategies and structures.<sup>14</sup> Additionally, challenges may emerge within military alliances, as AI might alter power dynamics, pushing preferences toward bilateral relationships. Issues with allies could restrict access to advanced autonomous weapons, impacting alliances' unity.<sup>15</sup> The evolving warfare scenario necessitates reconsideration of alliance membership and the evaluation of nuclear and conventional forces in light of strategic changes. The rising security dilemmas from democratizing automated weapons also significantly influence international relations and military technology advancements.

**Challenges for Arms Control and International Agreements:** The challenges in controlling military autonomous weapon systems arise from insufficient international regulations that fail to effectively address their ethical and legal concerns. Outdated security policies often fail to provide effective solutions for modern challenges, while the adaptation of arms control frameworks to new technologies is hindered by the complexities of autonomous systems, which can offer significant military advantages.<sup>16</sup> The ongoing global discourse lacks consensus on the definitions and usage of these systems. Efforts to control or ban them are complicated by verification and accountability challenges, raising concerns about a potential arms race in autonomous lethal technologies amid competition.<sup>17</sup> Involving a diverse range of stakeholders in public discussions is crucial to ensuring the legitimacy and broad acceptance of any new treaty. Meaningful engagement with experts, policymakers, and civil society helps build consensus and fosters transparency in the decision-making process. However, despite ongoing efforts by the international community to establish ethical principles and develop non-binding norms for autonomous weapon systems, these guidelines lack the necessary legal force. Without enforceable obligations under the laws of armed conflict, adherence to these principles remains voluntary, raising concerns about their effectiveness in regulating the use of military AI and autonomous warfare technologies.

**Figure-4: Future Implication of AWS**



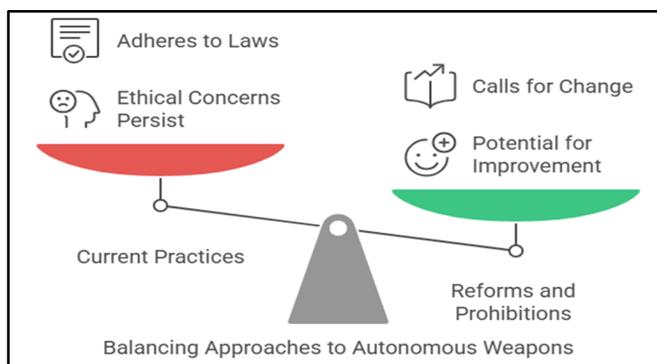
Source: Open Source

## Legal and Policy Considerations

International Humanitarian Law (IHL) is crucial for autonomous weapon systems, assessing military advantages against civilian harm through proportionality and ensuring clear distinctions between military targets and civilians via discrimination. The emergence of autonomous systems complicates legal norms due to their operational limitations. The Regulatory Gap Challenge highlights the lack of regulations to prevent misuse. Although some technologies are banned, autonomous systems are not specifically classified, necessitating clear definitions of ‘autonomy’ and ‘intelligence.’ Current laws fail to adequately address AI concerns, creating uncertainty over potential bans on lethal autonomous weapons. Defining and prohibiting certain technologies underscores the urgent need for coherent policies in autonomous warfare. Experts express concern over the feasibility of maintaining human control, citing historical tendencies for technology to bypass agreements. Enhancing national policies can improve military coordination, while international regulations clarify misunderstandings. Establishing military doctrine and rules for engagement is vital for the ethical deployment of these weapons amid their global proliferation, making collaboration among governments, legal experts, and military officials essential to address these challenges.

**International Humanitarian Law and Autonomous Weapons:** The use of force in conflict is regulated by principles that protect civilians. IHL aims to reduce suffering during armed conflict, overseeing military actions and safeguarding non-combatants. Key principles include distinction to avoid indiscriminate attacks, proportionality to prevent excessive civilian loss relative to military gain, and necessity to minimize collateral damage.<sup>18</sup> Ethical issues arise from highly autonomous weapons, especially concerning legal obligations amidst uncertain information or human-machine interactions. Compliance and accountability are crucial for ethical autonomous warfare, ensuring adherence to IHL standards. Failures in military actions raise concerns about accountability and the potential shifting of blame.<sup>19</sup> Scholars debate the interpretation of law in military robotics, with some advocating for strict adherence to existing laws, while others call for reforms and prohibitions against flawed autonomous systems, highlighting the ethical implications of current practices.<sup>20</sup>

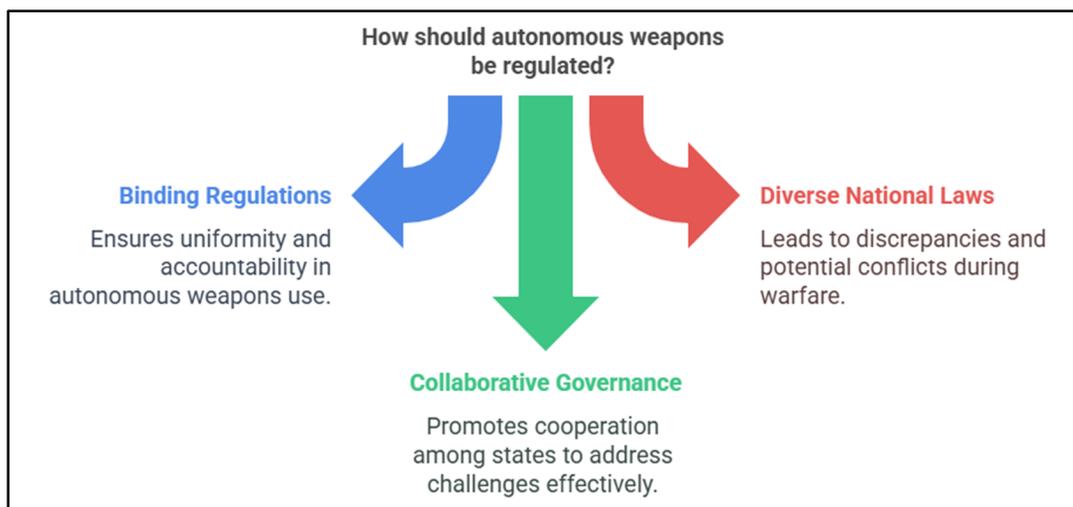
**Figure-5: Balancing Approaches to Autonomous Weapons**



Source: Author’s self-construct

**Regulatory Challenges and Gaps in Global Governance:** International humanitarian law and international criminal law aim to protect civilians in armed conflicts, but are inadequate in addressing the use of autonomous weapons. Major powers like the U.S., Russia, and China have not committed to binding regulations on fully autonomous lethal weapons.<sup>21</sup> Achieving global consensus on regulating emerging technologies poses challenges; the cyber domain showcases a decentralized system where various organizations collaborate. Existing legislation could clarify many issues, promoting coherent regulations across sectors.<sup>22</sup> However, nations may adopt different laws for AI regulation, leading to significant discrepancies during conflicts. If divergent or non-existent regulations are applied to AI and military tech, inconsistencies could arise, creating problems. Even if ethical principles for autonomous warfare are agreed upon, accountability for adherence remains uncertain.<sup>23</sup> We believe governance should result from collaborative efforts among states to effectively tackle these complex issues.

**Figure-6: Regulatory Framework of Autonomous Weapon System**

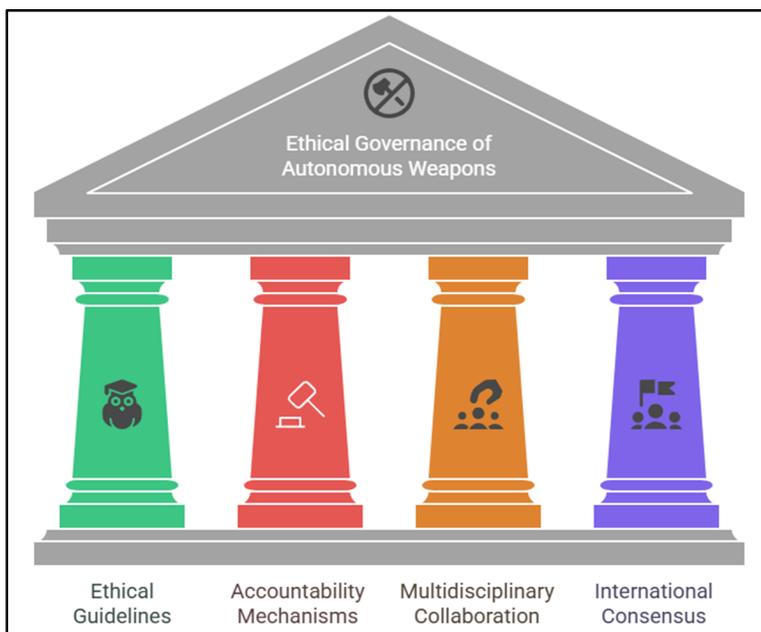


Source: Author's self-construct

### Recommendations for Future

At an expert meeting held in Lausanne in 2015, participants discussed a governance framework for autonomous warfare challenges. Key steps include establishing guidelines aligned with the Responsibility to Protect principle to support threatened civilians. This intervention principle may help prevent unjust occupations but raises risks of power abuse by the international community. While it offers a framework for ethical military development, concerns persist regarding personal motivations behind interventions. Recommendations are essential to tackle ethical issues and prevent misuse of autonomous military capabilities. Figure-7 depicts the four pillar governance system of AWS to be followed in future:-

**Figure-7: Four-pillar Governance of AWS**



Source: Author’s self-construct

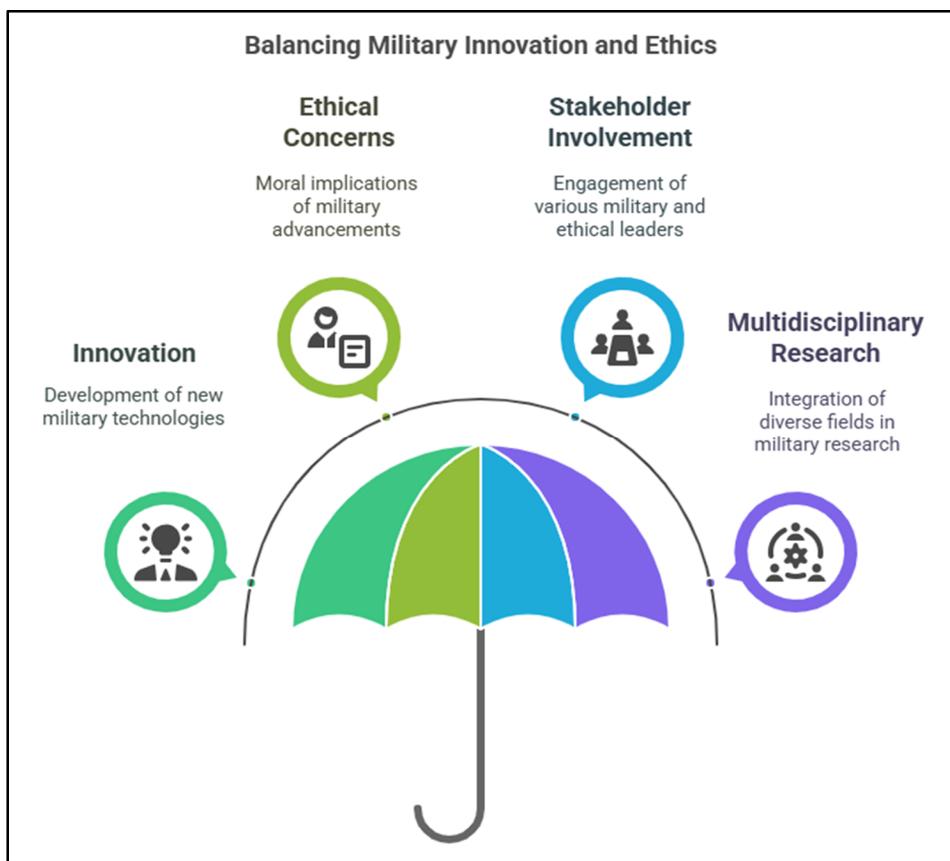
**Promoting Responsible Development and Use of AWS:** Technological advancements in the military create complex scenarios where predicting outcomes is difficult due to limited knowledge. Relying solely on one expertise can lead to errors. Understanding autonomous systems calls for examination of ethical implications, with a focus on human dignity and harm reduction.<sup>24</sup> Ethical considerations must guide technological growth to evaluate and mitigate potential impacts prior to deployment. Clear principles help navigate uncertainties and identify possible improvements. For autonomous weapons, ethical guidelines highlight unacceptable actions due to ignorance. Responsible development requires recognizing these systems’ unknown capabilities and necessitates ongoing reassessment, countering the notion that technology can eliminate war’s horrors. AI advancements prompt new military applications, necessitating a collaborative approach involving ethicists and technologists, with regulatory agencies ensuring ethical standards in military practices.<sup>25</sup>

**Building Ethical Guidelines and Safeguards:** Preventing dehumanization in warfare requires a commitment to human rights and ethics. It’s not just about technology; it’s about the intentions behind it and adherence to international law. Ethical principles must be central to the design and use of autonomous weapon systems (AWS), safeguarding vital rights like life and dignity. Military decision-making should reflect these rights, necessitating expert engagement in formulating ethical guidelines. Deployment must be supported by enforceable legal standards.<sup>26</sup> However, codifying morality in autonomous systems is challenging, and many nations fail to

ethically apply force, lacking accountability mechanisms. Engineers may inadvertently incorporate biases into machine learning, risking discrimination and use-of-force violations. Protecting remote combatants from ethical harm in cyberspace adds complexity.<sup>27</sup> Everyone involved in AWS creation must understand their legal and ethical responsibilities, and military leaders must assess the ethical implications of autonomous system use in conflict.

**Balancing Innovation and Ethics:** The ability to innovate is vital for militaries historically, providing advantages in strategy, deterrence, conflict resolution and peace. Policymakers must ensure developed countries remain ahead in developing capabilities despite ethical concerns. New warfare technologies can enhance effectiveness but also pose significant risks requiring thorough analysis. A culture of restraint, proportionality and ethical responsibility is crucial for military success. Manufacturers should prioritize these values, while ongoing dialogue among military leaders, policymakers and ethicists is essential to prevent potential disasters. Involving stakeholders in discussions about autonomous targeting helps understand its implications and research should be multidisciplinary to avoid systems that follow problematic logics.

**Figure-8: Four Pillars of Future Governance of AWS**



Source: Author's self-construct

**Collaborative Efforts between Nations and Institutions:** Issues surrounding military use and development of AWS connect to the broader topic of autonomism, as nations may implement measures affecting military cooperation. Major military powers could delay technological advancements until international ethical standards are established.<sup>28</sup> Educating decision-makers and sharing best practices by analyzing similarities and differences among countries is vital. Key studies may include ethical standards for AWS, defining legal limits and governance methods. Dialogue and networked actions can enhance transnational arms control based on ethics. Collaborative discussions among defense coalitions and global organizations can support shared technological aims while upholding law and human rights, fostering transparency and trust to minimize risks from hostile technologies.

## **Conclusion**

Autonomous combat marks a seismic shift in military strategy, reshaping the fabric of global security and ethical decision-making on the battlefield. Development of AI for use in warfare, especially through AWS, is beneficial in terms of improving efficiency and precision in attacking a target and cutting down on necessary human sacrifice in a combat scenario. The advancements bring with them complex sets of questions, particularly about the aspects of the ethical, legal and strategic. Encircling AWS is either an ethical, legal, or strategic debate. The most pressing issues are: Will AWS be able to take a life with no human being watching its operation? What caveats will be needed to convince that the action can follow the laws of accountability, proportionality and respect for IHL? Among the most problematic ethical questions regarding AWS are those of application-related compliance with IHL which obliges observance of the principles of distinction, proportionality, and necessity in armed conflict. Systems with little or no intuition and moral judgment will likely face difficulty differentiating between combatants and non-combatants, thereby increasing the risk of collateral damage. The AI biases included in its decision-making may result in discriminatory targeting, suffusing deployment with several ethical challenges. The lack of clear mechanisms of accountability raises a major question: who is responsible in the event of unlawful military actions—the manufacturer, the programmer, the commanding officer, or the deploying state?

AWS brings about strategic challenges alongside ethical ones, among them escalatory implications. The speed and independence of AI-controlled systems will conceivably leave much-too-small room for human intervention, resulting to unintended military engagements and crises. There is also the concern that the reliance on AI in warfare can generate an arms race amongst nations, everyone trying to improve its autonomous capabilities without any necessary regulatory framework. The problem might get even worse, as there is no universally agreed-upon legal framework for AWS, and the international agreements have so far failed to clearly and meaningfully regulate existing and foreseeable autonomous combat systems. There are discussions on international mechanisms in place, but big military powers like the United States, Russia, and

China seem to be stalling when it comes to approving a worldwide AWS regulatory framework, resulting in fundamental inconsistencies in global regulations.

The solution to these challenges lies in creating a collective mechanism bringing countries, defence institutions, legal professionals, and international organizations together. These such frameworks regarding the AWS design and deployment must be strong enough to safeguard ethics in trying warfare establishments. One big concern promulgated through law will be that to maintain a guardianship system ensuring human operators' tight control of AWS systems to prevent unintended or proportionally wrong impacts. It is desirable that proper definitions of "autonomy" and 'intelligence' in the field of military technology be laid down to avoid any case where these concepts become open to a wide variety of legal interpretations. In addition to the development of bilateral agreements, ethical considerations need to be built into the design and utilization of AWS where, for example, military research organizations ought to adopt the guideline of humanitarianism, placing humankind at the apex of considerations, while also looking up for responsibility and accountability. Representatives of varying backgrounds—policymakers, military officials, engineers, ethicists—should engage in an ongoing dialogue to address the developing security dynamics surrounding AI in warfare and simultaneously ensure that said technologies are oriented by adherence to prevalent international human rights standards. Furthermore, intense effort on enhancing international cooperation and building confidence is vital to stave off the thoughtless employment of these weapons. Multilateral endeavours should target agreements on arms control, confidence-building measures and joint sharing of information that could prescribe global standards of AWS usage. Only by maintaining an equilibrium between advances in the AI sector and ethical standards will humanity be saved from AID-driven wars' direct harm. It is an urgent necessity for the international community to come together in governing and overseeing AWS for military progress to not go beyond human rights and accountability, thereby maintaining peace at large. The future of autonomous warfare must rein in those policies that shepherd ethical standards and facilitate the sustenance of rights in an increasingly AI-driven world.

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### **Brief Biography**



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## Wargame Simulations: A New Paradigm for Future Warfare

Major Md Kamrul Hasan Mamun, Signals

### **Abstract**

*Wargame simulations have become a critical tool in modern military training and strategic planning, offering realistic, adaptive and risk-free environments to prepare forces for the complexities of contemporary warfare. This paper explores the historical evolution, technological advancements, and practical applications of wargame simulations, highlighting their pivotal role in enhancing decision-making, fostering collaboration and addressing emerging threats, such as cyber and hybrid warfare. It delves into the integration of cutting-edge technologies, including Artificial Intelligence (AI), Virtual Reality (VR), Augmented Reality (AR) and big data, to create immersive and dynamic training platforms. The paper also identifies key challenges in wargame simulation design, such as maintaining realism while ensuring accessibility, addressing ethical considerations, and bridging gaps between developers and military strategists. Proposed solutions include user-centered designs, continuous feedback mechanisms, modular architectures and culturally sensitive scenario development. Beyond the military, the versatility of wargame simulations is examined in domains like disaster management, cybersecurity and education. By integrating advanced technologies and addressing critical challenges, wargame simulations can evolve into indispensable tools for preparing armed forces and other sectors to navigate the complexities of future conflicts. This paper underscores their strategic importance in modern warfare and offers actionable recommendations for maximizing their effectiveness.*

**Keywords:** *Wargame, Artificial Intelligence, cyber security, Virtual Reality, Augmented Reality.*

### **Introduction**

Wargame simulations have emerged as a cornerstone in modern military training and strategic planning, bridging traditional combat exercises and the demands of contemporary warfare. In an era characterised by rapid technological advancement and ever-changing geopolitical dynamics, these simulations offer unparalleled opportunities to model complex scenarios, assess strategies and enhance decision-making without the risks and costs associated with live training. The evolution of wargame simulations from ancient strategic games like chess to advanced digital platforms leveraging Artificial Intelligence (AI), Virtual Reality (VR), Augmented Reality (AR) and big data highlights their growing importance in preparing military forces for 21st-century challenges.<sup>1</sup>

The significance of wargame simulations lies in their ability to provide realistic and adaptive environments for training and strategic development. They enable military personnel to engage in decision-making under pressure, foster collaboration in multi-domain operations and explore innovative approaches to problem-solving. Technologies such as AI and predictive

analytics now allow for modelling dynamic adversarial behaviours and real-time scenario adjustments, ensuring simulations remain relevant to the realities of modern conflict. Moreover, the applications of these tools extend beyond the military, encompassing areas like disaster management, cybersecurity and corporate strategy, demonstrating their versatility across multiple domains.<sup>2</sup>

This paper begins by introducing wargame simulations in the context of modern warfare, focusing on their historical evolution, technological advancements and pivotal role in preparing for emerging threats, such as cyber and hybrid warfare. It then explores the practical applications of wargame simulations in both military and non-military domains, highlighting their strategic importance in future warfare. Finally, the paper addresses key challenges associated with the design and implementation of wargame simulations and proposes ways to enhance their effectiveness, realism and overall utility in future conflict scenarios.

## **Aim**

This paper aims to explore the strategic significance of wargame simulations and propose measures to enhance their effectiveness for future warfare.

## **Introduction to Wargame Simulations in Modern Warfare**

**General:** Wargame simulations have emerged as a transformative tool in the realm of modern warfare, bridging the gap between traditional military training methods and the complexities of 21st-century conflict. As technology and global geopolitical landscapes evolve, wargame simulations provide militaries and defence organizations with the means to prepare for unpredictable scenarios, enhance decision-making and foster innovation in strategy and tactics. The subsequent paragraphs will discuss the evolution of wargame simulations, a few basics of wargame simulation and their critical role in future warfare.<sup>3</sup>

**Emergence of Wargame Simulations:** Warfare has undergone significant transformations throughout history, from conventional battlefield engagements to the hybrid and multi-domain conflicts of today. As these changes occurred, military training and planning also needed to adapt. Early forms of wargaming date back to ancient times when strategic board games like chess and Wei Qi (Go) were used to simulate conflict and train leaders in the art of war. The advent of industrial warfare in the 19<sup>th</sup> and 20<sup>th</sup> centuries saw the introduction of more structured and realistic wargames, such as the Prussian Kriegspiel, which was used to train officers and refine strategies. The digital revolution in the late 20<sup>th</sup> century marked a turning point for wargame simulations. The rise of computer-based simulations allowed for unprecedented levels of detail, interactivity, and scalability. Advanced computational capabilities enabled the modelling of complex systems, from individual unit movements to large-scale geopolitical dynamics. As a result, wargame simulations have evolved into comprehensive tools that integrate elements of AI, VR/AR and big data analytics.<sup>4</sup> Together, these advancements enable modern militaries to prepare effectively for the complexities of contemporary warfare.<sup>5</sup>

## Defining Wargame Simulations: A Brief Overview

a. **What Are Wargame Simulations?** Wargame simulations are interactive exercises designed to model conflict scenarios in a controlled and risk-free environment. They replicate real-world conditions, enabling participants to assess strategies, train personnel and evaluate outcomes without the logistical and ethical challenges associated with live training exercises. These simulations can range from simple tabletop games to highly sophisticated digital platforms incorporating real-time data and AI-driven adversaries.<sup>6</sup>

b. **Types of Wargame Simulations:** Wargame simulations come in various forms, each designed to achieve specific training or strategic objectives. These include strategic simulations, which focus on high-level decision-making and geopolitical strategies and operational simulations, emphasizing the coordination of military operations within a defined theater. Tactical simulations delve into the actions of individual units or small groups in combat scenarios, while cyber simulations address threats in the digital domain, such as hacking and information warfare. Additionally, wargames are categorized by their execution styles: live simulations, involving real-world exercises with personnel and equipment; virtual simulations, where participants interact with computer-generated environments; constructive simulations, which use models and algorithms to represent forces and scenarios without direct human interaction; and LVC simulations (Live, Virtual, and Constructive),<sup>7</sup> which integrate all three to create comprehensive and realistic training environments. These diverse types ensure that military and strategic planners can prepare for a wide range of challenges.

**Figure-1: Types of Wargame Simulation by Execution Style**

Category	People	System	Example
Live	Real	Real	 <b>Field Training Exercise</b>
Virtual	Real	Simulated	 <b>Driving Simulation</b>
Constructive	Simulated	Simulated	 <b>Computer Assisted Exercise</b>

Source: Author's self-construct

c. **Key Components of Wargame Simulations:** Key components of wargame simulations include well-crafted scenario design which sets the stage with clear objectives, defined roles and realistic conditions reflecting real-world challenges. Participants take on

various roles, such as military commanders or political leaders, promoting a multi-dimensional problem-solving approach. The decision-making process is central, with outcomes shaped by the participants’ choices under pressure. Feedback mechanisms, especially post-simulation debriefings, are vital for offering insights into decisions made during the simulation. These components work together to create an effective, interactive learning experience, enhancing participants’ ability to analyze and improve their performance.

**Figure-2: Key Components of Wargame Simulations**



Source: Author’s self-construct

d. **Drivers of Modern Wargame Simulations:** Technological advancements are propelling the evolution of wargame simulations, each contributing to more realistic, efficient, and secure training environments for military personnel. Incorporating these technologies into wargame simulations significantly enhances their effectiveness, providing military personnel with advanced tools to prepare for the complexities of modern warfare. Drivers of modern wargame simulations are as follows:

**Figure-3: Drivers of Modern Wargame Simulations**

<b>AI</b>	<ul style="list-style-type: none"> <li>▪ Dynamic opponent behavior</li> <li>▪ Enhanced decision-making training</li> </ul>
<b>Big Data and predictive Analytics</b>	<ul style="list-style-type: none"> <li>▪ Data-driven scenario planning</li> <li>▪ Performance optimization</li> </ul>
<b>AR/VR</b>	<ul style="list-style-type: none"> <li>▪ Realistic combat environments</li> <li>▪ Enhanced engagement and retention</li> </ul>
<b>Blockchain and Cybersecurity Application</b>	<ul style="list-style-type: none"> <li>▪ Secure data management</li> <li>▪ Enhanced cybersecurity measures</li> </ul>

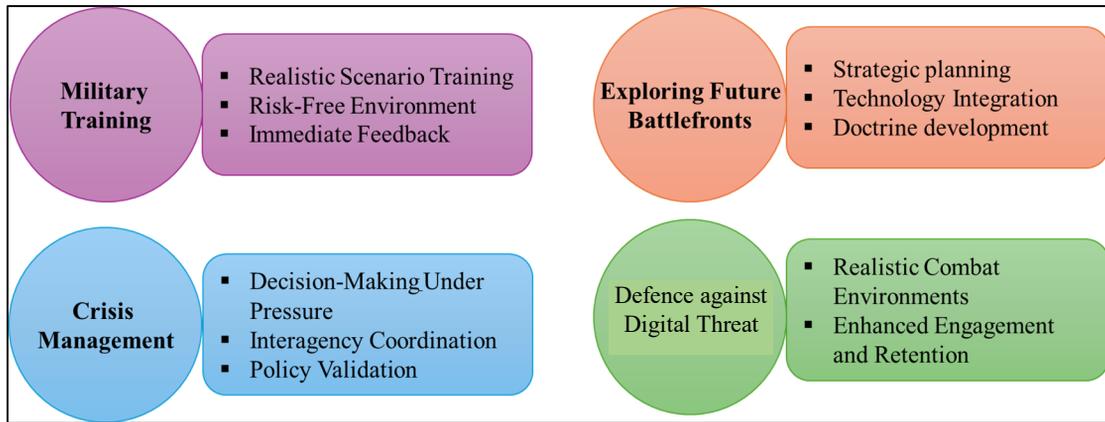
Source: Author’s self-construct

- (1) **The Role of AI in Realistic Scenario Modeling:** AI enhances wargame simulations by creating complex and adaptive scenarios that closely mirror real-world situations. AI-driven adversaries can adjust strategies in real-time, providing trainees with unpredictable and challenging scenarios. AI systems can simulate a wide range of tactical situations, allowing military personnel to practice and refine their decision-making skills under varying conditions.
- (2) **Big Data and Predictive Analytics:** The incorporation of big data and predictive analytics into wargame simulations enables the analysis of extensive datasets to predict potential outcomes and trends. By leveraging historical data and current intelligence, simulations can be designed to reflect potential future conflicts. Additionally, analyzing trainee performance data helps identify strengths and areas for improvement, resulting in more personalized and effective training programs.
- (3) **Virtual and Augmented Reality for Immersive Training Experiences:** VR and AR technologies provide immersive environments that enhance the realism of wargame simulations. VR and AR create lifelike simulations of various terrains and combat scenarios, allowing soldiers to train in diverse environments without leaving the base. Immersive experiences can improve trainee engagement and information retention, leading to more effective learning outcomes.
- (4) **Blockchain and Cybersecurity Applications in Simulation Integrity:** Ensuring the integrity and security of wargame simulations is crucial.<sup>8</sup> Blockchain technology provides a tamper-proof ledger for recording simulation data, ensuring authenticity and preventing unauthorized modifications. Implementing blockchain can protect simulation platforms from cyber threats, maintaining the confidentiality and integrity of training exercises.

### **Practical Applications and Usage of Wargame Simulations**

Wargame simulations have evolved into versatile tools with applications extending beyond traditional military training. They are now integral in various domains, including crisis management, cybersecurity, and the exploration of emerging battlefronts like space and hybrid warfare. Real-time data utilization, cybersecurity training and scalable platforms prepare military personnel for diverse scenarios, including asymmetric warfare and joint multinational operations. Beyond the military, these simulations find applications in disaster management, corporate strategy and education highlighting their versatility across various fields.

**Figure-4: Applications and Usage of Wargame Simulations**



Source: Author's self-construct

**Military Training:** Wargame simulations serve as a bridge between theoretical knowledge and practical application in military training.<sup>10</sup> Simulations provide lifelike environments where military personnel can apply theoretical strategies in practice, enhancing readiness and adaptability. Trainees can be engaged in complex operations without real-world consequences, allowing for experimentation and learning from mistakes. Simulations offer instant performance assessments, enabling rapid improvement and skill refinement.

**Crisis Management:** In crisis management, wargame simulations are employed to prepare for diplomatic and military interventions.<sup>11</sup> Simulations immerse leaders in high-stress scenarios, enhancing their ability to make informed decisions during actual crises. They facilitate collaboration among various agencies, ensuring cohesive responses to complex situations. Simulations allow policymakers to evaluate the potential outcomes of their decisions in a controlled setting.

**Defence against Digital Threats:** With the rise of digital threats, cybersecurity simulations have become an essential tool for the modern military.<sup>12</sup> Cybersecurity simulations help in recognizing cyber threats and formulating effective responses. It helps prepare cybersecurity teams to manage attacks, improving coordination and efficiency. Cybersecurity simulations also identify weaknesses in digital infrastructures, guiding necessary improvements.<sup>13</sup>

**Exploring Future Battlefronts:** As warfare extends into new domains, simulations are crucial for exploring these frontiers.<sup>14</sup> Simulations assist in developing strategies for space and hybrid warfare scenarios. They evaluate the effectiveness of emerging technologies in these new battlefronts. Simulations contribute to formulating doctrines tailored to the unique challenges of space and hybrid warfare.

**Expanding the Scope of Wargame Simulations:** The scope of wargame simulations is rapidly expanding through technological advancements such as AI, VR, and AR, which enhance realism and provide adaptive training environments for military personnel. They are increasingly integrated into multi-domain operations, covering land, air, sea, space, and cyber warfare, to model interconnected modern conflicts. Real-time data utilization and cybersecurity-focused simulations further prepare forces to navigate dynamic and digital battlefields. These platforms are also scalable, allowing training for diverse scenarios, including asymmetric warfare and joint multinational operations. Beyond the military, wargame simulations find applications in disaster management, corporate strategy and education, highlighting their versatility across multiple domains.

a. **Wargame Simulation in Military Domain**

(1) **Enhanced Realism through Emerging Technologies:** The military is increasingly leveraging innovative technologies to enhance the realism and effectiveness of wargame simulations. VR and AR are used to create immersive environments that replicate battlefield conditions with remarkable detail. Additionally, AI and machine learning are enabling the development of adaptive adversaries, which simulate realistic enemy behaviours and tactics. These advancements provide military personnel with more authentic training experience, preparing them for the complexities of modern warfare.

(2) **Integration of Multi-Domain Operations:** Future military simulations will emphasize multi-domain operations, which integrate land, air, sea, space and cyber warfare. Modern conflicts are increasingly interconnected, requiring coordinated strategies across all domains. Wargame simulations are evolving to model these complexities, allowing participants to practice joint operations, assess interoperability, and identify vulnerabilities in multi-domain strategies. This integrated approach is critical for preparing military forces for the challenges of hybrid warfare.

(3) **Real-Time Data Utilization and Decision Support:** The military is harnessing the power of real-time data and predictive analytics to improve the accuracy and relevance of wargame simulations. Advanced sensors, satellites, and communication systems provide a constant stream of battlefield data, which can be integrated into simulations to reflect evolving situations. These tools also enable commanders to explore various scenarios and assess the potential outcomes of their decisions, enhancing strategic planning and operational readiness.

(4) **Emphasis on Cybersecurity and Information Warfare:** As cyber threats become a dominant aspect of modern conflicts, wargame simulations are increasingly focusing on cybersecurity and information warfare. These simulations allow participants to practice defending critical infrastructure, mitigating cyberattacks and

responding to disinformation campaigns. By incorporating these elements, wargame simulations ensure that military personnel are prepared to navigate the digital battlefield and protect national security.

(5) **Scalability for Asymmetric Warfare Training:** With the rise of asymmetric warfare, involving non-state actors and unconventional tactics, the military is developing scalable simulation platforms to train personnel in diverse scenarios. These simulations can model urban combat, insurgency operations and counter-terrorism strategies, allowing forces to adapt to the fluid and unpredictable nature of modern conflicts. Scalable platforms also make it possible to involve various levels of personnel, from individual soldiers to large units, in training exercises.

(6) **Collaboration with Allied Forces and Joint Training:** Future military wargame simulations will emphasize collaboration with allied forces to improve interoperability and joint training. Simulations will increasingly involve multinational participants, creating scenarios that reflect real-world coalition operations. By practicing coordination and communication in simulated environments, allied forces can build trust and strengthen their ability to operate together effectively during actual missions.

b. **Beyond the Military: Applications in Other Sectors:** While primarily associated with Defence, wargame simulations have found applications in other sectors, such as:

(1) **Disaster Management:** Simulations help prepare for natural disasters, pandemics, and other emergencies by modeling response strategies and testing coordination among agencies.

(2) **Corporate Strategy:** Businesses use wargame simulations to anticipate market shifts, assess risks, and develop competitive strategies.

(3) **Education and Training:** Academic institutions employ simulations to teach complex subjects like international relations, conflict resolution and systems thinking.

### **Strategic Importance of Wargame Simulations in Future Warfare**

Wargame simulations are increasingly recognized as a vital tool for modern militaries, offering a cost-effective, safe and innovative alternative to traditional training methods. They foster strategic and tactical problem-solving by enabling participants to deconstruct complex challenges and prepare for diverse and unpredictable threat scenarios, including cyber and irregular warfare. These simulations enhance decision-making by providing opportunities to refine strategies in risk-free environments. Moreover, they promote multi-domain readiness, allowing militaries to train for conflicts spanning land, sea, air, space and cyberspace. By integrating advanced technologies like

AI and predictive analytics, wargame simulations ensure that military forces remain adaptable and effective in addressing the complexities of future conflicts.<sup>15</sup>

**Figure-5: Benefits of Wargame Simulation**



Source: Author's self-construct

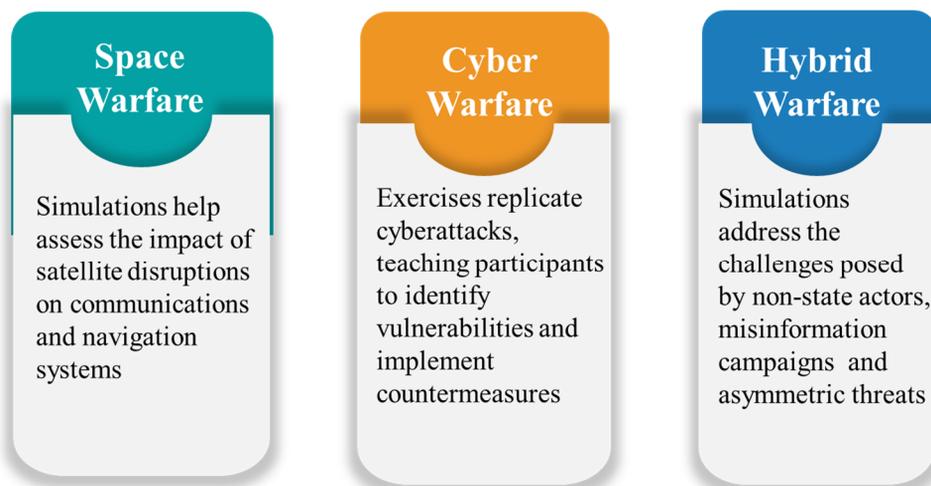
**The Shift from Traditional Warfighting to Simulation-Based Training:** Modern militaries are increasingly transitioning from conventional training methods to simulation-based approaches.<sup>16</sup> Simulation-based training reduces the expenses associated with operating real vehicles and weapons. It enables simultaneous training of multiple personnel in a controlled environment, thereby saving time and resources. Virtual simulations allow soldiers to practice managing dangerous equipment and scenarios without real-world risks, ensuring safety while maintaining training effectiveness. Wargame simulations serve as a breeding ground for innovation, encouraging participants to explore unconventional strategies and solutions. The integration of AI and predictive analytics further enhances this capability, offering data-driven insights into potential outcomes and enabling the development of more effective approaches to conflict resolution.

**Preparing for Unpredictable Threat Landscapes through Wargames:** Wargame simulations enable military strategists to predict and prepare for diverse and unpredictable threat scenarios. It deconstructs complex strategic, operational, or tactical challenges, identifying critical factors that influence outcomes. This analytical approach aids in developing effective strategies for real-world conflicts. By simulating various conflict scenarios, wargames help militaries adapt to new forms of warfare, including cyber threats and irregular combat situations.

**Enhancing Strategic Thinking and Tactical Decision-Making:** Through simulated experiences, soldiers enhance their strategic thinking and tactical decision-making abilities, preparing them for complex battlefield situations. These simulations allow for the assessment of various theories and strategies in a risk-free environment, facilitating the refinement of military doctrines and operational plans.

**Cultivating Multi-Domain Preparedness for Modern Militaries:** The incorporation of artificial intelligence and other advanced technologies in wargames enhances the realism and effectiveness of training, preparing the military for future challenges. It also enables militaries to train for these complex scenarios, ensuring seamless coordination and effective responses across all domains.

**Figure-6: Multi-domain Wargame Simulation**



Source: Author's self-construct

### **Challenges and the Ways Forward in Wargame Simulations**

Wargame simulations have revolutionized military training and strategic planning, offering immense potential for preparing armed forces to meet modern and future challenges. However, the inherent challenges of wargame simulations must be addressed to maximize their effectiveness and ensure their sustainable development.<sup>17</sup>

#### **Balancing Realism with Accessibility in Wargame Designs**

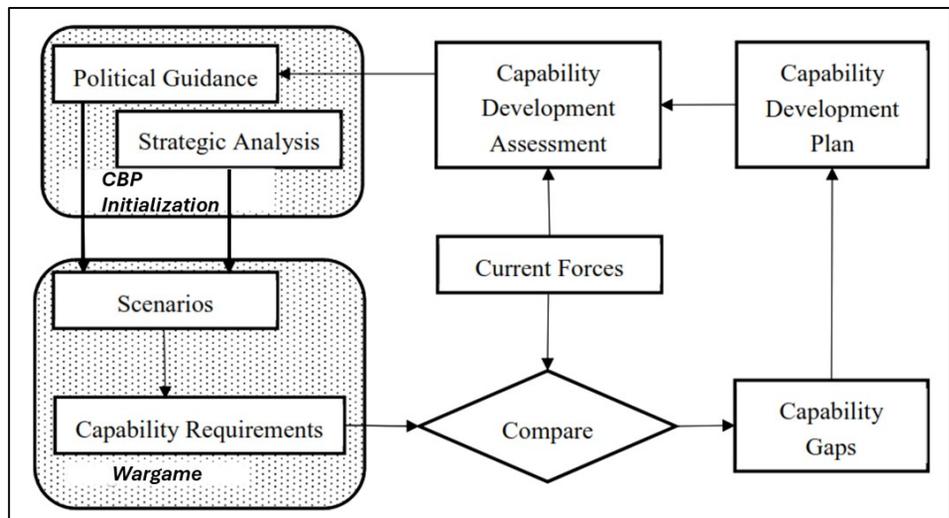
- a. **The Challenge:** Creating wargame simulations that strike a balance between realism and accessibility remains one of the most significant hurdles. Realism in wargames is critical for providing an accurate representation of combat scenarios, enabling participants to experience the complexities of real-world warfare. However, overly complex simulations can become inaccessible for trainees, requiring extensive technical knowledge

and long learning curves.<sup>18</sup> This limits the utility of simulations, particularly for larger units or joint operations involving personnel with varying levels of technical expertise.

**b. Ways Forward.**

- (1) **User-Centered Design:** Simulations should be developed with intuitive interfaces that accommodate diverse user groups, ensuring effective interaction for both novice and expert users.
- (2) **Scalable Complexity:** Tiered levels of complexity should be introduced, enabling users to tailor their experience based on their expertise and training objectives.
- (3) **Continuous Feedback Loops:** User feedback should be integrated during the design and testing phases to enhance usability while maintaining realism.
- (4) **Blended Learning Approaches:** Realistic digital simulations should be combined with simpler analog wargames to deliver a comprehensive training experience
- (5) **Capability-based Planning (CBP):** CBP Focus on designing wargame simulations that emphasize the essential capabilities required for mission success, allowing trainees to prioritize critical skills and decision-making processes. By aligning simulations with specific operational goals, users can develop competencies that are directly applicable to real-world scenarios while maintaining a balance between realism and accessibility.

**Figure-7: CBP Process Framework**



Source: J. Hodický, et al ‘Computer Assisted Wargame for Military Capability-Based Planning,’ *Entropy*, vol. 22, no. 8, p. 861, 2020.

## **Ethical Considerations in Simulating Conflict Scenarios**

- a. **The Challenge:** Simulating conflict scenarios involves ethical dilemmas, particularly when scenarios include civilian casualties, cultural sensitivities, or politically charged situations. The risk of desensitizing participants to the human costs of war or perpetuating biases in simulated environments is a significant concern.<sup>19</sup>
- b. **Ways Forward:**
  - (1) **Establishment of Ethical Oversight Committees:** Interdisciplinary committees should be formed to review and approve scenario designs, ensuring alignment with ethical standards.
  - (2) **Integration of Humanitarian Perspectives:** Humanitarian considerations should be incorporated into simulations to encourage participants to prioritize civilian safety and comply with international laws of war.
  - (3) **Transparent Scenario Design:** The assumptions, biases and objectives underlying each simulation scenario should be documented and disclosed.
  - (4) **Inclusion of Scenario Diversity:** A wide range of scenarios should be included to avoid reinforcing stereotypes or presenting single-sided narratives.

## **Bridging Gaps between Technology Developers and Military Strategists**

- a. **The Challenge:** The effectiveness of wargame simulations depends on seamless collaboration between technology developers and military strategists. However, significant gaps exist between the two groups, often resulting in tools that do not fully meet the practical needs of the military or fail to leverage cutting-edge technologies effectively.<sup>20</sup>
- b. **Ways Forward:**
  - (1) **Cross-Disciplinary Teams:** Collaboration between developers, strategists, and operational personnel should be encouraged by forming integrated teams during the development phase.
  - (2) **Regular Training for Developers:** Developers should be provided with basic military training or exposure to real-world military operations to improve their understanding of operational requirements.
  - (3) **Joint Workshops and Simulations:** Joint workshops should be organized to enable developers and military personnel to collaboratively assess and refine simulations.
  - (4) **Feedback Integration:** Systems for continuous feedback from end-users to developers should be established to support iterative improvements.

### **Innovations and Future Trends: The Path toward Smarter Simulations.**

- a. **The Challenge:** The rapid pace of technological advancement presents both opportunities and challenges for wargame simulations. Integrating innovations such as artificial intelligence AI, VR, and predictive analytics can enhance simulations but also introduces complexities in terms of cost, interoperability and adaptability.
- b. **Ways Forward:**
  - (1) **Adoption of Modular Architectures:** Simulations should be designed using modular frameworks to enable the integration of modern technologies without requiring a complete overhaul of existing systems.
  - (2) **Emphasis on Cost-Effectiveness:** Open-source technologies and partnerships with academic institutions should be utilized to minimize development costs while fostering innovation.
  - (3) **Development of Interoperability Standards:** Universal standards need to be maintained by the developers to ensure seamless communication and functionality across different systems.
  - (4) **Future Proofing:** Emerging trends, such as quantum computing and neural interfaces, should be anticipated by the developers and their potential applications in simulation design to be explored proactively.

### **Addressing Cognitive Overload in Trainees.**

- a. **The Challenge:** Simulations that aim to replicate complex battle scenarios can overwhelm participants, leading to cognitive overload and reducing the effectiveness of training.
- b. **Ways Forward:**
  - (1) **Gradual Scenario Progression:** Training should begin with simpler scenarios and progressively increase in complexity as trainees gain confidence and proficiency.
  - (2) **Cognitive Load Analysis:** The scenario developers should conduct studies to identify the optimal level of complexity tailored to different training objectives and user groups.
  - (3) **Debriefing and Reflection:** Structured debriefing sessions should be incorporated to help participants analyze their experiences and derive valuable lessons.

### **Maintaining Data Security and Privacy.**

- a. **The Challenge:** Wargame simulations often involve sensitive data, including classified military strategies and personnel information. Protecting this data from cyber threats is a critical challenge.
- b. **Ways Forward:**
  - (1) **Implementation of Robust Cybersecurity Measures:** Advanced encryption, multi-factor authentication, and real-time threat monitoring systems should be employed to ensure data security.
  - (2) **Regular Security Audits:** Routine security audits should be conducted to identify and resolve potential vulnerabilities.
  - (3) **Utilization of Decentralized Storage:** Blockchain technology should be leveraged for secure and tamper-proof data storage solutions.

### **Ensuring Cultural Sensitivity in Multinational Exercises.**

- a. **The Challenge:** Multinational military exercises using wargame simulations must account for cultural differences among participants to avoid miscommunication and foster effective collaboration.<sup>21</sup>
- b. **Ways Forward:**
  - (1) **Inclusion of Cultural Training Modules:** Cultural awareness training should be incorporated into the simulation program to enhance understanding and cooperation.
  - (2) **Inclusive Scenario Design:** Representatives from participating nations should be involved in scenario development to ensure cultural relevance and sensitivity.
  - (3) **Use of Real-Time Translation Tools:** AI-driven translation tools should be utilized to enable effective communication among participants from diverse linguistic backgrounds.

### **Conclusion**

Wargame simulations have evolved significantly, transitioning from basic training exercises to sophisticated tools with diverse applications across various sectors. Within the military domain, their future hinges on leveraging innovative technologies such as VR/AR and AI to create highly realistic and adaptive training environments. The increasing complexity of modern warfare necessitates a focus on multi-domain operations and wargame simulations effectively model these complex scenarios, enabling comprehensive training and vulnerability assessments. Real-time data

integration and predictive analytics further enhance the accuracy and relevance of these simulations, empowering data-driven decision-making.

Beyond their military applications, wargame simulations offer versatile and invaluable tools across various sectors. Their applications extend to crisis management, cybersecurity, and the exploration of emerging warfare domains like space and hybrid conflicts. Simulations provide a controlled environment for strategic planning, policy testing, and technology integration, enabling informed decision-making and enhanced preparedness. By bridging theory and practice, they facilitate realistic scenario training, risk-free experimentation, and immediate feedback, fostering adaptability and skill refinement.

Wargame simulations are crucial for modern militaries, offering a cost-effective, safe, and innovative approach to training. They enhance strategic thinking, tactical decision-making, and adaptability to emerging threats by providing a risk-free environment for evaluating theories and strategies. The integration of advanced technologies like AI and predictive analytics further strengthens their capabilities. Moreover, wargame simulations foster multi-domain readiness, preparing forces for the complexities of future conflicts across land, sea, air, space, and cyberspace. By embracing these simulations, militaries can ensure they remain agile, prepared, and effective in addressing the evolving landscape of warfare.

The future of wargame simulations depends on addressing key challenges and embracing innovation. Balancing realism with accessibility is crucial for wider adoption and effective training. Bridging the gap between technology developers and military strategists ensures simulations meet practical needs and leverage innovative advancements. Integrating AI, VR/AR, and predictive analytics offers transformative potential for enhanced realism and data-driven insights. Overcoming data bias and ethical considerations is paramount for responsible development and application, enabling wargame simulations to reach their full potential as indispensable tools for training, strategic planning and navigating the complexities of future warfare.

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### Brief Biography



**Major Md Kamrul Hasan Mamun, Signals** was commissioned from Bangladesh Military Academy (BMA) with 60th BMA Long Course in the Corps of Signals on 24 June 2009. He is a communication engineer from Military Institute of Science and Technology (MIST). He has diverse experience of serving in unit and as staff. He served in 2 Signal Battalion, 7 Signal Battalion and 10 Signal Battalion in different regimental appointments. As staff, he performed his duty as Staff Captain of Headquarters 86 Independent Signal Brigade. He has participated in United Nations Peacekeeping Mission in MINUSMA (Mali) as Detachment Commander of Bangladesh Signal Company-2 and MONUSCO (DR Congo) as Deputy Contingent commander of Bangladesh Headquarters Support and Signal Company-17. Presently, he is serving as Chief of Simulation Support in Army War Game Centre.

## **China's Global Security Initiative (GSI): Reshaping the Global Security Order and its Implications for Bangladesh**

Major Zubair-Al-Hasan, psc, Engineers

### ***Abstract***

*The current global landscape is experiencing significant change, marked by a discernible shift from the dominance of Western powers to the emergence of new global actors that challenge existing norms and institutions. China's proposed Global Security Initiative (GSI) resonates with this challenge, seeking to resolve conflicts, improve global security governance and promote sustainable peace and development. This article thoroughly examines the core concepts of GSI. The essay delineates the potential transformation of the global order and security architecture under the Initiative by examining global geopolitics and monetary systems, historical precedence and China's geopolitical ambition. It underscores China's expanding influence in global governance and conflict resolution, notably in the Middle East, Ukraine, and Africa. Moreover, the author emphasises the Initiative's importance within the purview of Bangladesh, highlighting its potential contributions to economic and security prospects, such as infrastructure advancement and strengthened collaboration with China. However, the paper also illustrates the need for Bangladesh to balance its relations with China and other global entities, avoiding excessive reliance. In unveiling the intricacies of GSI, this analysis offers an in-depth perspective on its ramifications for Bangladesh's strategic framework and the potential advantages and obstacles that may emerge for Bangladesh in navigating this geopolitical dichotomy.*

**Keywords:** *Global Security Initiative, China-Bangladesh Relations, Geopolitics, Security Landscape, Global governance.*

### **Introduction**

The contemporary global landscape is undergoing a profound transformation, characterised by a discernible shift away from the dominance of Western powers towards the ascent of new global actors challenging established norms and institutions. This evolving paradigm heralds an era where conflicts, driven by contestation and recalibrated power dynamics, are increasingly likely to shape the trajectory of international relations. Central to this transformation is the emergence of alternative power centres with hegemonic aspirations, leveraging newfound economic legitimacy to disrupt the existing balance of power.<sup>1</sup> The challenge resonated with the proposed Global Security Initiative (GSI) by Xi Jinping, General Secretary of the Chinese Communist Party (CCP) and President of the People's Republic of China (PRC), in April 2022 during a keynote speech at the Boao Forum for Asia (BFA) Annual Conference.

The GSI by China has triggered widespread discussion among countries worldwide regarding its repercussions. At the BFA, Xi outlined six core principles or commitments and 20

priority areas of cooperation and talked about six cooperation mechanisms with countries.<sup>2</sup> Xi called it “A holistic approach to collaboration, political discourse, peaceful negotiation, and the pursuit of sustainable security, which can be considered cornerstones of Xi Jinping’s vision for common, comprehensive, cooperative, and sustainable security.”<sup>3</sup> Presently, it reflects a nebulous geostrategic offering that serves as an alternative to the prevailing geopolitical framework, which the CCP views as primarily influenced by liberal-democratic countries and, therefore, skewed against its interests.<sup>4</sup> The Initiative has expressed the Chinese approach to reshaping international norms, institutions, and rules to better serve its goals by promoting GSI as a global solution. However, the initiative is more of a global solution yet possesses far-reaching impacts on regional countries, especially for developing countries like Bangladesh.

This paper begins by simplifying the core of GSI. Then, the article aims to dissect the evolving nature of the current world order and elucidate how GSI poses a threat to it, with a specific focus on the security architecture and trade regime. It contemplates the prospect of a transition towards a multipolar order from the prevailing unipolar paradigm. Finally, the essay will highlight some significant takeaways for Bangladesh by delving into these dynamics and sorting out the complexities and implications of this transformative global paradigm shift.

### **Conceptualising the GSI**

**Background:** During his keynote address, ‘Rising to Challenges and Building a Bright Future Through Cooperation,’ at the BFA on April 21, 2022, President Xi first introduced GSI. It emerged in response to rising geopolitical tensions, particularly the Ukraine crisis, the United States (US)-China contest, and regional conflicts. GSI is rooted in China’s broader vision of a multipolar world order and is committed to promoting “common, comprehensive, cooperative, and sustainable security.”<sup>5</sup>

The initiative builds on China’s previous diplomatic frameworks, including the Shanghai Cooperation Organization (SCO), Regional Comprehensive Economic Partnership (RCEP), Belt and Road Initiative (BRI), and the recently proposed Global Development Initiative (GDI). Through these initiatives, China seeks to enhance global stability and peace, foster economic development and establish a community centred on a shared human destiny.<sup>6</sup> It positions China as a security provider, countering Western-led alliances like the North Atlantic Treaty Organization (NATO) and the Quadrilateral Security Dialogue (QUAD). Over time, China has expanded GSI’s influence through peace mediation efforts, defence diplomacy and strategic partnerships across Asia, Africa and Latin America.

**Core Concepts and Key Principles:** The GSI Concept Paper published by China’s Ministry of Foreign Affairs (MFA) outlined six key principles and commitments of GSI. The concept paper amplifies President XI’s speech at the BFA, in which the President convened the countries to stay committed to the core principles of GSI which are as follows:-

- The vision of common, comprehensive, cooperative and sustainable security
- Respecting all countries' sovereignty and territorial integrity.
- Abiding by the purposes and principles of the UN Charter, rejecting the Cold War mentality, opposing unilateralism and saying no to group politics and bloc confrontation.
- Taking the legitimate security concerns of all countries seriously, upholding the principle of indivisible security
- Peacefully resolve differences and disputes between countries through dialogue and consultation, rejecting double standards and opposing the wanton use of unilateral sanctions and long-arm jurisdiction.
- Maintaining security in both traditional and non-traditional domains.<sup>7</sup>

**Brief Analysis of Key Components of GSI:** The Initiative did not unveil the implementation of these principles. However, it did shed light on the worldview of the Chinese leadership within which GSI is located:-

Firstly, Beijing cites the GSI as a response to the significant and chaotic changes in the global order. At BFA, Xi stressed that the Cold War attitude, hegemonism and power politics would hurt global peace and that bloc antagonism would deepen 21st-century security issues.<sup>8</sup> Later, he resisted perceived US containment measures. Unilateralism, self-interest, decoupling, supply disruption, maximum pressure, and 'small circles' or ideological strife will fail today.

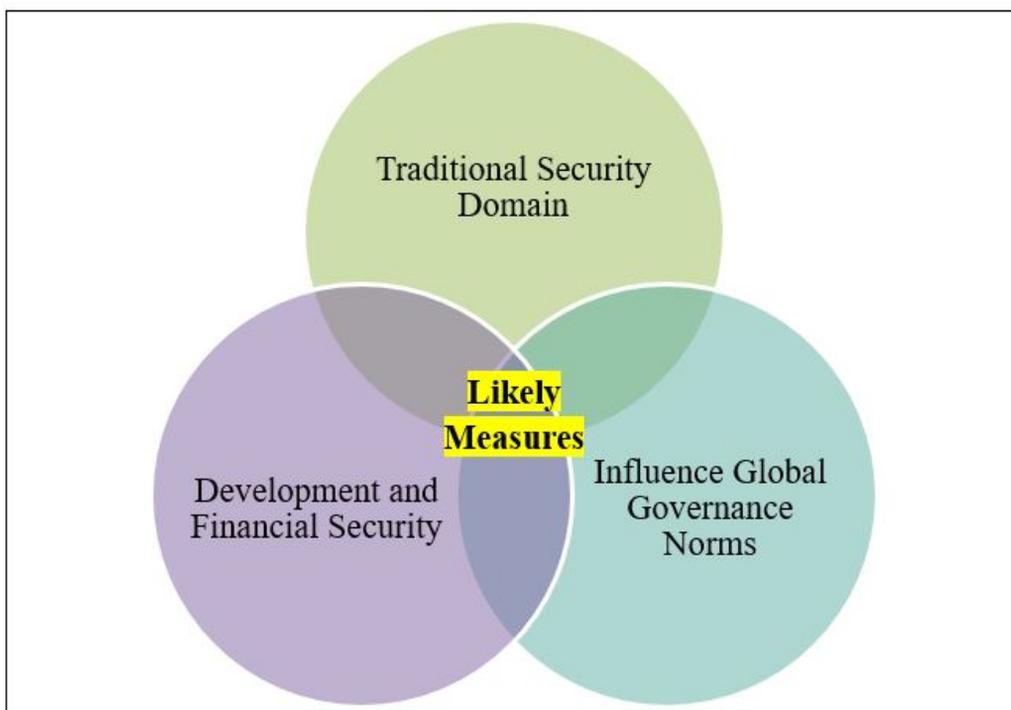
Secondly, the speech suggested that Chinese leadership should seek self-reliance to reduce its strategic deficiencies. It recognises that its development aims and prosperity are increasingly global. Xi stressed the necessity of an open world economy and economic globalisation. Chinese officials believe 'security is the precondition for development,' so the GSI protects development interests and prevents external instability. GSI supports Xi's September 2021 Global Development Initiative (GDI). It also securitises China's economic and development diplomacy.

Thirdly, Xi's statements and Chinese analysts' and opponents' writings show a threat prism. However, preconceptions about China's material power, global influence and ability to influence international discourse, norms and outcomes create an opportunity prism. This opportunity allows Beijing to address global governance, trust, development, and peace challenges as American power declines and China's capabilities rise. Beijing says changing geopolitics has made big-power diplomacy more proactive.

Moreover, Xi's BFA speech and diplomatic efforts illustrate that China's security role depends on the developing world, especially Asia. Xi and other Chinese officials have sought global support for GSI since its establishment. At the June 2022 meeting of Brazil, Russia, India, China and South Africa (BRICS), Xi said, "China would like to work with BRICS partners to

operationalise the GSI.” Xi informed the September SCO meeting that China welcomes all GSI participants. These initiatives yielded mixed outcomes. Near the end of the year, China's Foreign Ministry said, ‘GSI has received support and appreciation from more than 100 countries and international and regional organisations.’<sup>9</sup> A schematic on likely measures under GSI is shown below:-

**Figure-1: Schematic of Likely Measures Under GSI**



Source: Author's self-construct

Finally, GSI remains a mere proposition that unearths the Chinese vision of dominating as a global actor. Therefore, the next section of this paper explores how China threatens the existing world order in the security realm. This exercise intends to unpack their contradictions with Western-led security alliances, push for a multipolar world and emphasise a new approach to security and China's growing role in conflict mediation within the ambit of GSI.

### **The Global Security Order: Transformation Under GSI**

**State of Current World Order:** The US-led global security order is defined by a unipolar framework, where American military superiority and alliances, particularly NATO, shape international security dynamics. The USA has regularly intervened in conflicts and crises since the Cold War, consolidating its global security dominance. Emerging nations like China, Russia, and others oppose this concept as a tool of Western hegemony. China promotes a multipolar

international system based on sovereignty and non-interference, while Russia challenges US supremacy in Syria and Ukraine through strategic alliances and military action. Others support UNSC reforms to reflect better developing powers and balance strategic goals. This increasing resistance challenges the Western-led global security framework.

The Western-dominated monetary system, anchored by the US dollar as the global reserve currency, gives the US financial power. The World Bank and IMF have generally supported this supremacy, allowing the USA to dominate international trade and finance and impose unilateral sanctions. To resist Western hegemony, numerous states are diversifying their financial reserves, de-dollarizing and building alternative payment systems and regional trade blocs. These changes reflect the global financial system’s slow but significant transformation, undermining the Western-dominated economic order.

**Challenges to the US-led Global Order:** After Xi Jinping came to power, a shift was evident from Deng Xiaoping’s policy of “hiding the strength and biding the time”.<sup>10</sup> Since President Xi launched the GSI in April 2022, China has used it to extend its international security role and influence the global order.<sup>11</sup> The following Table-1 highlights the challenges posed by China to traditional Western alliances by promoting an alternative security framework through GSI:

**Table-1: GSI approach Challenging the World Order**

<b>Key Theme</b>	<b>China’s GSI Approach</b>	<b>Challenges to the Current World Order</b>
<i>Promoting Multipolarity Over Unipolarity</i>	GSI condemns U.S.-centric unipolar security paradigms and promotes a multipolar world order that gives non-Western nations worldwide security influence.	Western alliances strengthen Western dominance and unipolarity. GSI counters this by giving non-Western nations a more decisive role in global security policymaking
<i>Undermining U.S. Military Alliances and Influence</i>	GSI prefers diplomatic and regional security relationships to military alliances. It challenges the relevance of US military networks.	US military alliances maintain American dominance in global security, projecting power in key regions. GSI undermines this approach by rejecting military alliances and emphasising diplomacy.
<i>Strengthening Alternative Regional Security Frameworks</i>	China strengthens regional security frameworks through BRICS, SCO and BRI, reducing reliance on Western institutions and promoting alternative security mechanisms.	Western-backed NATO and QUAD dominate regional security. GSI advocates alternatives to US-led defence pacts, redistributing influence across Asia, Africa, and Latin America.

Key Theme	China's GSI Approach	Challenges to the Current World Order
<i>Rejecting Western Interventionist Policies</i>	GSI promotes non-interference and sovereignty, rejecting Western interventionist policies justified under human rights and democracy promotion.	US and Western military interventions (e.g., Iraq, Afghanistan, Libya) are often justified by human rights concerns. GSI challenges this narrative and advocates respect for local governance and sovereignty.
<i>Lessening US Sanctions and Economic Pressure</i>	GSI advocates de-dollarization and alternative trading systems to sidestep Western restrictions and promote economic ties.	Western geopolitical policy relies on US-led sanctions against Russia, Iran and China. GSI weakens sanctions by reducing the US banking system's dominance.
<i>Strengthening the Global South's Role in Security</i>	GSI elevates the role of developing nations in global security decisions, making it more inclusive	Traditional Western policies prioritise Euro-Atlantic interests over the rest of the world. GSI promotes Global South's voice, reducing Western domination in Africa, Asia and Latin America.

Source: Author's self-construct

### China's Alternate Vision on Global Governance

**China's Geopolitical Ambition under the GSI:** The GSI discourse on China's non-traditional security examines its rising attention to global stability, particularly counterterrorism, cyber threats and transnational crime. Supporters argue that GSI encourages regional collaboration and collective security by providing capacity-building, intelligence exchange and accords across Africa and Southeast Asia to address similar concerns. Advocates say this stabilises governments and pushes them to strengthen internal security for modern, non-traditional requirements.

The GSI raises concerns that China's increasing non-traditional security focus may support its geopolitical objective of ensuring overseas interests like BRI projects and maintaining domestic stability by influencing perceived regime threats abroad.<sup>12</sup> Chinese cooperation may drive rising nations to choose Chinese security technologies and worry about monitoring and political control. China's handling of domestic non-traditional security challenges in Hong Kong and Xinjiang makes this concern relevant.

Moreover, GSI may allow China to flex its arm and facilitate engagement in other nations' security frameworks, especially in Asia and Africa. This may be an effort to extend its influence over partner nations' domestic issues. The following map shows the destination of Chinese arms and the location of Chinese private security companies (PSCs) worldwide.

**Figure-2: China's Global Influence as Arms and Security Provider**

Source: <https://www.rand.org/nsrd/projects/chinese-weapon-sales.html>

**Enhanced Engagement as a Global Actor:** China's GSI has positioned her as a key mediator in global conflicts, particularly in the Middle East and North Africa (MENA). China has sought to maintain neutrality while expanding its influence through diplomatic engagements and security partnerships. During Xi Jinping's 2022 Saudi Arabia visit, China proposed major cooperation initiatives and security frameworks. Xi's mediation efforts in the Saudi-Iran reconciliation highlight GSI's potential in regional peace building, challenging the U.S.'s traditional role as the region's primary security actor. Additionally, China introduced multi-point peace proposals for Syria, the Israeli-Palestinian conflict, and broader MENA security, reinforcing its commitment to regional stability.

China's GSI extends beyond MENA, influencing global security discussions, particularly regarding the Ukraine- Russia war. China's 12-point peace proposal emphasised non-intervention, dialogue, and opposition to Western sanctions, aligning with its broader GSI principles. Moreover, China has deepened its UN engagements, military exchanges and regional security collaborations, mainly through initiatives like the Lancang-Mekong Cooperation (LMC) and China-Horn of Africa Peace Conferences, signaling its commitment to a new global security order. Chinese foreign minister Wang Yi stated, "GSI offers a new approach to eliminating the root causes of international conflicts and achieving durable stability and security in the world."<sup>13</sup>

**Successful Mediation of the Saudi-Iran Deal:** On March 10, 2023 Saudi Arabia and Iran announced the normalisation of relations, facilitated by the People's Republic of China. A joint trilateral statement confirmed that an agreement had been reached between the Islamic Republic of Iran and the Kingdom of Saudi Arabia. The declaration suggests intentions to restore diplomatic relations and reopen embassies and missions within two months while affirming respect for state

sovereignty and non-interference in internal affairs. An intriguing aspect is that the three nations employed Mandarin, Arabic and Farsi, rather than English, to negotiate the agreement.<sup>14</sup>

**Promoting Political Solution to Russia-Ukraine Conflict:** The GSI also offers a solution to the Ukraine crisis. The initiative promotes indivisible security and the urge to shed the Cold War mentality. The initiative suggests that flexing military blocs cannot guarantee regional security and that attaining ultimate security by endangering other countries is untenable. Stakeholders must acknowledge the legitimate security concerns of all nations and establish a balanced, effective and durable European security framework for collective and universal safety. Concerned parties should insist on peacefully resolving issues through dialogue and consultation. The international community should condemn forces that incite disputes, obstruct peace discussions and encourage all parties to seek security and peace through dialogue.

### **Regional Impacts of GSI**

The geographical positioning of China within Asia confers a unique array of advantages and disadvantages. It is pivotal among five significant regions: the Middle East to the west, Central Asia, South Asia, Southeast Asia and East Asia. This makes China a key actor in Asian security architectures, including Central Asia's landlocked countries' notable maritime dimensions. China has long envisioned an Asian security framework and GSI has enabled the realisation of this deeply held aspiration.

**Promoting the Asian Model of Security:** On 21 May 2014, Xi Jinping advocated for a new Asia-Pacific security framework at the Conference on Interaction and Confidence Building Measures in Asia (CICA).<sup>15</sup> The concept unveils a new security architecture of mutual trust, benefit, equality, and coordination. It endorses the constructive roles of regional organisations, including the Association of Southeast Asian Nations (ASEAN), South Asian Association for Regional Cooperation (SAARC), League of Arab States (LAS), etcetera.<sup>16</sup> The GSI further echoed the rhetoric by emphasising non-interference, mutual respect and comprehensive security beyond military concerns, including economic, environmental and cyber security. It advocates regional autonomy, rejecting external intervention and Cold War-era alliances. The model promotes multilateralism, gradual diplomacy and inclusive dialogue.

**Advocating Indivisible Security in Chinese Lexicon:** The fundamental tenet of the PRC's emerging security framework is the concept of 'Indivisible security,' which posits that the security of one nation is inextricably linked to that of its regional counterparts and that the security of any single state should not be achieved at the expense of other. The concept was first set out in the 1975 Helsinki Act,<sup>17</sup> which established ground rules for interacting with the two Cold War rivals, NATO and the Warsaw Pact.<sup>18</sup> However, through GSI, the Chinese leadership defied its standing with its allies. On 4 February 2022, in a joint statement, President Putin and President Xi announced 'Friendship with no Limits' and 'Cooperation with no forbidden area.'<sup>19</sup> The initiative

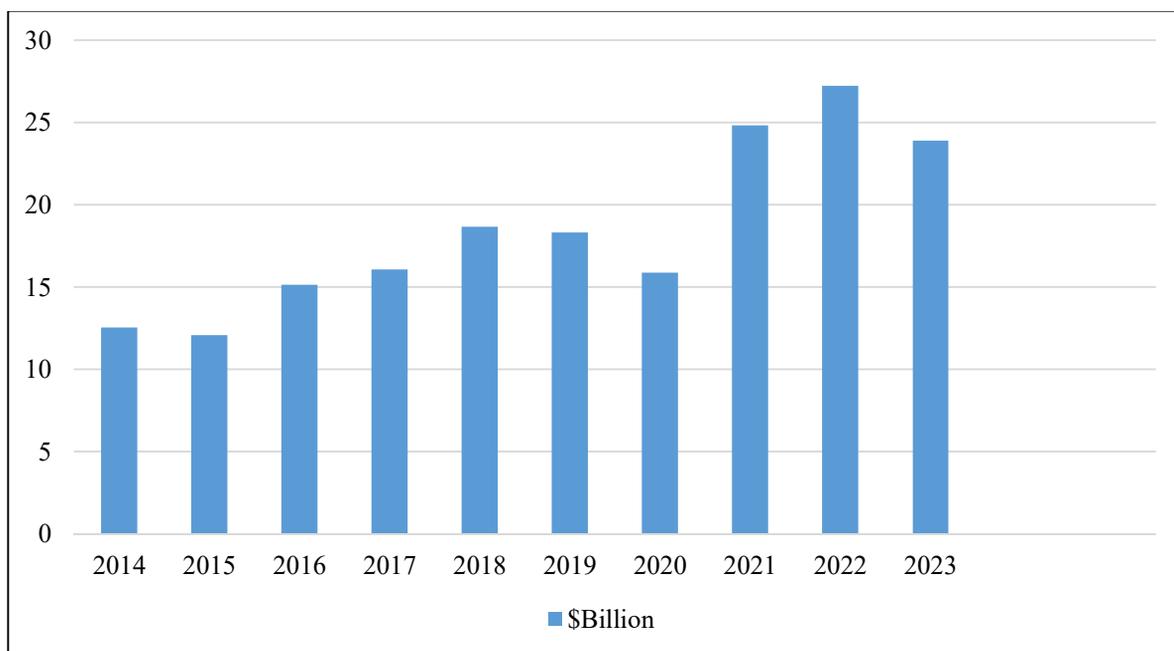
intends to organise security actors across China's party-state structure to strengthen concrete security cooperation with other nations.<sup>20</sup>

**Implementing GSI in Southeast and Central Asia:** As China's security interests in Central and Southeast Asia have expanded, it has placed itself as a regional security provider, gradually branding its actions with the GSI moniker.<sup>21</sup> The GSI supports security cooperation through SCO, BRICS, CICA, and C5+China. This includes military-to-military diplomacy, law enforcement exchanges, expanded military and security training, etcetera. The initiative also emphasises unconventional security issues, such as counterterrorism and cross-border crime, particularly in regions like the Lancang-Mekong area and Central Asia. While some countries, like Cambodia and Tajikistan, have embraced it, its full impact on regional security is still unfolding. The GSI has placed Southeast Asian nations in a challenging situation, sandwiched between great powers, notably the U.S. and China.<sup>22</sup> Southeast Asian countries have traditionally used a "hedging" approach to protect their economic and security interests by maintaining good diplomatic bonds with the U.S. and China.<sup>23</sup> US-based think tank, RAND Corporation found Pakistan, Bangladesh, Cambodia, and Myanmar to be China's most likely overseas base hosts.<sup>24</sup> Nonetheless, China's advent as a regional hegemon has prompted Southeast Asian countries to reevaluate their ties and alliances.<sup>25</sup>

### **GSI: Insights for Bangladesh**

Bangladesh, a historical ally of China, is positioned at a vital South Asian juncture. The nation's involvement in China's Worldwide Security Initiative (GSI), amid its expanding influence in regional and worldwide matters, could profoundly impact its diplomatic, economic and security framework. Bangladesh's strategic location, geopolitical standing, and political upheaval give China a golden opportunity to expand its South Asian influence.<sup>26</sup> Bangladesh needs a prudent yet careful manoeuvre to reap the best from the Initiative.

**Enhancing Economic Relations and Infrastructure Advancement:** Bangladesh-China relations have been scrutinised since China emerged as Bangladesh's biggest trading partner in 2006.<sup>27</sup> The economic connection between Bangladesh and China is fundamentally based on commerce, investment, and infrastructure development. China is Bangladesh's principal trading partner, with bilateral commerce surpassing \$18 billion annually.<sup>28</sup> The BRI has also propelled substantial megaprojects such as the Padma Bridge, Karnaphuli Tunnel and Payra Port. These partnerships have boosted Bangladesh's economy and regional ties. Bangladesh continues to benefit from Chinese investment in technology, energy, and transport infrastructure because the GSI prioritises international security and economic cooperation. However, this growing dependence on China creates concerns about project feasibility, debt sustainability and political control. Meanwhile, according to the Bangladesh Bureau of Statistics (BBS), China continued to be Bangladesh's largest trading partner in the Financial Year (FY)-24, with bilateral trade reaching Tk 2.246 trillion.<sup>29</sup> Figure-3 demonstrates bilateral trade between the nations in the last decade (2014-2023) as shown below:-

**Figure-3: Bangladesh-China bilateral trade in the last decade (2014-2023)**

Source: The Observatory of Economic Complexity <https://oec.world/en/profile/bilateral-country/bgd/partner/chn>

**Regional Security and Geopolitical Considerations:** Bangladesh's strategic position in South Asia, adjacent to India and Myanmar, and its oversight of critical maritime pathways in the Bay of Bengal amplifies its significance in regional security. The GSI, which promotes comprehensive security encompassing military, economic, and environmental issues, may serve as a forum for Bangladesh to participate in regional stability dialogues. Through its participation in the GSI, Bangladesh can enhance its defence capabilities and maritime security, harmonising with China's overarching Indo-Pacific security objectives. Nonetheless, Bangladesh's involvement necessitates meticulous management to prevent excessive dependence on China and sustain equitable ties with neighbouring nations, which are apprehensive about China's regional influence.

**Improving Bilateral Relations with China:** Bangladesh's expanding relations with China are seen in trade, defence, and investment. Bangladesh identifies a framework that matches its foreign policy ideals through the GSI's focus on mutual respect and non-interference in the internal affairs of states. The GSI enables Bangladesh to diversify its strategic partnerships and strengthen its relationship with China, potentially resulting in enhanced military collaboration, including technology transfer, defence assistance and the modernisation of Bangladesh's armed forces. SIPRI, a Swedish think tank on global conflict and security, reported that China supplied 72% of Bangladesh's armaments between 2019 and 2023.<sup>30</sup> Bangladesh's textile sector highly depends on Chinese fabrics, chemicals, yarns, dyes, and machinery. According to Bangladesh

Bank, China was the country's 2nd largest Foreign Direct Investment (FDI) source in the FY 2023-24 and Table-2 shows that FDI from China in 2024 was USD 283.56 million or 19.31%.<sup>31</sup> Bangladesh will aim to bolster mutual relationships in trade, defence cooperation and FDI and its association with GSI will smooth the path.

**Table-2: Top Countries by FDI Inflows (Net) during FY 2022- 2024**

Sl.	Name of Countries	FDI Inflows (Net) In Millions Dollar		
		2021-22	2022-23	2023-24
1.	United Kingdom (UK)	79.51	507.89	506.53
2.	China	428.09	68.15	283.56
3.	Republic of Korea	200.24	284.45	246.35
4.	India	57.09	72.34	132.83
5.	Norway	9.22	11.55	94.43
6.	Singapore	83.90	50.70	93.70
7.	United States of America	426.59	146.40	89.28
8.	Sri Lanka	56.98	20.94	88.67
9.	Hong Kong: SAR of China	121.72	147.55	81.10
10.	Malaysia	66.29	34.61	55.15
11.	Japan	98.67	1.28	47.84
12.	Turkey	8.42	12.58	36.69
13.	Switzerland	-6.35	14.49	32.16
14.	Denmark	61.61	-30.02	27.49
15.	Netherlands	-69.19	72.11	23.20
16.	Pakistan	6.97	12.04	14.78
17.	Sweden	-5.67	5.49	13.03
18.	Canada	2.40	8.10	10.96
19.	France	-24.43	4.21	10.83
20.	Other Countries	119.06	164.91	-420.41
<b>Total</b>		<b>1721.10</b>	<b>1609.77</b>	<b>1468.17</b>

Source: Statistics Department, Bangladesh Bank.<sup>32</sup>

**Engagement with Multilateral Frameworks and Global Peace:** Bangladesh has consistently advocated for multilateralism and the peaceful resolution of conflicts in its foreign policy. The GSI, emphasising collaborative security frameworks, resonates effectively with Bangladesh's goal for global peace and stability. Bangladesh's involvement in the GSI, as a major contributor to UN peacekeeping missions, will enhance its capacity to support regional and GSIs.

Consequently, Bangladesh may influence the course of the GSI, ensuring its methodology stays inclusive and centred on human security, environmental sustainability and social fairness. Furthermore, by participating in the GSI, Bangladesh can champion regional stability and advance its vision of a harmonious, inclusive global order.<sup>33</sup>

**Navigating Global Multipolarity:** An Equitable Strategy Bangladesh's non-alignment stance has traditionally enabled it to sustain a precarious equilibrium between rival global powers. The GSI presents a possible opportunity for enhanced collaboration with China; however, it necessitates meticulous management in a progressively multipolar landscape. Bangladesh must avoid becoming entangled in the geopolitical contest between China and the West, as such tensions could jeopardise its global stance. Although Bangladesh has carefully avoided taking sides in a global power struggle since independence, previously in bipolarity, Bangladesh will be careful in navigating in this era of multipolarity.<sup>34</sup> As such, Bangladesh should remain engaged in global institutions like the UN to promote peace and sustainable development while monitoring GSI and its regional impacts.

**Prudent Involvement with GSI:** Bangladesh is strategically important to China.<sup>35</sup> On 14 October 2024, the Chinese ambassador to Bangladesh, Ambassador Yao Wen, stated that China and Bangladesh now face significant historical opportunities for greater cooperation. China stands ready to collaborate with Bangladesh to seize the opportunities.<sup>36</sup> GSI relationships benefit Bangladesh in many ways. Participation in the initiative might promote economic growth, regional security and diplomatic standing while promoting global peace and stability. When participating in China's GSI, Bangladesh must address geopolitical issues and the risks of overdependence on China. Bangladesh must carefully and strategically manage relations with China while retaining diplomatic autonomy to reap GSI benefits without compromising national interests.

## Conclusion

The GSI, supported by China, suggests a move from the U.S.-led unipolar system to a more competitive and multipolar one. GSI represents Beijing's geopolitical goal of becoming a global security supplier through diplomacy, economic leverage, and regional security formations that challenge NATO and the QUAD. By emphasising non-interference, sovereignty, and "indivisible security," China hopes to change the global security narrative from military alliances to collaboration. Chinese geopolitical goals to expand its influence in Asia, Africa and the Global South are revealed by GSI when addressing collective security and sustainable peace. This strategic shift challenges U.S. dominance, fragmenting and competitiveizing the global environment. Many developing countries want alternatives to Western-dominated security models. Still, GSI's sustainability depends on China's ability to align its growing economic and military power with genuine multilateralism rather than just exerting influence under the guise of global security cooperation.

In this context, Bangladesh emerges as a crucial player in the evolving security landscape, maneuvering the complex dynamics of great-power contests while safeguarding its national interests. Bangladesh, which has close economic and strategic relations with China, benefits from GSI's security, infrastructural, and trade efforts. Dhaka's leading commercial partner and source of foreign investment is Beijing; thus, working with GSI might boost Bangladesh's economic resilience, technical advancement and regional security. Bangladesh must ensure that its involvement in GSI does not damage its traditional diplomatic balance with India, the U.S. and other global allies. Given geopolitical dynamics, Bangladesh's GSI strategy should be realistic, leveraging economic possibilities while retaining foreign policy independence. As the Indo-Pacific area becomes a global competition hub, key governments compete for influence, and strategic alliances become more fluid. Dhaka's role in global security depends on its diplomatic, adaptive, forward-thinking approach to these changing dynamics.

Finally, the GSI reflects a significant, albeit uncertain, shift in international security, affording Bangladesh and other regional countries options and challenges. China must act on its values and maintain inclusion to preserve this alternative to Western-centric security arrangements. Bangladesh must balance economic cooperation and strategic autonomy to maximise GSI benefits. Dhaka must navigate multiple security and economic frameworks while protecting its sovereignty as the world becomes multipolar. Bangladesh may become a major actor in global security by carefully considering and implementing a strategy that aligns national interests with global trends. Amidst rising geopolitical competition, the ability of the nation to adjust, engage in negotiations, and maintain its independence will be crucial in shaping its role within the broader security structure that GSI seeks to transform.

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### Brief Biography



**Major Zubair-Al-Hasan, psc, Engineers** was commissioned from Bangladesh Military Academy (BMA) with 61st BMA Long Course in the Corps of Engineers on 24 December 2009. He has diverse experience serving in the unit and as staff. He served in 2 Engineer Battalion, 6 Engineer Battalion and 10 Riverine Engineer Battalion in different regimental appointments. As staff, he performed his duty as General Staff Officer, Grade-2 in Engineer in Chief's Branch in Army Headquarters and as Brigade Major of a Composite Brigade. Apart from the mandatory courses, he attended the Junior Command Course in India and the Counter Improvised Explosive Device course from ECSME. He is a Civil Engineer from the Military Institute of Science and Technology (MIST) and a graduate of Defence Services Command and Staff College, Mirpur. Under the blue helmet, the officer participated as Operations Officer in the United Nations Peacekeeping Mission in South Sudan (UNMISS). Presently, he is serving as Second-in-Command in 17 Engineer Construction Battalion.

# **Integration of Artificial Intelligence: A Catalytic Agent to Enhance the Effectiveness of Command and Control System of Bangladesh Army in Fighting Operations of War**

Major Md Rezwanul Haque, psc, Infantry

## **Abstract**

*Artificial intelligence (AI) is the intelligent behaviour displayed by machines. With the changing dynamics of the world, the roles of the military are also changing. The modern battlefield demands seamless coordination, rapid decision-making, and superior situational awareness, which can be effectively achieved through the integration of AI into Command and Control (C2) systems. In the present-day battlefield scenario, C2 is one of the key aspects to all military operations and activities. AI implementation in the C2 system becomes the best and fastest at analysing information that aids the commanders in taking quick and precise decisions and gaining an operational advantage over their opponents. Recognizing the transformative potential of AI in optimizing military operations and intelligence management, and to deal with future tech-based warfare and sustaining AI-enabled threats it has become obvious for Bangladesh (BD) Army to develop AI applications in its doctrine. However, significant challenges exist, including the integration of AI into existing C2 infrastructure, ensuring data security and developing AI systems capable of understanding complex military contexts and human intent. By addressing challenges and adopting a holistic strategy, BD Army can lead the charge by integrating AI in to its operational framework to enhance the effectiveness of the its prevalent C2 system in combating operations of war.*

**Keyword:** *Artificial Intelligence (AI), Command and Control (C2) and Bangladesh (BD) Army, Operations of War.*

## **Introduction**

Artificial Intelligence (AI) is widely acknowledged to be one of the most dramatic technological game changers and the most disruptive technology of the current era.<sup>1</sup> AI has advanced very quickly in recent years, resulting in a wide range of applications, both in civil and military. AI enables autonomous systems to conduct missions, achieve sensor fusion, automate tasks, and make better, quicker decisions than humans. Rapid advances in weaponry and defence systems have necessitated the development of a more sensitive military command environment. The widespread adoption of AI technologies is now regarded as a paradigm shift in threat monitoring by enhancing timely decision, a modern revolution in military affairs.<sup>2</sup>

AI is one of the most remarkable technologies that have the potential to revolutionize the face of combat in the years to come. The existing six-dimensional battlefield, including land, sea,

air, space, and cyberspace, is increasingly becoming interactive. AI advancements have shown the ability to augment human ideas and behaviour in various disciplines, particularly in military operations' Command and Control (C2).<sup>3</sup> The C2 system consists of people, organizations, processes, methods and equipment. C2 becomes increasingly essential in different military levels, from the strategic to the operational and tactical levels.<sup>4</sup> Especially, for the fighting arms of BD army, the inclusion of AI may be more appropriate for having an enhanced and efficient C2 environment in the modern-day battlefield scenario.

In BD Army, many research works have been carried out to determine how best modern technologies can be incorporated to deal with existing and expected future C2 challenges on the battlefield. However, the effectiveness of the overall C2 system of the BD Army is severely limited by the lack of speed, inadequate commination facilities, inadequate battlefield surveillance module, data assessment and evaluation, et cetera. Till now, no provision of modern technology has been adopted to enhance effectiveness of the C2 system to connect the commanders with the frontline soldiers on the battlefield. In this regard, emerging technology such as integration of AI into BD Army is anticipated to induce a paradigm shift in strengthening the C2 system in defensive and offensive operations by enhancing prompt decision-making and allowing the army to stay up with technological progress. Therefore, this paper attempts to identify the potential effects of AI on C2 and how best integration of AI may strengthen BD Army's C2 system's effectiveness in fighting operations of war.

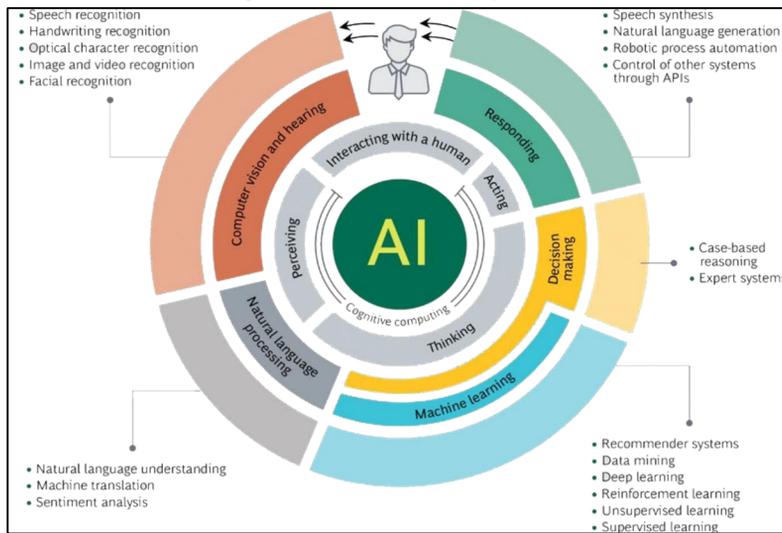
### **Understanding AI with Its Effects on C2 System and Present State of AI Infrastructure of BD Army**

With growing technologies throughout the world, the nature of warfare is changing. Rapid advances in weaponry and defence systems have necessitated the creation of a more responsive military command environment.<sup>5</sup> The advancement of AI has changed the way we think about the modern battlefield. As a result, BD Army must also prioritize AI's capabilities, which have immense potential and effects on the C2 system for fighting war operations.

### **Definition and Terminology of AI**

**What is AI:** AI refers to an artificial system that accomplishes tasks that require human-like perception, cognition, planning, learning, communication, or physical action and is produced in computer software and physical hardware.<sup>6</sup> More precisely, it can be said that AI is the process of creating machines that can study the surroundings and work as intelligently as humans, understand human language, and learn new assignments.<sup>7</sup> Figure-1 depicts the functionality of AI.

**Figure-1: Functionality of AI**



Source: Draft National Strategy AI BD, 2019

**Types of AI:** AI can be divided in various types, there are mainly two types of main categorization which are based on capabilities and based on functionality of AI. Table-1 explains the types of AI as shown below:-<sup>8</sup>

**Table-1: Types of AI**

<b>Based on Capabilities</b>	<p><b>Weak or Narrow AI</b></p> <ul style="list-style-type: none"> <li>• It cannot perform beyond its field or limitations, as it is only trained for one specific task</li> <li>• It operates with a limited pre-defined range of functions</li> </ul> <p><b>General AI</b></p> <ul style="list-style-type: none"> <li>• It is a type of intelligence which could perform any intellectual task with efficiency like a human</li> </ul>
	<p><b>Super AI</b></p> <ul style="list-style-type: none"> <li>• It is a type of intelligence at which machines could surpass human intelligence, and can perform any task better than human with cognitive properties</li> <li>• Some key characteristics of strong AI include capability include the ability to think, to reason, solve the puzzle, make judgments, plan, learn and communicate by its own</li> </ul>
<b>Based on Functionality</b>	<p><b>Reactive Machines</b></p> <ul style="list-style-type: none"> <li>• Such AI systems do not store memories or past experiences for future actions</li> <li>• These machines only focus on current scenarios and react on it as per possible best action</li> </ul>
	<p><b>Limited Memory</b></p> <ul style="list-style-type: none"> <li>• Limited memory machines can store past experiences or some data for a short period of time</li> <li>• These machines can use stored data for a limited time period only</li> </ul>
	<p><b>Theory of Mind</b></p> <ul style="list-style-type: none"> <li>• Such type of AI understands the human emotions, people, beliefs and be able to interact socially like humans</li> </ul>
	<p><b>Self-Awareness</b></p> <ul style="list-style-type: none"> <li>• Self-awareness AI is the future of AI. These machines will be super intelligent, and will have their own consciousness, sentiments and self-awareness</li> <li>• These machines will be smarter than human mind</li> </ul>

Source: Author's self-construct

**Applications of AI at Various Levels of Warfare:** AI has a wide range of usability across different levels of warfare,<sup>9</sup> including the strategic, operational and tactical levels. AI has been increasingly applied to various levels of warfare to enhance military capabilities, decision-making processes and overall operational efficiency. Table-2 illustrates the application of AI at various level of warfare as shown below:-

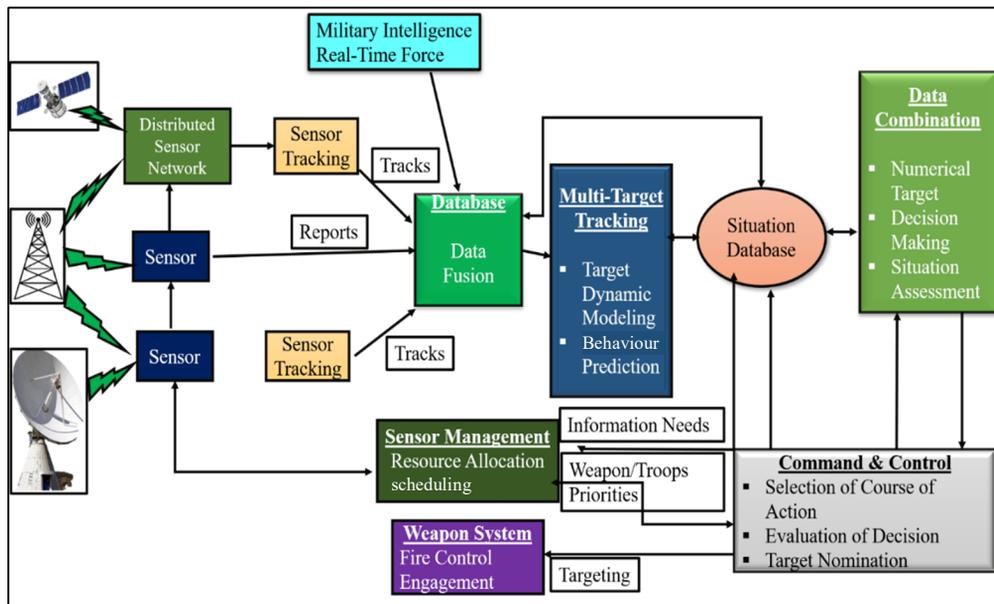
**Table-2: Application of AI at Various Levels of Warfare**

<b>Applications of AI at Various Levels of Warfare</b>	
<b>AI at the Strategic Level of War</b>	<p><b>At the strategic level, AI with machine learning (ML) can accomplish advanced military activities. Few examples are:</b></p> <ul style="list-style-type: none"> <li>• Precision Targeting of Strategic Assets</li> <li>• Strategic Planning</li> <li>• Resource Allocation</li> <li>• Scenario Analysis</li> <li>• Command &amp; Control</li> </ul>
<b>AI at the Operational Level of War</b>	<p><b>AI can significantly enhance military operations at the operational level of war, where the focus is on planning and executing campaigns and major military engagements. Few examples are:</b></p> <ul style="list-style-type: none"> <li>• Situational Awareness</li> <li>• Mission Planning</li> <li>• Logistics and Support</li> <li>• Battle Management and Coordination</li> </ul>
<b>AI at the Tactical Level of War</b>	<p><b>AI will provide the tactical commander a new facet in the military. Violent ascendancy of no man’s land, target identification and counteraction, dynamic C2 system, et cetera. Few examples are:</b></p> <ul style="list-style-type: none"> <li>• Threat Assessment</li> <li>• Command &amp; Control</li> <li>• Autonomous Vehicles</li> </ul>

Source: Author’s self-construct

**Conceptualization of AI-Powered C2:** AI-powered C2 refers to the integration of AI in military command and decision-making processes. It involves leveraging AI technologies to enhance the efficiency, accuracy and effectiveness of the C2 structure. AI into C2 systems can potentially deliver critical system support when the time is limited or when the number of options is too large for people to be able to analyze alternative courses of action. An AI-Powered C2 is an automated and systematic system, which provides real time situation awareness, sharing of true Common Operational Picture (COP) of the battlefield to the commanders.<sup>10</sup> AI-powered C2 system is based on the following model.

**Figure-2: AI-powered C2 Model**

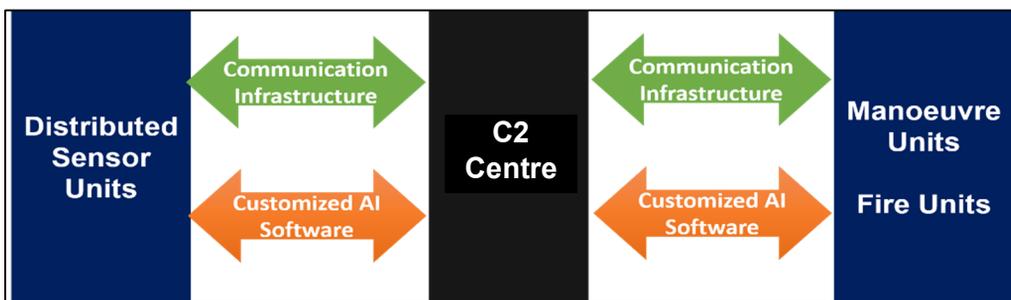


Source: Author's self-construct

**Effects of AI-Powered C2 System in Operations of War**

AI has emerged as a game-changer,<sup>11</sup> revolutionizing the way wars are planned, executed, and assessed. At the forefront of this transformation stands AI-powered C2 systems, a groundbreaking fusion of human ingenuity and machine intelligence. These systems leverage the immense processing capabilities of AI to enhance situational awareness, streamline decision-making processes, and optimize the coordination of military assets on the battlefield. As the global defence community continues to explore the potential of AI-powered C2, it is evident that this novel approach has both the potential to revolutionize the effectiveness of military operations and raise profound ethical considerations. In subsequent paragraphs, the potential effects of AI in enhancing effectiveness of C2 systems in combating operations of war are discussed. Figure-3 shows the functionality of AI-powered C2 system in combating operations of war.

**Figure-3: Functionality of AI-powered C2 System in Combating Operations of War**



Source: Author's self-construct

**Target Detection and Analysis:** The sensors on the ground are primarily used to detect targets, and the analysis is based on the relationship between the train and test datasets gathered by the sensors.<sup>12</sup> AI technology allows for the automated identification, tracking and assessment of targets in various domains, including military, security, autonomous vehicles, et cetera. The AI module generates multiple options to assist the commander in determining target strength and geographical location and whether or not to engage the target. According to final report of National Security Commission on AI 2021 agreed that AI-enabled target detection scheme will improve the effectiveness of the current C2 and decision support system.

**Common Operational Picture (COP):** AI guided COP is a single, standardized display which shows position of own troops and enemy troops, position and status of important infrastructure such as bridges, roads, et cetera. A COP aids all echelons in achieving superiority over the enemy by facilitating collaborative planning and execution. AI contributes to generating a COP by collecting, analyzing, and presenting data from diverse sources in a coherent and real-time manner. This shared understanding of the battlefield enables military commanders and personnel to make informed decisions, coordinate operations and respond effectively to threats and opportunities on the battlefield.

**Reduced Intelligence Cycle (RIC):** When the same information is gathered from various sources, the intelligence cycle becomes more complicated. The AI-based intelligence loop will reduce information redundancy and help predict threats more quickly.<sup>13</sup> As a result, a more accurate threat forecast will have a significant impact on the C2 system. According to the analysis it is believed that RIC has potential influence of AI that will boost C2 efficiency at various levels that includes rapid decision making, convert information to intelligence in short time and quick dissemination of intelligence.

**Quick Readjustment of Original Plan:** It's critical to make a speedy modification to the original strategy because no plan survives the first contact. The AI-powered system will give commanders with a variety of alternative options by calculating and evaluating the training and test datasets.<sup>14</sup> National Security Commission on AI 2021 revealed that AI-powered C2 will allow for speedy re-adjustment of plan on the battlefield enabling exploitation of fleeting opportunities, activating contingency plans and evaluation of commander's decisions.

**Situational Awareness:** Situational awareness is crucial for making informed decisions, coordinating operations, and responding effectively to changing circumstances. Threat monitoring and situational awareness have been recognized as one of the key benefits of AI-guided system.<sup>15</sup> AI has the potential to significantly enhance situational awareness on the battlefield by providing real-time, accurate, and comprehensive information to military personnel and commanders. AI's ability to process and analyze vast amounts of data in real-time, identify relevant information, and present it in an accessible manner can greatly improve situational awareness on the battlefield. This enhanced awareness empowers military personnel and commanders to make timely and well-

informed decisions, ultimately improving the effectiveness and safety of military operations and strengthening C2 on the battlefield.

**Own Force Tracking (OFT):** For the command echelon to maintain control, the capacity to track its own force in the heat of combat is crucial.<sup>16</sup> An AI-powered system will provide the updated of friendly dispositions through the distributed sensor units. Moreover, AI systems can integrate with Global Positioning System (GPS) technology and location-based services to track the precise position of friendly forces. By leveraging AI for tracking own forces on the ground, military units can operate more efficiently, reduce the risk of friendly fire incidents, and enhance overall C2 on the battle field.

**Rapid Decision Making:** The AI-powered quick decision-making tool is intended to assist commanders in making proper judgments and providing strong evaluation of the results within a shortest possible time. Faster decision making will edge over enemy.<sup>17</sup> In 2022, according to the research report on AI by Rand Corporation rapid decision making is one of the most important effects of AI power that makes the C2 effective.

**Own/Threat Casualty Estimation:** Accurate casualty estimation is essential for medical response, resource allocation, and overall situational awareness. The AI-powered system assists in determining own/threat casualty estimation at any stage of the battle. Sensors provide the common battle picture about the casualty rate of both own and threat. This automated casualty estimation module helps the commander to determine the forcer ratio and employment of reserve. AI-driven casualty estimation is particularly valuable in high-intensity conflicts and scenarios where large-scale casualties are expected. By providing accurate and timely information, AI helps military medical teams respond effectively to casualties and optimize the allocation of limited resources, ultimately improving the chances of survival and recovery for injured personnel.

### **Present State of AI Integration of BD**

To keep pace with the modern world, in 2019, a draft National Strategy for AI Bangladesh has been formulated by ICT Division. The slogan of the strategy is ‘AI for Innovative BD’.<sup>18</sup> In BD, AI activities are mostly limited to a few academics and young private businesses, particularly in the service sector.<sup>19</sup> Table 3 portrays the world AI index report 2023, where BD is ranked 123<sup>rd</sup>, while the US in 1<sup>st</sup> place and India in 18<sup>th</sup> place in different sectors of AI Integrations. Despite the fact that the government has already drafted an AI policy and announced its first National Strategy, progress in this area is modest. In comparison to the global and regional contexts, BD is still in the early stages of this industry and has a long way to go to attain its targeted goals. World AI index report 2023 is shown below in Table-3:-

**Table-3: World AI Index Report 2023**

Country	Talent	Infrastructure	Operating Environment	Research	Development	Government Strategy	Commercial	Overall Ranking
USA	1	1	35	1	1	10	1	1
China	21	2	4	2	3	5	2	2
UK	4	19	11	3	11	14	4	3
Canada	8	16	20	5	9	3	6	4
South Korea	19	6	50	18	2	7	15	5
Israel	5	28	29	7	12	51	3	6
Germany	14	11	17	4	10	8	11	7
Netherlands	6	8	8	13	7	29	21	8
India	2	39	33	26	6	39	12	18
Bangladesh	111	120	113	121	119	102	117	123

Source: <https://www.tortoisemedia.com/2023/06/28/the-global-artificial-intelligenceindex>  
 Accessed on 18 January 2024.

**Present State of AI Infrastructure in BD Army**

In comparison to the neighbouring countries, BD Army remains far from taking AI development initiative. With the existing facilities within the Army, it will face tremendous difficulty to implement AI as they are not adequately designed to support AI technology. However, realizing the future trends of warfare, military leadership is on a positive mindset for implementing AI in the BD Army. Several studies have been carried out in National Defence College (NDC) and Defence Services Command and Staff College (DSCSC) about the prospect of AI in the BD Army. However, in the BD Army, few steps have been taken to incorporate AI technology to build technologically driven military in future. Table-4 depicts current AI infrastructure/development of BD Army.

**Table-4: Current AI Infrastructure/Development of BD Army**

Serial	Organization	Development	Remarks
1.	Army War Game Centre (AWGC)	AI guided war gaming software (SWOD) has been incorporated to validate and identify weakness of operational plan	Every year different formations and military training institutes take part in AI guided war gaming exercises
2.	Defence Services Command and Staff College(DSCSC)	In collaboration with AWGC, DSCSC conducts AI-guided exercise 'Exercise Nogar Durgo'	
3.	Signal Training Centre and School (STC&S)	<ol style="list-style-type: none"> <li>In 2021, developed a draft cyber doctrine that includes the concept of AI.</li> <li>Regularly, theoretical and practical lessons are taught to the officers in the basic course.</li> <li>Developing Prototype projects.</li> </ol>	
4.	Information Technology (IT) Directorate, AHQ	<ol style="list-style-type: none"> <li>Data Centre has been established in 2016.</li> <li>AI guide Security Operations Centre (SOC) is in the process of development.</li> <li>Soon draft AI Strategy will be formulated.</li> </ol>	
5.	86 Independent Signal Brigade	<ol style="list-style-type: none"> <li>A satellite substation has been established in Dhaka Cantonment and satellite communication testing and trials are under underway.</li> <li>An adhoc satellite communication (SATCOM) unit has been established.</li> </ol>	
6.	Military Institute of Science & Technology (MIST)	<ol style="list-style-type: none"> <li>Theoretical and practical lessons are taught to the officers and civil students in various discipline.</li> <li>Development of Prototype projects.</li> </ol>	
7.	Electronic Warfare (EW) Coy	As part of Forces Goal 2030, EW coy has been established where few AI-powered applications are in the process of induction	

Source: Author's self-construct

### **Comparative Assessment of Present C2 System of BD Army with AI-Powered System in Fighting Operations of War**

AI-powered system expedites the commander's decision-making process. Data sharing, evaluation of decision, threat assessment, quick dissemination of information, automated formulation of contingency plan are some examples. Table-5 illustrates the comparative assessment of present C2 system of BD Army with AI-powered system.

**Table-5: Comparative Assessment of Present C2 System of BD Army with AI-Powered System**

Serial	Discussion Point	Present C2 System	AI-Powered C2 System
1.	Named Area of Interest (NAI)	No means to monitor	Distributed sensor unit will enable NAI monitoring
2.	EW Capability/ Battlefield Surveillance	Limited EW capability by HUMINT that is unreliable	Sensors will provide real time common operational picture of the battle field those are reliable and faster
3.	Intelligence Sharing Procedure	Long and complex	Faster, simple and reduces the intelligence cycle
4.	Communication Reach of Commanders of Different Echelons	Cannot directly establish communication with front line troops	Establish direct communication with front line troops
5.	Calculation of Force Ratio	Not accurately possible	High rate of accuracy
6.	Automated Contingency Plan	Manually done	Possible with multiple options
7.	Own/Threat Casualty Estimation	Not accurately done	Automated and accurate
8.	Decision Making	Comparatively slow	Faster with better accuracy
9.	Evaluation of Decision	Cannot be performed instantly	Can be performed instantly
10.	Priority of Target	Takes longer time and may not be accurate all the time	Precociously done

Source: Author's self-construct

### Challenges and Opportunities of AI Integration in the BD Army

Varied perceptions beget numerous and multi-dimensional challenges in the integration of AI-powered C2 system in BD Army.<sup>20</sup> Since AI is a high-tech system, different stakeholders have diverse perspectives on its integration into BD Army. Challenges of AI integration will stem in form of technological understanding, budgetary constraints, AI's security vulnerability, legal framework, et cetera.

## Challenges of Implementing AI into BD Army

**Shortfall in IT Training and Research & Development (R&D):** Various analysts believe that the BD Army requires realistic training and more R&D in the AI field to prepare for better development. Compared to the rest of the world, BD is far behind in IT training & R&D. BD Army's severe lack of IT expertise, talent and knowledge is the most pronounced weakness. For technological advancements, the BD Army needs an R&D cell. Inadequate training is a fundamental flaw in the BD Army's development of technological improvement which is potential challenge in incorporating AI technology.

**Non-Availability and Inaccessibility of Big Data:** Another critical challenge for BD Army is acquiring and integrating AI-related data without endangering security and ethics. AI systems rely on data, which necessitates skills, big data infrastructure, and a regulatory and technological enablement framework. A lack of appropriate data increases the risk of inconsistency and can result in unpredictability which a potential challenge towards AI integration.<sup>21</sup>

**Doctrinal Reorientation:** In BD, AI is a relatively a new notion.<sup>22</sup> On that basis, doctrinal reorientation in the BD Army is a difficult task to undertake effectively. Lack in technological progress, adversary pattern, terrain and weather condition are the major reasons that doctrinal reorientation is difficult in regards to AI integration in BD Army. Hence, AI system's doctrinal appropriateness is a challenge.

**The National AI Strategy Excludes AI for Military Use:** AI for military purposes is not included in the ICT division's draft AI plan 2019.<sup>23</sup> As national AI policy prohibits the employment of AI in the military, incorporating AI into the BD Army is a major challenge. So far there is no guidelines to incorporate AI for military purposes into national strategy which poses significant challenges for BD Army.

**Inadequate Organizational Structure:** The lack of an organizational structure is a flaw in the development of disruptive technology like AI. Only the IT directorate is equipped to work in such a technologically advanced field.<sup>24</sup> For future AI technology, the BD Army's senior leadership also emphasized for organizational structure. A new organizational structure is needed for future work with AI technology in BD Army.

**Absence of AI Policy and Regulations:** The fields of AI are expected to have implications in several policy areas. Armies all around the world are progressively taking into account the many AI implications whilst formulating policies. Advanced Armies' main policy issues related to technology are data collection, storing, processing, social safety, security, privacy and ethics, legal issues, intellectual property rights, et cetera. BD Army is yet to formulate its own AI policy, which is one of the significant challenges of AI integration.

## Opportunities for BD Army to Integrate AI

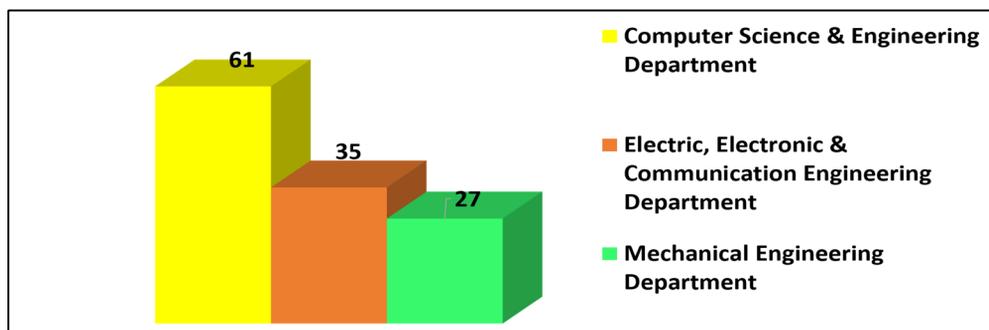
Besides challenges, BD Army has developed a lot of opportunities to implement AI into its operational framework. The challenges can be addressed by the taking the advantages of prevailing opportunities available to the BD Army.

**Potential Human Resources:** Satellite, programming, network, software, computer systems, signal transmission, cyber security, database management, server administration, and telecommunication are among areas where the BD Army has experts.<sup>25</sup> Many officers from various corps have already completed advanced studies in IT-related areas, such as computer science and engineering, electrical and electronic engineering, mechanical engineering, et cetera both at home and abroad, and more are on the way. This workforce with a lot of potential could bring AI breakthroughs in the BD Army.

**Development of Network Infrastructure:** BD Army has the first Tier-III data centre in South Asia and a disaster recovery site (DR). It unites the whole Army through a lone platform that runs nearly 100 applications, websites, and enterprise-level services and can store up to 500 Terabytes of data. Two Internet Service Providers (ISPs),<sup>26</sup> one from Nationwide Telecommunication Transmission Network (NTTN) and the other from BD Telecommunications Company Limited (BTCL), support the Army Wide Area Network (WAN) design and are linked in tandem to safeguard data recovery. In addition, the Army's network infrastructure embraces a high-capacity core switch and a next-generation firewall system all over BD Army. All these offer enormous opportunities for BD Army to embrace AI technology.

**Institutional Support of R&D for AI Innovations:** Besides, the military schools and training institutions for all Arms and Services, Army has number of reputed educational institutions for higher studies having R&D facilities. Bangladesh University of Professionals (BUP), Military Institute of Science & Technology (MIST) and many other Army run universities and colleges have laboratory facilities for research. All these facilities offer opportunities for BD Army to integrate AI technology in its operational framework. Number of AI-powered projects done by MIST student officers are illustrated in Figure-4.

**Figure-4: AI-powered Projects by Student Officers of MIST (2020-2023)**



Source: MIST

**Establishment of Satellite Sub-Station:** In Dhaka cantonment, a ‘Bangabandhu Satellite’ sub-station has been established, which is under 86 Independent Signal Brigade. This installation has provided an exclusive prospect for the BD Army to maximize the benefits of technological progress. This sub-station has opened a unique opportunity for BD Army to implement AI innovations.

**Leadership in Positive Mind-set:** Senior leadership of BD Army is very positive towards the technological advancement, particularly AI, which will create an edge for BD Army. With the latest technical advancements, policymakers have already acknowledged the relevance of AI technology in building an intelligent and smart force. By cultivating this positive outlook, leadership can foster an environment where AI integration is viewed as an opportunity for enhanced capabilities rather than a challenge. This mindset shift is instrumental in promoting innovation, collaboration, and a smooth transition towards a technologically empowered military force in Bangladesh.

### **AI Integration Plan into the BD Army to Strengthen C2 Effectiveness in Operations of War**

In the context of BD Army, the effectiveness of prevalent C2 system is sternly limited by the lack of swiftness, inadequate communication facilities, inadequate situational awareness module, inadequate situational responsiveness module, prone to several perceptual decision/planning idiosyncrasies, habit, et cetera. To alleviate this situation, AI, which is defined as an intelligent computer-based system that assists or replaces humans when large amounts of data must be analyzed quickly and can be used as a decision/planning aid technique that allows the commander to focus on the options available and determine the best course of action.<sup>27</sup>

### **Pre-requisites for the Integration of AI in BD Army**

Few pre-requisite requirements for incorporating AI into the BD Army have been identified through different study which are discussed in the subsequent paragraphs:-

**Policy Formulation:** The BD Army has yet to develop an AI policy.<sup>28</sup> Forming the right AI policy can have a big impact on the direction and implications of AI developments, allowing for the best possible start for AI-enabled expansion in the BD Army’s operational framework. Information Technology (IT) Directorate, Army Headquarters in consultation with Signal Training Center & School (STC&S) should take the lead to formulate realistic and feasible military AI policy and strategy. While formulating military AI strategy few things to be considered such as identifying priority Areas of AI application, embedding AI with various operations of war, et cetera.

**Generating Big Data and Automated Datasets:** Better the data, better the AI decision. It will be extremely difficult to use AI technology without the availability of labeled data and digital infrastructure. To host and manage digital platforms, the BD Army needs to establish a robust and adaptable data infrastructure. IT Directorate must ensure data feeding of all operational, administrative and training events must be ensured.

**AI Research and Development (R&D), Training and Awareness:** The significance of R&D, along with comprehensive training and awareness initiatives, cannot be overstated for the BD Army.<sup>29</sup> Furthermore, fostering awareness within the Bangladesh Army about the potential applications, benefits, and ethical considerations of AI is essential. This holistic approach ensures that the military is not only equipped with state-of-the-art technology but also possesses the knowledge and awareness necessary to harness the full potential of AI in safeguarding national security. However, only a few people are aware of AI's technological growth in the military arena. To raise AI awareness and establish suitable R&D facilities, training institutions (MIST, BUP and Schools) must collaborate with civil institutions to develop a module that will better support the system.

**Inclusion of AI for Military Use in National AI Strategy:** Inclusion of AI for military use in national AI strategy is paramount importance. A board of officers from the AFD should take the lead in collaborating with the ICT division and ensuring that AI for military use is included in the national AI policy.

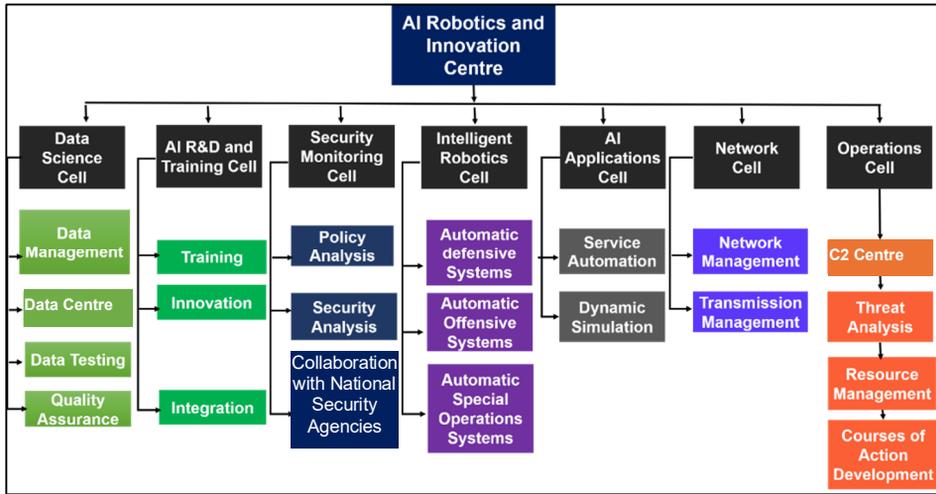
**Steps to Mitigate Knowledge and Skill Deficiencies:** Practical, feasible and project-based training about new technologies like AI, networking, big database data, IT security, et cetera should be conducted in schools and centres of technical arms for all ranks. Selected personals from all arms should be send to the civil technical organizations for training and knowledge sharing. Besides, project-oriented training should be focused all the military institutions to embrace AI into BD army.

### **Proposed AI Integration Plan for BD Army's Operational Framework to Enhance the Effectiveness of C2 in Fighting Operations of War**

It is obvious that AI for combat objectives was not included in the BD government's draft AI strategy. However, by prudent persuasion of Armed Forces Division (AFD) with ICT division, it is imperative to include combat objectives into the final AI strategy for BD. Since the BD government will implement required guidelines for molding AI within the military, the researcher has proposed organizational structure, operational framework for AI adaption, AI integration roadmap in BD Army and various tiers' responsibilities in the following paragraphs.

**Proposed AI Organizational Structure for BD Army:** AFD may form a Task Force led by a technically competent senior officer to recommend AI applications in diverse sectors across all services. An organizational framework is a must for developing AI in the Bangladesh Army in order to stay competitive in this disruptive technology field. An AI Robotics and Innovation Centre (AIRIC) could be established to engage with national and international organizations. AIRIC (Figure below) should be led by a technically sound officer with at least the rank of Brigadier General. Otherwise, it will have difficulty in accomplishing the targeted work, similar to the Army EW company, which was formed in 2012 but has yet to go on its operational objective mission. The suggested organizational structure for the integration of AI technologies within the BD Army is depicted in Figure-5.

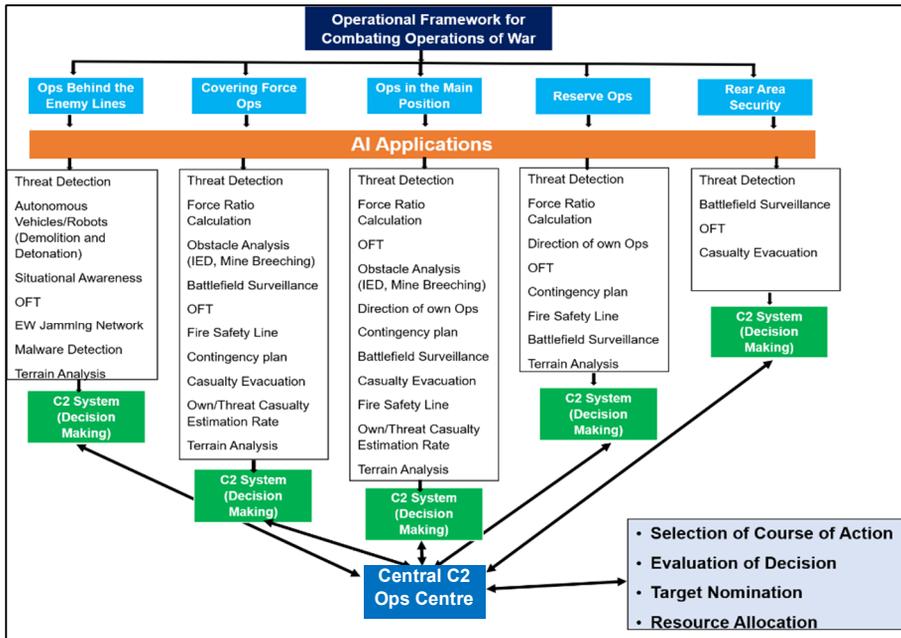
**Figure-5: Proposed AI Organizational Structure for BD Army**



Source: Author’s self-construct

**Proposed Operational Framework for AI Adoption in the BD Army:** With a functional solution, the operational framework can provide suitable outputs. The BD Army’s operational framework in fighting operations of war should be thoroughly analyzed to maximize the benefits of AI while reducing its potential costs and hazards. Study says that BD Army should create and conform AI applications to its prevailing operational framework in order to strengthen its C2 system. AI integration in BD Army’s operational frameworks is depicted in Figure 6.

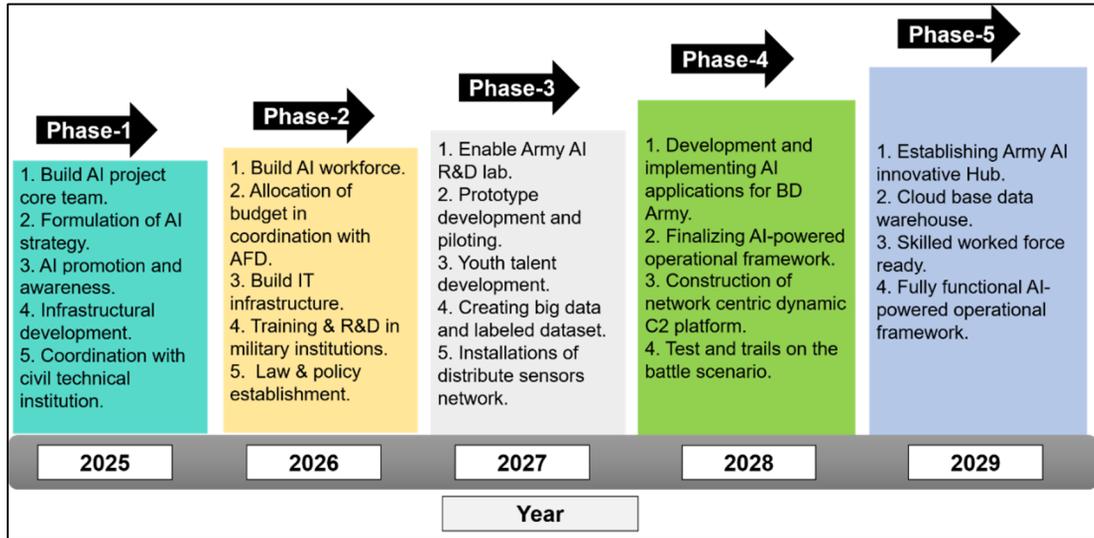
**Figure-6: AI integration in BD Army’s operational frameworks**



Source: Author’s self-construct

**Proposed AI Integration Roadmap for BD Army:** Researchers has recommended a five-year AI integration strategy for the BD Army based on qualitative analysis. The phases’ scales are scheduled for the years 2025, 2026, 2027, 2028, and 2029, respectively in Figure-7.

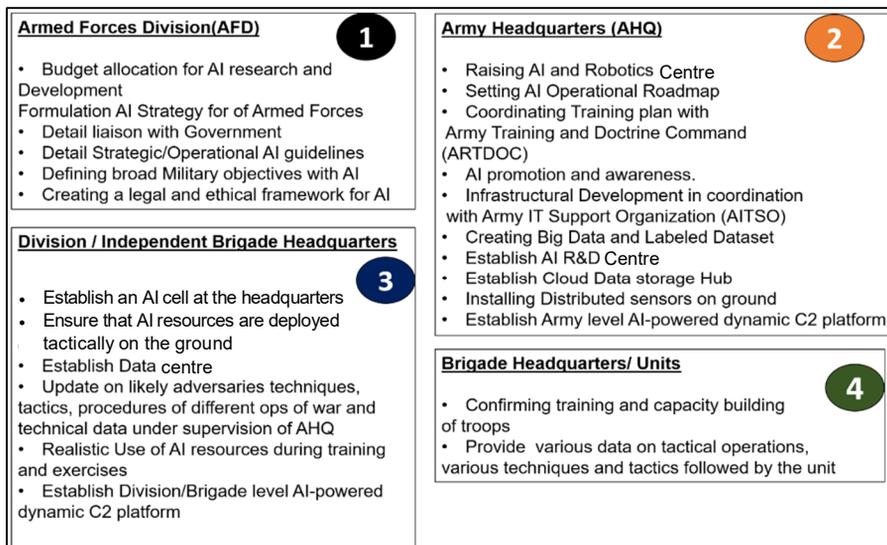
**Figure-7: Proposed AI Integration Roadmap for BD Army**



Source: Author’s self-construct

**Different Tiers’ Proposed Roles and Authorities:** Figure 8 depicts the anticipated task and responsibilities of the AFD, AHQ, Division Headquarters, Brigade Headquarters and Units.

**Figure-8: Different Tiers’ Proposed Roles and Responsibilities**



Source: Author’s self-construct

## **Conclusion**

The present C2 system of the BD Army demands a transformation in fighting operations of war. The present-day battlefield scenario necessities quick and effective decision making by the commanders. Effective C2 systems are not just decision-making processes that select the best option but also the creation, evaluation and refinement of the situation. AI technology offers the possibility of real-time intelligent decision aids for the C2 system for fighting the operations of war. Even in a complicated warfare environment, AI has the ability to act as a force multiplier by integrating all military elements. In fighting operations of war, an AI-powered C2 system will have substantial effectiveness over the present C2 system of the BD Army. The comparative assessment of the AI-powered C2 system over the present C2 system has affirmed the dynamics of intelligence sharing procedure, calculation of force ratio, automated contingency plan, battle field surveillance and faster highest and lowest level communication accessibility. Target identification and analysis, situational awareness, OFT, RIC, own/threat casualty estimation and are the key effects of an AI-powered C2 system that supports the commander in making quick and precise combat decisions.

A few notable challenges for AI implementation in the BD Army to improve its C2 system are shortfall in training and R&D, non-availability and inaccessibility of bigdata, doctrinal orientation, Absence of AI policy and so on. It is to be mentioned that besides the challenges, there are several opportunities to implement AI in the BD Army, such as potential human resources, institutional support for AI R&D, satellite sub-stations, et cetera. To endure in the future military environment, the BD Army will have no alternative but to incorporate AI-powered technology in the coming days. Comprehending the future warfare trends, military leadership is on an optimistic mindset for AI implementation into BD Army.

Considering the constraints and prospects in BD Army a few prerequisite conditions were identified to implement AI. Formulation of AI policy and strategy, generating big data and automated datasets, development of AI infrastructure, AI R&D, training and awareness and requirement of an organizational structure are few key prerequisites. According to the findings, the AFD should form a task force to coordinate and supervise AI implementation in the Armed Forces. The proposed AIRIC will collaborate with the AFD and be in charge of AI development in the BD Army. To speed AI adoption and provide suitable outcomes with a practical solution, AIRIC must work through the suggested framework. Based on the analysis, the research has proposed a five-year AI implementation roadmap in BD Army. To expedite the proposed roadmap, the study has suggested specific role and authorities of different tiers of BD Army. Consequently, AI-powered C2 system will dynamically enhance the effectiveness of present C2 system practice in the BD Army in fighting operations of war.

## **Recommendations**

Considering the future trends of warfare, present AI development in military sectors, following recommendation can be made to incorporate AI-powered C2 system into BD Army in fighting operations of war:

- a. A board of officers under IT Directorate may be formed to ascertain the practical impacts of AI-powered C2 system and its effect in fighting operations of war.
- b. More study can be carried out under the supervision of IT Directorate, Signal Directorate and Signal Training Centre and School (STC&S) to find out the feasibility of AI integration into BD Army.
- c. A board of officers under Army Training and Doctrine Command (ARTDOC) may be formed to evaluate contemporary training modules to include an IT package for aptitude building of all ranks of BD Army so that they are familiar with AI technology.
- d. Comprehensive awareness programs under the supervision of formation headquarters may be arranged at unit and formation level to reduce the psychological barriers about the AI technology.
- e. AI R&D should be prioritized in Army Training Centers and Schools, Military Universities, and factories like MIST, BUP, and Bangladesh Machine Tools Factory (BMTF).

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### Brief Biography



**Major Md Rezwanul Haque, psc, Infantry** was commissioned with the 63<sup>rd</sup> BMA Long Course on 22 December 2010 in the Corps of Infantry. He held all regimental appointments in his parent battalion 17 Bangladesh Infantry Regiment. He is a graduate of Defence Services Command and Staff College. He contributed to peace in Congo as Platoon Commander with BANRDB/1 in 2018. He has also served in Pabna Cadet College as Adjutant and Instructor class B. Presently, he is serving as a Grade 2 Staff Officer in the Overseas Operations Directorate of Army Headquarters.

## **Integrating Meta-Leadership Approach for Mid-Level Officers of Bangladesh Army: Overcoming the Challenges in the 21<sup>st</sup> Century**

Major Nur Mohammad Al Shawon, psc, G, Arty

### ***Abstract***

*The Bangladesh Army (BA) is undergoing significant changes, including the induction of educated soldiers, new technology and socio-cultural shifts. A dynamic leadership style, such as meta-leadership, which emphasises connectivity, emotional intelligence, and participatory decision-making, could help to address these challenges. This article discusses the leadership difficulties confronting the Bangladesh Army (BA) in the twenty-first century and investigates the potential integration of Meta-leadership Approach (MLA) to overcome these challenges. The article explores several leadership methods, emphasising the importance of moving away from traditional hierarchical command and control system and toward more dynamic, adaptable models in response to changing societal and organizational needs. MLA is presented as a solution to leadership issues such as hierarchical command structure, inflexible decision-making, poor connectivity and low morale. Through statistical analysis, it is revealed that the current leadership approach in the BA is inadequate for addressing modern days complexities. The article emphasises the need for revised training programs that focus on emotional intelligence, critical thinking and contextual intelligence, alongside fostering a more communicative and flexible leadership approach. It is expected that this dynamic leadership style will allow under-commands to contribute more to the Army, opening the way for a more robust and spirited Army in the future.*

**Keywords:** Leadership, meta-leadership, 21<sup>st</sup> century leadership challenges, Mid-level officers of Bangladesh Army.

### **Introduction**

Leadership is a unique trait that influences people. Many leadership styles are prevailing in the present world, such as democratic, autocratic, Laissez-Faire, strategic, transformational, transactional, and so on. The concept of meta-leadership has emerged to deal with the ever-changing leadership dynamics of the present world. This is a leadership approach that transcends traditional command structures, emphasizing connectivity, adaptability coupled with emotional and contextual intelligence.<sup>1</sup> This concept provides leaders with the skills and perspectives needed to lead in a challenging environment. It offers a broader, more adaptable leadership framework beyond traditional command and control structures.<sup>2</sup> The ability to influence beyond a leader's immediate domain and connect different organisations or components to achieve a shared purpose is the key aspect of meta-leadership.<sup>3</sup> This newly emerging concept may contradict the present military leadership approach based on a hierarchical leadership structure. However, the leadership challenges of the 21<sup>st</sup> century demand a reassessment of the present military leadership approach to overcome the challenges.

Numerous new difficulties and challenges have emerged as society and culture have evolved in the 21<sup>st</sup> century. The nation's educational system has advanced to a new level. Nowadays, people with good educational backgrounds are joining the Army.<sup>4</sup> They are likewise subjected to the harmful effects of society. The economic condition has improved significantly during the last decades. Moreover, multicultural exposure, widespread corruption, and, most significantly, individuals' increasingly materialistic views have altered the entire atmosphere of society. The Current Leadership Approach (CLA) may not be effective in addressing the leadership challenges posed by rapid societal change. Therefore, this issue is necessary to be taken care immediately. Thus, a dynamic approach like meta-leadership may require integration into the current leadership style of the Mid-level Officers (MLO) of the Bangladesh Army to overcome the leadership challenges of the 21<sup>st</sup> century.

Though Meta-leadership Approach (MLA) is discussed and practiced mostly in the corporate world, its effectiveness in the military environment is yet to be examined. The concept of leading beyond the formal command and control structure and getting out of the traditional leadership style may not be compatible with the present military leadership approach. However, the multi-faceted emerging challenges while leading the units of the BA may necessitate a change in the leadership approach. Thus, it is essential to determine the feasibility of the MLA for the MLO of the BA and how it might effectively integrate with the traditional leadership approach to mitigate the leadership challenges in the 21<sup>st</sup> century. Therefore, this article will focus on the ways to integrate the MLA in the BA to mitigate the present leadership challenges.

### **Meta-leadership Approach vis-à-vis Current Leadership Challenges**

**Understanding the Meta-leadership:** Meta-leadership is a leadership model that emerged from the study of challenging circumstances, such as the events of 9/11 and Hurricane Katrina. It focuses on the collaboration among organizations and individuals, drawing inspiration from the positive outcomes achieved when communities, businesses and public agencies united. Meta-leaders are broad thinkers, emotionally intelligent and self-aware, capable of tackling complicated situations. They are self-regulated, motivated, empathetic and socially skilled, enabling them to perceive the big picture and find possibilities. The 'Meta' perspective promotes a comprehensive analytical approach, acknowledging diverse perspectives of stakeholders involved. Meta-leaders purposefully connect and utilize the endeavors of diverse organizations and individuals, creating a sense of unity and initiative. They are driven by a purpose that goes beyond their formal responsibilities and possess distinct cognitive abilities and unique behaviours. By adopting a comprehensive perspective, they deliberately establish connections and utilize the collective efforts of the entire community to achieve a shared goal and collective endeavour.<sup>5</sup>

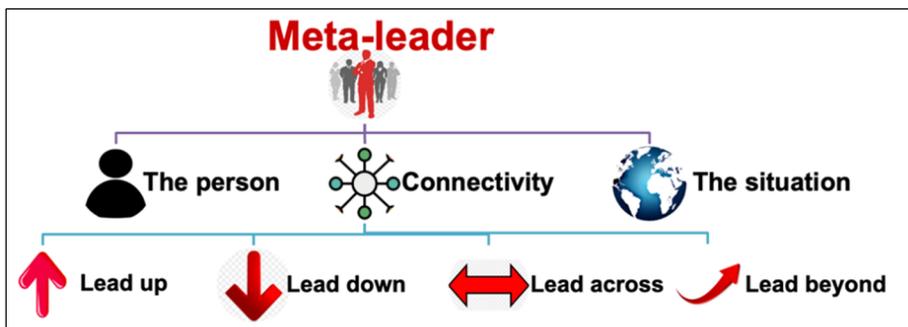
**Table-1: Traditional Leader vs Meta-leader**

<b>Traditional Leader</b>	<b>Meta-leader</b>
Hierarchical command structure	Work beyond formal command structure
More authoritative	Use influence rather than authority
Autocratic decision-making process	Empowered decision making process
Focuses on leading within official responsibilities, mostly leading down	Leads up, down, across and beyond
More formal way of command	Less formal way of command
Absence of speaking and hearing truth to the power (Yes bossing)	Encourages speaking and hearing truth to the power
Lack of EI	Promotes leading with EI
Less focus on contextual intelligence	Promotes contextual intelligence

Source: Author’s self-construct

**Dimensions of a Meta-leader:** A meta-leader has three dimensions, the person, connectivity and the situation. While traditional leaders mostly lead down through hierarchical structure, a meta-leader leads up his/her superior, leads down, leads across and leads beyond his traditional perimeter.

**Figure-1: The Dimensions of a Meta-leader**

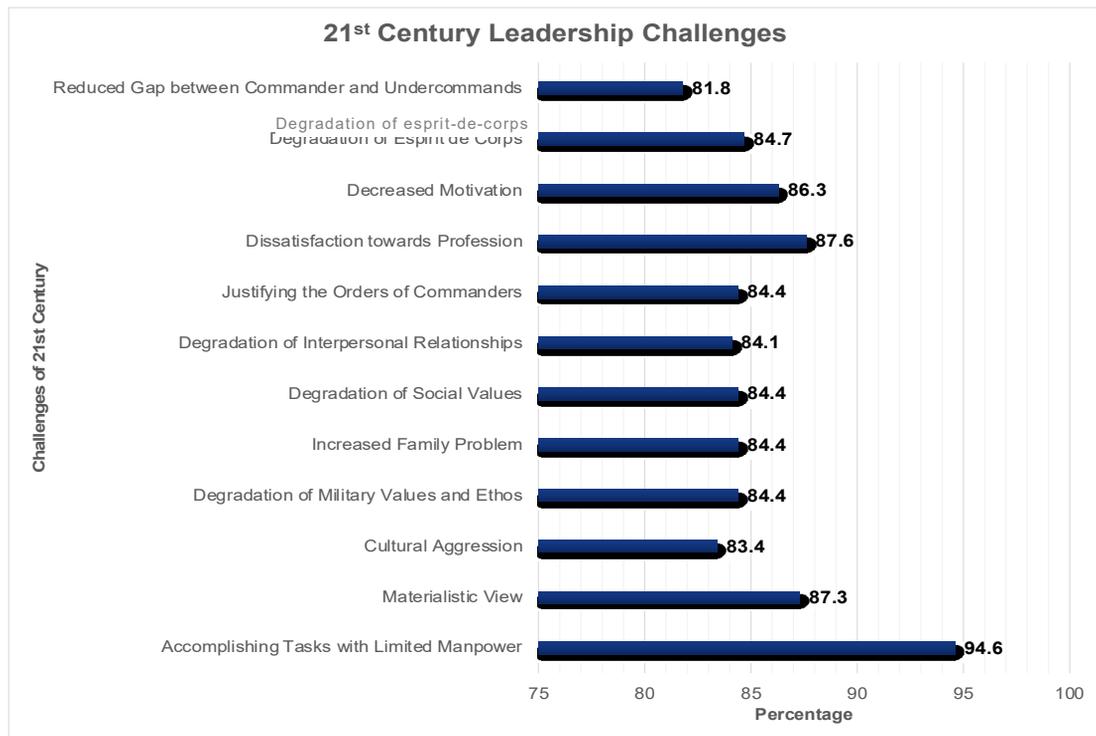


Source: Author’s self-construct

**Current Leadership Challenges:** Current leadership in the BA faces numerous challenges, including managing complex tasks with limited manpower, cultural aggression and the degradation of military values and ethos. Increasing family problems and declining social and interpersonal values have affected soldier morale and cohesion. Soldiers’ materialistic attitudes, often motivated by socio-economic pressures, have led to decreased motivation and weakened their commitment to military duties. The spread of global media and cultural influences has altered traditional values, leading to a more individualistic and less cohesive military environment. Leadership struggles include maintaining soldiers’ dedication amidst these shifting dynamics, as well as addressing the reduced esprit-de-corps and the changing nature of authority where soldiers question orders more

frequently. The growing materialism has also led to a preference for higher-paying posts over traditional service roles, further complicating the leadership’s ability to motivate and retain talent. In summary, the leadership challenges revolve around maintaining discipline, morale and a strong command structure amidst evolving socio-cultural dynamics and expectations.

**Figure-2: Leadership Challenges of the 21<sup>st</sup> Century**



Source: Author’s self-construct

**The Present Leadership Approach:** The BA’s leadership has numerous obstacles as a result of its traditional hierarchical chain of command, which, while maintaining order, can impede speedy decision-making and adaptation. The authoritarian decision-making process discourages participation of undercommands, resulting in poor decision-making and poor communication between leaders and the led. Issues such as the ‘Yes Boss’ mentality, in which subordinates avoid dissent, limit creativity and honest input. Leaders’ materialistic attitudes erode military values even more, while their refusal to accept ‘Truth to Power’ stifles free communication, preventing critical feedback from reaching higher leadership. In addition, the lack of organized feedback systems, as well as poor lateral and vertical information flow, result in communication gaps and inefficiencies. This rigid structure, along with centralised command and control, limits MLO’s capacity to empower and adapt in changing environment. Decentralisation and better communication skills are required to improve flexibility, responsiveness and overall leadership effectiveness.

**Necessity of MLA to Overcome the Leadership Challenges:**

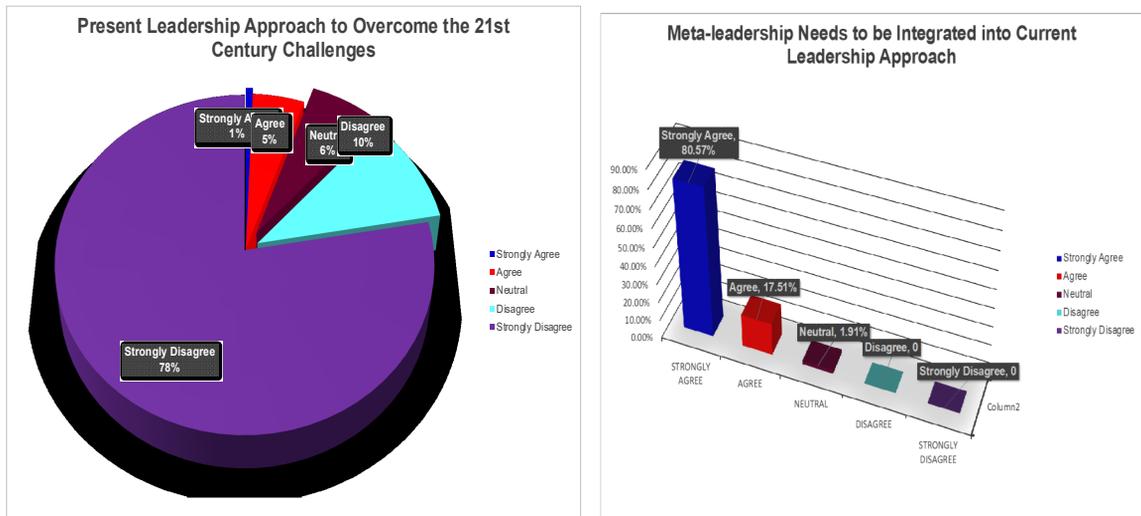
**Table-2: Chi-square Test**

	Value	Df	Significance
Pearson Chi-square	250.21	8.0	.000
Likelihood Ratio	224.10	8.0	.000
Linear-by-linear Association	232.99	313.0	.000
N of Valid Cases	314		

Source: Author’s self-construct

The findings of the chi square test suggest that the current leadership approach in the BA is inadequate for addressing 21st-century challenges. Statistical tests, including the Pearson Chi-Square, Likelihood Ratio and Linear-by-Linear Association, show a strong correlation between leadership issues and the need for a more dynamic leadership approach. The high statistical significance indicates that MLOs recognise the limitations of the existing command structure and support the adoption of a more flexible and dynamic leadership approach like meta-leadership to enhance decision-making, flexibility and adaptability. This shift is essential to better handle complex, modern-day leadership challenges and improve overall organisational effectiveness and cohesion within the BA.

**Figure-3: CLA to Overcome the Leadership Challenges of the 21<sup>st</sup> Century vis-à-vis Necessity of Integrating MLA**

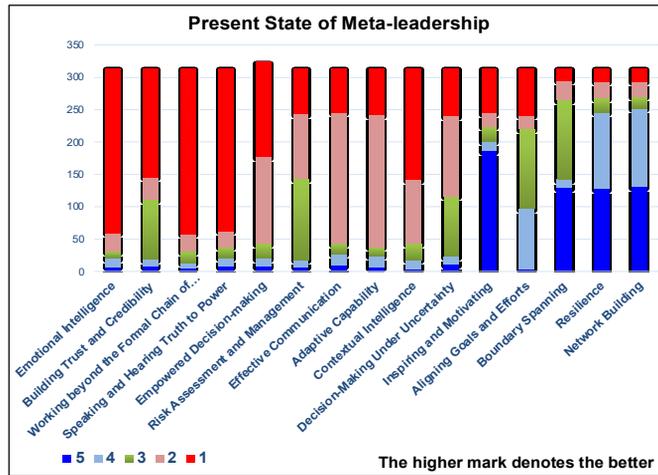


Source: Author’s self-construct

### Factors Affecting the Integration of Meta-leadership into the CLA

**The Present State of Meta-leadership Attributes:** The study indicates that while certain meta-leadership attributes like motivating, boundary spanning, resilience, and network building are present among MLOs of the BA, other essential attributes are lacking in the current leadership style.

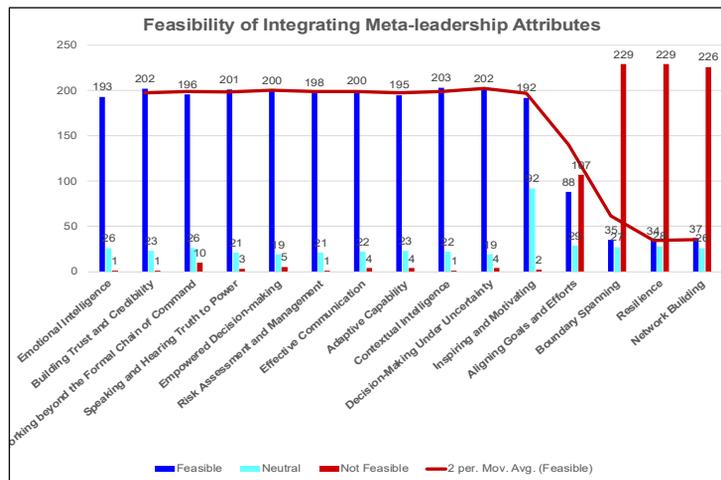
**Figure-4: Present State of Meta-leadership**



Source: Author’s self-construct

**Feasibility of Integrating Meta-leadership Attributes:** Quantitative analysis, as shown in Figures-5 reveals that most attributes are underrepresented but feasible to integrate into the existing framework. The survey findings suggest that incorporating these attributes can enhance the effectiveness of BA leadership, making it more adaptable to modern challenges and improving overall organisational performance.

**Figure-5: Feasibility of Integrating Meta-leadership Attributes**



Source: Author’s self-construct

## Challenges of Integrating Meta-leadership into the CLA

**Rigidity to Change:** One of the primary challenges is the inherent rigidity to change among the officers of the BA. The younger generation embraces new trends, whereas the older generation tends to avoid them. The BA often exhibits rigidity when adopting new ideas.<sup>6</sup> The established hierarchical practices resist adopting new leadership approaches. Thus, at times, integrating a more adaptive MLA becomes difficult.

**Soldiers' Poor Mental Uptake:** Though the soldiers of the BA are recruited after qualifying for the HSC exam, the mental uptake remains low. Leaders may face challenges to lead soldiers with low mental uptake, going beyond the strict hierarchical chain of command. Soldiers may be educationally more qualified than before, however, their societal background will pose challenge to integrating a less hierarchical command structure. A few soldiers may not understand the thin line between the leaders being close and being friends.<sup>7</sup>

**Lack of Opportunity for Informal Interaction with the Soldiers:** To be influential leaders, they should always be available to their under commands and maintain face-to-face communication wherever possible. They should include junior leaders in critical decision-making and keep everyone updated about the latest situation.<sup>8</sup> Nowadays, leaders have less free time to interact with the under command beyond the formal sessions. This is due to over-commitments, shortage of officers in the units, centralised command and control structure, lack of personal interest, etcetera. Informal interactions are necessary for building trust and credibility.

**Absence of Regular Feedback from Undercommands:** Regular feedback helps meta-leaders with continuous improvement and adaptation.<sup>9</sup> The absence of structured feedback mechanisms prevents leaders from understanding the needs and perceptions of their subordinates. Without feedback, leaders cannot identify the areas for improvement.<sup>10</sup> Presently there is no structured feedback system prevailing in the BA.

**Inadequate Decision-Making Training:** Meta-leadership promotes quick decision-making under uncertainty.<sup>11</sup> The officers require significant enhancement in their ability to make prompt and autonomous decisions on various unit matters.<sup>12</sup> It requires structured training for the MLOs. Current training programs in the BA may not sufficiently equip leaders with practical decision-making ability.

**Lack of Training in Emotional Intelligence (EI):** EI is one of the attributes of a meta-leader. Currently, there are little to no measures to address the issue of EI in the BA.<sup>13</sup> Today's leadership training in the BA is primarily centered on a few theoretical packages, the remainder being environmental learning. Within the theoretical packages, EI is less prioritised. However, there is a vacuum in the system. Environmental learning doesn't happen as planned.<sup>14</sup>

**Leaders' Materialistic Attitude:** The temptation of materialistic gain is so appealing that even leaders are not spared from this phenomenon.<sup>15</sup> Meta-leaders have to go beyond their call of

duty to establish connectivity within the unit. A materialistic attitude among leaders can inhibit better connection between leaders and the led. At the same time, it discourages the officers from speaking truth to the power. Officers of this generation prioritize attaining financial stability and success more than earlier generations.<sup>16</sup>

**Barriers of Speaking and Hearing Truth to Power:** One of the attributes of a meta-leader is to promote speaking and hearing truth to power. A sense of fear among the officers in the BA poses an essential challenge to creating a culture of speaking truth to power.<sup>17</sup> Officers view speaking truth to power as an argumentative behavior. They frequently prefer to withhold their opinions due to concerns about possible negative consequences, like receiving a negative remark on their OPR.<sup>18</sup> Careerism, lack of practical communication skills, poor critical thinking ability, and cultural stigma are the other barriers to speaking and hearing truth to power.

**Less Emphasis on Communication Skill Training:** Connectivity is one of the three dimensions of meta-leadership. Both lateral and horizontal connectivity require effective communication skills by the leaders.<sup>19</sup> Though BA started realizing the importance, the training for improving effective communication has not yet been materialised.<sup>20</sup>

**Lack of Training in Contextual Intelligence:** Contextual Intelligence is the ability to quickly and intuitively recognize and diagnose the dynamic contextual variables inherent in an event or circumstance, resulting in intentional adjustment of behavior to exert appropriate influence in that context.<sup>21</sup> In the 21st century, leaders must be trained in contextual Intelligence to deal with diverse, ever-changing environments. Contextual Intelligence is one of the dimensions of the MLA.<sup>22</sup> However, contextual intelligence is not included in the leadership traits of the BA. Thus, there is no training in contextual intelligence for the MLOs of the BA.

**Poor Critical Thinking Ability:** Critical thinking is required for effective decision-making, an essential attribute of a meta-leader.<sup>23</sup> The present system in the BA indicates that the training is inadequate to enhance the MLOs' critical thinking.<sup>24</sup> It is evident that the lack of critical thinking is a barrier to integrating meta-leadership into the CLA.

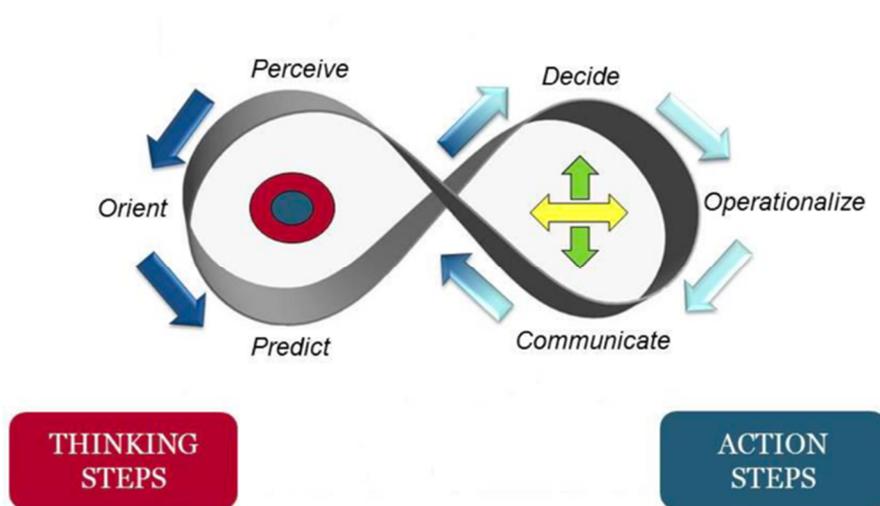
## **Ways to Integrate Meta-leadership into the CLA**

### **Organisational Approach**

a. **Inculcate Culture of Speaking and Accepting Truth to Power:** Creating a culture of speaking truth to power requires a fear-free environment and motivation from senior officers.<sup>25</sup> Senior officers must lead by example and promote this culture at all levels. Critical thinking and communication skills are essential for speaking truth to power. A comprehensive approach across the organization is necessary to cultivate this culture in the BA.

b. **POP-DOC Loop Decision-Making Cycle:** The National Preparedness Leadership Initiative established the six steps of the POP-DOC Loop (Perceive, Orient, Predict, Decide, Operationalise and Communicate) as an extension and expansion of Boyd’s OODA Loop. The six stages of the POP-DOC Loop correspond to distinct cognitive phases required for leaders to comprehend a situation, make educated judgments and take successful action.<sup>26</sup> It enables leaders to make empowered and quick decisions in the ever-changing unit environment. The limitations of well-practised OODA loop process can be overcome with this new model. BA may introduce institutional training on POP-DOC loop decision-making in different courses for MLOs.

**Figure-6: POP-DOC Loop Decision Making Process**



Source: Leonard J. Marcus et al, *Meta-Leadership: A Framework for Building Leadership Effectiveness*, Cambridge University Press, 2024<sup>27</sup>

c. **Generating Regular Feedback System from Undercommands:** A consistent feedback system from subordinates is essential for improving leadership approaches and should be implemented in all units. This allows leaders to make informed decisions reflecting unit needs and reality. Regular feedback fosters better relationships and ensures leadership practices remain effective.<sup>28</sup> The BA should introduce half-yearly or annual feedback from JCOs, NCOs, and other ranks through a standardized format.

### **Institutional Approach**

a. **Modified Leadership Training:** To integrate meta-leadership into the CLA, leadership training programs must be revised to include principles such as EI, contextual intelligence, truth to power and critical thinking. The BMA Command, Leadership and Management curriculum should be updated, and additional periods should be allocated for

leadership training in basic and Junior Command and Staff courses. This leadership package should be designed thoughtfully, addressing the diverse and dynamic challenges of the 21st century.

b. **Training on EI:** Training in EI for the officers should start from BMA.<sup>29</sup> There is no alternative for including training packages at various Army-level courses.<sup>30</sup> Thus, BA should incorporate EI training packages in officers' basic courses and Junior Command and Staff Course.

c. **Training on Communication Skills:** Effective communication is a prime requirement for meta-leadership, as it facilitates connectivity across different levels of the organization and beyond. To enhance communication skills, the BA should introduce dedicated training modules focused on verbal, non-verbal and written communication. These modules should be developed to promote clarity, persuasiveness, and the ability to communicate complicated matter concisely. These modules can be implemented starting from BMA training to all levels of officers' training.

d. **Training on Critical Thinking:** Critical thinking, essential for meta-leadership, requires formal training from the start of military education at BMA and should be reinforced throughout all levels of institutional training. Additionally, Formation/Brigade/Units should promote this skill among junior officers. Officers must develop their critical thinking abilities to analyze complex situations, challenge assumptions and make informed decisions.

e. **Training in Contextual Intelligence:** Contextual Intelligence is a critical component of meta-leadership. Training in contextual intelligence should be incorporated into the leadership development programs of the BA. This training can commence from officers training in BMA. Later, this can be incorporated in the basic trainings of officers. Overall, culture of promoting the practice of contextual intelligence should be continued by the leaders in the units.

### **Individual Approach**

a. **Change in Mindset:** Integrating meta-leadership into the CLA requires a mindset shift among officers, moving from traditional hierarchy to a flexible, adaptive approach. This involves delegating authority, valuing lower-level input and promoting self-reflection, mentoring and exposure to diverse leadership styles. Studying global leaders' case studies and senior officers sharing insights in forums can support this transition, making meta-leadership essential for modernizing leadership practices.

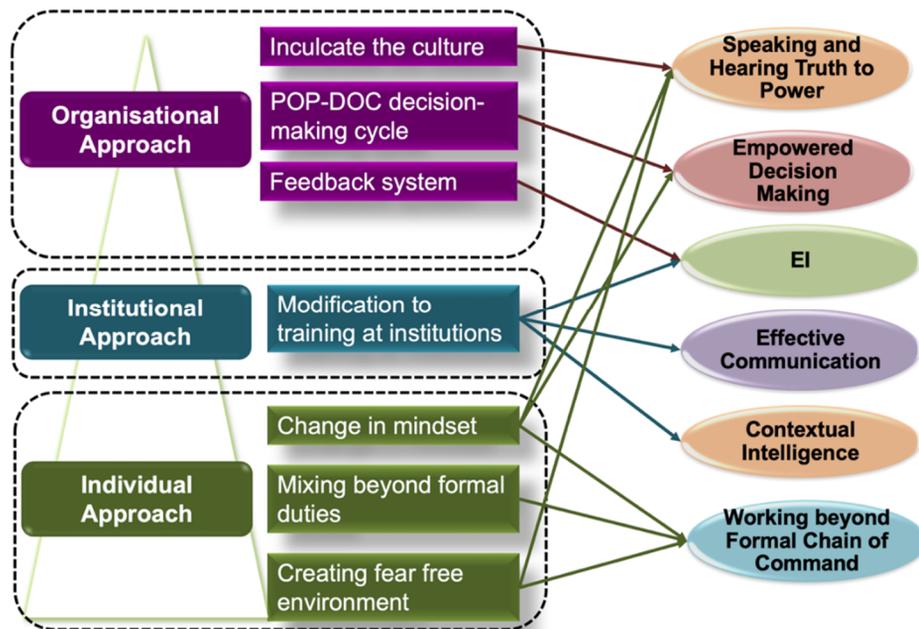
b. **Mixing with Undercommand beyond Formal Call of Duty:** Meta-leaders should engage with subordinates beyond formal interactions to improve leadership effectiveness in complex situations. Although officers' over-commitments often limit such opportunities,

MLOs can foster better relationships by actively seeking informal interactions. Visiting soldiers' recreation rooms in the evenings and participating in games and sports are effective ways to build trust and rapport. These efforts can help MLOs better understand their subordinates' perspectives, enhance communication, and lead more effectively.

c. **Easy Access to the Leader:** The undercommands should have easy access to their leaders. Leaders should be approachable and available to their subordinates, encouraging them to share their ideas, concerns and feedback. To promote easy access leaders should announce in open during DARBAR or roll call that any time anyone can reach him/ her. At the same time, a leader has to be a good listener to promote easy access. Soldiers will prefer to tell their problems who they think give value to those problems. A good communication skill is also mandatory to connect with the subordinates, thereby, advocating easy access.

d. **Creating Fear-free Environment:** Mid and higher-level leadership must ensure that juniors see them as true leaders who manage fear effectively, as this impacts juniors' perception and strengthens command efficiency.<sup>31</sup> A fear-free environment encourages subordinates to speak truth to power and allows leaders to receive honest feedback. MLOs should foster this environment through their actions and communication skills.

**Figure-7: MLA Integration Model**



Source: Author's self-construct

## **Conclusion**

The study highlights the challenges faced by the BA's traditional hierarchical leadership structure in addressing the complex demands of the 21<sup>st</sup> century. It proposes the adoption of MLA as a dynamic and holistic strategy to bridge these gaps. MLA emphasizes connectivity, contextual intelligence, and less authoritarian leadership, which can enhance the BA's ability to handle current challenges. The rigid structure, lack of EI and growing materialism among officers hinder effective decision-making and adaptability, complicating leadership in today's complex environment.

The research identifies several critical gaps in current leadership practices, such as underdeveloped EI and weak critical thinking skills, which limit leaders' abilities to handle complex situations. Addressing these deficiencies through specialized training programs is essential for fully integrating MLA into the BA. The study underscores the importance of recognizing existing leadership shortcomings and the feasibility of incorporating MLA to enhance the organization's effectiveness and responsiveness.

Despite the challenges posed by the existing hierarchical rigidity and lack of informal interactions, the study asserts that integrating MLA is necessary and achievable. It recommends updating leadership training programs to include meta-leadership attributes and fostering a more communicative organizational culture. Encouraging flexible leadership styles and informal interactions between leaders and subordinates can promote a culture of trust, adaptability and continuous improvement within the BA.

## **Recommendations**

BMA, under the oversight of ARTDOC, may review the present leadership traits mentioned in the Command, Leadership and Management precis by June, 2025. The feasibility of integrating leadership traits, like emotional intelligence, contextual intelligence, truth to the power and critical thinking should be further evaluated.

Army Headquarters, General Staff Branch, Staff Duties Directorate may introduce a structured half-yearly feedback system in the unit for the JCOs, NCOs and other ranks by 2025. A board of officers can be formed by the Staff Duties Directorate to finalise a standardised format for the feedback.

ARTDOC may include training module for the development of emotional intelligence, contextual intelligence, critical thinking and communication skills for the Officers Cadets and Trainee Officers in the BMA and for the officers in the course curriculum of Basic courses and Junior Command and Staff Course by 2025.

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### Brief Biography



**Major Nur Mohammad Al Shawon, psc, G, Arty** was commissioned from Bangladesh Military Academy (BMA) with 69th BMA Long Course in the Corps of Artillery on 24 December 2013. He has completed Masters in Military Science and Applied Gunnery and Masters in Security Studies both from Bangladesh University of Professionals. He is also a graduate of Defence Services Command and Staff College, Mirpur. He has a diverse experience of serving in different units and organisations. He served in Rowshan Ara Regiment and 9 Field Regiment in different regimental appointments. As an Instructor, he served as a Platoon Commander in BMA. Other than the mandatory courses, he attended in Target Acquisition and Survey Course, Officers' Military Police Course, United Nations Military Observer Course, Potential Platoon Commanders' Course and Officers' Gunnery Staff Course. Besides, he has to his credit a published article in BMA journal- *Padakkhep*. He has participated in the United Nations Mission in Democratic Republic of Congo as Detachment Commander of a Military Police Contingent. Presently, he is serving as the Brigade Major of 19 Artillery Brigade.

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