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“Read! In the name of your Lord Who has created (all that exists)”

Surat Al - 'Alaq (The Clot) XCVI



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CONTENTS

	Page
College Governing Body	iv
Vision, Mission and Objectives of the College	v
Foreword	vi
Editorial	vii
Faculty and Staff	viii
Abstracts	ix
Developing National Policy Guidelines on United Nations Peace Operations By - Brigadier General Saleem Ahmad Khan, SGP, ndc, afwc, psc, te	01
Social Compliance in Readymade Garments (RMG) Sector: Towards Ensuring Equitable Justice for Garment Workers and Boosting Bangladesh's Export Economy By - Brigadier General Naquib Ahmed Chowdhury, ndc, psc	17
Threat of Global Terrorism for Bangladesh: A Reality or a Myth By - Brigadier General A K M Nazmul Hasan, ndc, psc	37
The Syrian Crisis: Role of Major Powers By - Brigadier General Mizanur Rahman Shameem, BP, ndc, psc	55
Need For National Security Strategy: Relevant Concept and Paradigm and Context of Bangladesh By - Commodore Abdullah Al Mamun Chowdhury, (N), ndc, psc, BN	69
The Scope of Sub-Regional Energy Cooperation in South Asia in the Perspective of Emerging Global Energy Security Architecture By - Director General Shah Ahmed Shafi, ndc	88
India China Relations: Implications for Global Peace and Regional Security By - Brigadier Padam Singh Shekhawat, ndc	114

Improving Road Traffic Management in Dhaka and its Economic Benefits By - Captain Chijioke Onyemaobi, ndc, psc+	130
Integration of Non-Military and Commercial Facilities Towards Enhanced Communication for Bangladesh Army By - Lieutenant Colonel Rakibul Karim Chowdhury, afwc, psc, Sigs	147
Optimum Utilization of Armed Forces' Budget: Implications on Bangladesh National Budget By - Lieutenant Colonel Md Imrul Mabud, afwc, psc, Arty	163
Impact of Participation in UN Peacekeeping Contingents on Operational Capability of BAF By - Wing Commander Moqbul Ahmed, afwc, psc, ATC	183
Regional Physical Connectivity in South Asia: Impacts on Non-Traditional Security Threats in the Region By - Lieutenant Colonel Syed Jamil Ahsan, afwc, psc, AC	201
Evolving Regional Security Landscape of the Asia-Pacific By - Lieutenant General Chowdhury Hasan Sarwardy, BB, SBP, BSP, ndc, psc, PhD	223

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VISION, MISSION AND OBJECTIVES OF THE COLLEGE

VISION

The National Defence College is dedicated to be the premier national centre of excellence on defence, security, strategic and development studies.

MISSION

To impart training and education to selected senior military and civil officers from both home and abroad on national and international security related fields as well as to impart training to mid ranking military officers of Bangladesh on war studies.

OBJECTIVES

- To educate and train selected armed forces, civil services and allied officers at operational and strategic level of national security and development.
- To focus on long term national security and development issues and to suggest appropriate national responses.
- To support the national agencies in policy making on security and development matters.
- To support the armed forces on strategic and operational level planning of warfare.
- To strengthen civil-military relations in Bangladesh.
- To strengthen military to military co-operation in the region and beyond.



FOREWORD

National Defence College is on its track since 1999 with a vision to be the premier national centre of excellence on defence, security, strategic and development studies - meeting the challenges of the 21st century. Since the inception the college has been relentlessly presenting time - befitting academic curricula to the potential policy planners, leaders and strategic thinker of the future. Intent of the college is to create a balanced outlook and bring a visualization amongst the Course Members with a strategic and operational level understanding. Past 18 years of track record attests to the practicability of the learning regime that has made this premier institution a centre of excellence at home and abroad.

National Defence College being the premier national institution in Bangladesh, has always been emphasizing on conducting research in contemporary issues. The main aim of the research is to enable Course Members to make an original contribution to a subject of national or international interest that has a bearing on the national security and development. NDC journal is a reflection of the research works carried out by the Course Members and Faculty of the college. I am confident that selected Research Papers of the Course Members accommodating diverse subjects and merits have been included in this issue. I believe the readers will find the articles useful and intellectually stimulating.

My heartiest congratulations to all the members who have contributed to this journal. I appreciate the sincere efforts of the Research and Academic Wing and acknowledge the solemn endeavour of the editorial board to bring out the journal timely. This issue of the journal is yet another landmark in the path of advancement of National Defence College, Bangladesh.

Chowdhury Hasan Sarwardy
Lieutenant General
Commandant

EDITORIAL

NDC Journal is a bi-annual publication of National Defence College, the premier national centre of excellence on Security, Strategy and Development Studies. The articles for the journal (Volume 16, Number 2, December 2017) are mostly selected from individual research papers that the Course Members had submitted as part of the course curriculums. The College believes that a senior officer from military and civil services should have a good understanding of the major economic, political and social issues of the nation and be able to recommend measures to face the challenges.

National Defence College has been very regular in bringing out 'NDC Journal' every year on time. This speaks of the laborious effort and genuine commitment on the part of both the editorial staffs and writers. While research papers are of usually of 10,000 -15,000 words, the abridged versions are of 4,000 - 5,000 words. The abridgement is executed in a manner that the principal arguments and the logical basis are represented succinctly, objectively and clearly. A total 12 (twelve) have been adjudged for publication in the current issue in abridged form. The articles reflect complex and intricate multidimensional issues emanating from the long diversified experiences and the curriculum based deliberations and discourse on various topics concerning comprehensive national security during their trainings.

This volume includes papers of different categories those will draw attention of varied group of readers. A reader, before getting into the pleasure of reading, can get an idea of what these papers are about from the abstracts included at the beginning of this journal. We would like to express our sincere gratitude to the Chief Patron Lieutenant General Chowdhury Hasan Sarwady, BB, SBP, BSP, ndc, psc, PhD, the Commandant of NDC for his valuable guidance.

Research is a highly committed undertaking. Despite all efforts, unintentional errors in various forms may appear in the journal. We ardently request our valued readers to pardon us for such unnoticed slights and shall consider ourselves rewarded to receive any evocative criticism. We hope that all papers included in this volume will satisfy our readers.



M Sanaul Huq
Air Vice Marshal
Senior Directing Staff (Air)

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ABSTRACT

DEVELOPING NATIONAL POLICY GUIDELINES ON UNITED NATIONS PEACE OPERATIONS

Brigadier General Saleem Ahmad Khan, SGP, ndc, afwc, psc, te

International peace and stability are indispensable foundations laid in the constitution and foreign policy of Bangladesh (BD). BD has engaged in a spectrum of United Nations (UN) peace operation since 1988 and within a very short time became a key player. BD's contribution so far did not follow through a national policy. Through the policy guidelines, BD may focus different dimension of peace operations that leads to concerted efforts by different stakeholders. While developing national policy guidelines on UN peace operation, BD may address all aspects covering UN policy guidelines, future challenges and trends, challenges and achievements of BD including approach of different countries. Special focus may be given on consultation process at the UN HQ, protection of civilian, training, operational, logistics and leadership requirements. The issues related to human rights, international humanitarian law, sexual abuse and exploitation would have to be given zero tolerance. BD may have to maintain rapid deployment capability in order to get an edge over other contributing countries at any point of time with appropriate training and logistics preparation. Gender mainstreaming may remain as a priority with respect to women, peace and security. The peace operations related issues of some of the countries may be useful for policy formulation as well. The Government may focus on diplomacy in the countries where peacekeepers are deployed. National policy demands setting the agenda with well-articulated farsighted objectives. The policy guidelines may consider the diplomatic engagements with opportunities; workable decision making process through a national committee; roles, and responsibilities including capabilities of different stakeholders to share and optimise resources. It may also cover training including capacity development, regional cooperation, peacebuilding efforts with utilisation of civil societies to enhance civilian capacity in the peace operations. BD needs to establish 'UN Peace Operations Wing' under the Ministry of Foreign Affairs in order to effectively deal with the subject taking all stakeholders on board. BD may form an organisation (with extended role of Non-Government Organisation), to get engaged in the mission areas for development work through bilateral engagement. Above all, BD needs to consolidate gains, continue greater contribution to world peace as well as focus on sustained peace in the mission areas.

**SOCIAL COMPLIANCE IN READYMADE GARMENTS (RMG)
SECTOR: TOWARDS ENSURING EQUITABLE JUSTICE FOR
GARMENT WORKERS AND BOOSTING BANGLADESH'S EXPORT
ECONOMY**

Brigadier General Naquib Ahmed Chowdhury, ndc, psc

The contribution of Bangladesh's Readymade Garment (RMG) sector to the country's economy can hardly be overemphasized. During the last three decades or so, this sector has been the major export-earning source that enabled the country to maintain a steady pace of development in a competitive world economy. In fact, the amount of export earnings from the RMG sector has been overwhelming, as much as 82% of the total export. The RMG sector provides gainful employment opportunities to more than four million workers, the vast majority of whom are adolescent girls and women. The sector has also created employment opportunities in the auxiliary support industries for another huge number of people. However, the RMG sector has in recent years been beset with a number of grave challenges. There were a good number of accidents like blaze of garment factories and building collapses, resulting in loss of both property and human lives. Following these accidents, ensuring fair wage and decent working condition became a concern for international buyers/brand retailers and also, of the human rights organizations. Ensuring social compliances at factory level has continued to remain as a major concern. Question arises, why the garment owners should take initiative to improve factory condition to a complaint one by investing more money? How the owners can ensure safety and security of workers by ensuring social compliance? Extensive research including visits to a number of compliant, non-compliant and foreign invested garment factories, and interview of workers, owners and related persons have been conducted to find out answers to these critical questions as well as to measure importance and economy of enforcing social compliance in the garment factories. There are a number of challenges such as arrangement of additional money for refurbishing factories and factory owner's initiative alongside buyer's initiative to raise price of product. During the very recent past, however, some of the related stakeholders and organizations as well as the factory managements have taken appreciable initiatives to improve condition of garment factories towards meeting compliance requirements, though there are still rooms for further improvement. Government agencies, owners, buyers, workers, politicians and related institutions have to work together to ensure social compliance in the best interest of the RMG sector in particular, and in the interest of the country as a whole.

THREAT OF GLOBAL TERRORISM FOR BANGLADESH: A REALITY OR A MYTH

Brigadier General AKM Nazmul Hasan, ndc, psc

In the era of globalization and technological advancement, terrorism has gained multi-dimensional height, where in terrorist think globally, organized regionally but act locally. Online radicalization by social media has made the terrorism more globalized and diversified than ever before. Presently global terrorist outfits like ISIS, AQ and AQIS are trying to influence the Muslim world including Asian Region. They are alluring the young people to join their outfits for so called 'Jihad'. As a part of the globalized world Bangladesh is not out of the influence of terrorist's domain. Bangladesh is suffering from terrorist activities since independence. It had the leftist dominated terrorism in the early stages and religion extremism surfaced in the late nineties and thereof. The most dominated terrorist groups like; HuJI-B, JMB, JMJB, HT, ABT and Nabba JMB are active in the country in different magnitude in different phases. Recently terrorist activities and dimension has been changed and they carried out massive operations in Holy Artison Bakery at Gulshan and Eid Congregation at Sholakia, Kishoregonj. They killed two foreigners in 2015 and seventeen foreigners in Holy Artison Bakery on 01 July 2016. These killing were claimed by IS through SITE Intelligence Group. This has given the birth of the doubt about the threat of global terrorism in Bangladesh. In this backdrop the research has been carried to examine whether there exists any real threat of global terrorism on Bangladesh. Bangladesh government has given highest priority and declared 'Zero Tolerance' policy to address the issue. Lot of domestic, regional, international and bi-lateral cooperation and measures are being taken to curb the terrorism in Bangladesh. With the present efforts, Bangladesh has made remarkable progress in controlling terrorism in the country. Therefore, available data from the research indicates that terrorism has always been an internal affair of Bangladesh and it has hardly any relation with the transnational terrorist outfits. However, Bangladesh being the third Muslim largest country having huge young population remains susceptible to global terrorism in future and terrorist organizations might pursue to exploit any opportunity to radicalize young people and homegrown terrorist outfits to join their organizations.

SYRIAN CRISIS: ROLE OF MAJOR POWERS

Brigadier General Mizanur Rahman Shameem, BP, ndc, psc

The Syrian crisis has entered into sixth year compounded by new and old challenges and is now more than just a battle between those for or against President Bashar al-Assad. Peaceful procession asking democracy and greater freedom at the beginning got agitated on the regime's brutal action and later demanded the president to resign. The conflict turned into an armed rebellion within a short period which was overtly sectarian in nature between Alawite-dominated government forces, militias and other Shia groups. Opposition splited into different groups of rebel fighters instead of having single entity. Meanwhile an extremist group called Islamic State of Iraq and the Levant (ISIL) started taking over large swath of the country adding a further dimension. The political crisis in Syria has concerned major regional and international actors in such a way that in a short period of time, a new political alignment has taken shape at the regional level as well as in the international arena. Two major regional powers formed coalition i.e. Russia , Iran, Lebanese Hezbollah form the anti-Western coalition and United States, Turkey, European Union and the Persian Gulf countries are in the opposing side. Most importantly the conflict in Syria has drawn in major global powers, supporting and opposing President Bashar al-Assad and the myriad rebel groups ranged against him. Russia has been one of Syria's staunchest allies for decades. The US insists President Assad cannot be part of Syria's future. Diplomatic ties between Saudi Arabia and Syria have long been strained by major events in the region. As such Saudi Arabia provides military and financial assistance to several rebel groups in Syria. Turkey had ambition to project power in the region and tried to overthrow Assad by actively supporting the armed rebellion. This study intends to find the answers of some pertinent questions related to this most pressing conflict of present time. The study mainly focuses on the role of major powers and how their involvement actually shaped the war by period of time. This research also tries to identify way-out to resolve the crisis.

NEED FOR NATIONAL SECURITY STRATEGY: RELEVANT CONCEPT AND PARADIGM AND CONTEXT OF BANGLADESH

Commodore Abdullah Al Mamun Chowdhury (N), ndc, psc, BN

The term National Security Strategy (NSS) is viewed as ability of a nation to

order its internal life without external interference. Thus NSS can be defined as “The nation’s evolving plan for the coordinated use of all the instruments of national power to defend and advance national interests”. This would encompass development and application of national power potential both non-military as well as military in nature. Thus National Security Strategy is formulated in the context of prevailing situation based on the input provided by official, political and intellectual forums. Power potential of a country has numerous dimensions like economic, Political, diplomatic, military and social. These elements of national power play the most important role in formulating security strategy of a country. The developing countries are often facing difficulty to maintain domestic stability to prevent. At the same time absolute security against all the threats may not be attainable. Therefore, policy must determine the level and areas of insecurity, which would be acceptable. Thus in depth understanding of concept of NSS is essential. This paper is an endeavor to put in a capsule, for understanding the Concept and paradigm of NSS for the Policy Planning Process and Formulation Methodology. The paper also highlight the what security strategy may be adopted by weak & developing nation and suggested an outline for Bangladesh. The core purpose of this paper is to keep it concise yet providing sufficient and relevant academic input to the policy maker for implementing appropriate strategy. It is expected that regular study on the very subject “National Security Strategy” would open new vistas of strategic thinking and debating security issues in the context of Present Regional and Global Security Issues. As such the concept suggested in the paper is by no means a binding one. It must be taken as a guideline and modified as per level of understanding in future.

THE SCOPE OF SUB-REGIONAL ENERGY COOPERATION IN SOUTH ASIA IN THE PERSPECTIVE OF EMERGING GLOBAL ENERGY SECURITY ARCHITECTURE

Director General Shah Ahmed Shafi, ndc

Energy security is defined as the ability of a nation to secure sustainable energy supplies to meet its energy needs at reasonable prices has thus become a major energy policy imperative. Energy security is the association between national security and the availability of natural resources for energy consumption. Access to cheap energy has become essential to the functioning of modern economies. The uneven distribution of energy supplies among countries has led to significant vulnerabilities. Therefore, a growing number of countries around the world, particularly in the west are coming under regional and international energy charter

and energy security umbrella to ensure smooth energy supply as well as to govern the global energy regime to secure their long-term energy need. And among the South Asian countries there is a wide variation in energy resource endowments and energy demand to fuel their rapid economic growth. While India, Pakistan and Bangladesh account for the major natural gas and coal resources, Nepal and Bhutan have large hydropower resources. Further, all the countries have vast renewable energy potentials. Taping and trading of these huge resources would ensure more optimal energy security solutions for the entire South Asia region in the backdrop of the global energy governance. The countries need enhanced and efficient regional energy transfer to leverage economies of scale through a more vibrant intra and inter regional energy production and trade structure. Key issues faced in energy sector cooperation in South Asia are centered on the need to develop: (i) a regional power and energy infrastructure; (ii) an efficient production capacity and management; (iii) a regional power market; (iv) energy supply availability; and (v) harmonized legal and regulatory frameworks. Energy cooperation is a main focus of the South Asia Sub-regional Economic Cooperation (SASEC) program. The establishment of ongoing and proposed new power transfer links between Bangladesh and India, India and Sri Lanka and between India and Pakistan would further strengthen the regional energy cooperation and power trade. The overall context for regional energy cooperation in South Asia has undergone a change in the past few years. A window of opportunity has now opened up due to a shift in the regional political and policy mindset that has caused countries to look outward for advancing their energy security needs. There is broader recognition that energy trade is better for energy security and helps diversify a country's energy base through mutual dependence. On contemplating this reality all the SAARC and BIMSTEC countries must establish an energy network or multiple networks of energy production and supply chain. As economic powerhouse and technologically advanced country in the proximity China is very critical to provide finance and expertise & technical knowhow. Sitting on the corridor between South and South East Asia, and South and Far East Asia, particularly China, Bangladesh should take a pivotal role in the energy cooperation of the economically fastest growing region of the world. Like China, Japan and South Korea could also provide critical and necessary supports to the energy growth of this region. Bangladesh's proactive and innovative diplomacy in relations with all the countries of the region and beyond, and above all the geopolitical advantage as located at the cross-road of three distinct region give it a unique opportunity to strive rapid economic growth through connectivity, trade, and energy cooperation.

INDIA CHINA RELATIONS: IMPLICATIONS FOR GLOBAL PEACE AND REGIONAL SECURITY

Brigadier Padam Singh Shekhawat, ndc

The strategic emergence of India and China, the two Asian neighbours has shifted the gravity of world politics in to Asia and turned the vision of “Asian Century” into reality. India and China are poised to regain world leader status by middle of 21st Century. Their combined size and population makes them the largest geographical and human resource on earth. India and China have cultural, religious and trade links going back centuries in history. They also share a past of colonial and imperialist subjugation from which freedom had to be won with a major struggle, paradoxically they even fought a war with each other over disputed frontiers. That continuing border dispute between the two countries and China’s rapid growth in military power, not unsurprisingly creates anxieties about the future relationship. China’s aggressive foreign policy postures also do not encourage a benign view of it. Is China a major future threat to India, or can they both coexist as world powers? China follows the path of peaceful coexistence and India a path of non violence, Ahimsa and non confrontation. Their relations were good when they gained independence but within a short span went to war; and ever since their relations have been far from normal. Both nations understand their ability to dominate world geopolitics and strive to attain their rightful place in world comity. Confrontation between the two economic giants will certainly not benefit but cooperation can hasten their progress. In spite of various convergences and numerous divergences, there exists space between them to cooperate and coexist. Rather, cooperation and not confrontation is the way forward. The research dwells into the intricate China India relations and attempts to redefine their relations as per Panchsheel; the policy of mutual respect and peaceful growth. What therefore, should be the policy of India and China in the world dominated by United States? India must take advantage of the opportunities proffered, yet it should desist in confrontation with China. This delicate balance can be achieved by a redefined policy based on Panchsheel.

IMPROVING ROAD TRAFFIC MANAGEMENT IN DHAKA CITY AND ITS ECONOMIC BENEFITS

Captain Chijioke Onyemaobi, ndc, psc+

This study on improved road traffic management (TM) and its economic benefits to Dhaka City was inspired by Dhaka City Corporation’s (DCC) efforts

over the years toward the development of road transportation and traffic management in Dhaka City. These efforts include; the establishment of traffic management agencies, road/bridge/flyover construction and expansion and the implementation of aspects of the Strategic Transport Plan (STP) among others. Despite these efforts, Dhaka City is still bedevilled by heavy traffic congestion (TC) which have affected the tempo of its economic development. This is the rationale behind the search for strategies to mitigate the challenges of efficient TM in Dhaka City. The broad objective of the study therefore is to appraise TM and its economic benefits to Dhaka City. Methodology for this study, which adopted the field survey and descriptive approach, collected data from primary and secondary sources by means of questionnaire, unstructured interviews and document analysis. Secondary data were collected from published and unpublished materials relevant to the study. The collected data were analysed descriptively by tables, figures, maps and logical reasoning. The research findings established that there was a strong, positive though indirect relationship between TM and the economic benefits Dhaka City could derive from the improvement of its TM system. Furthermore, the study revealed that TC leads to the loss of productive man hours, extra transport cost, extra fuel consumption and adverse effects on human health. Some of the identified challenges were; poor coordination between TM agencies, inadequate road infrastructure, poor private sector involvement in TM and weak enforcement of traffic laws. In the light of its findings, the study proffers strategies which are expected to mitigate the effects of identified challenges. Some of the strategies include the establishment of a joint TM authority, creating conducive atmosphere for private sector investment and introduction of area licensing in Dhaka City's central business district (CBD) among others. The study also made some recommendations in line with the strategies which if implemented would ensure economic derivables for the benefit of DCC and its residents.

INTEGRATION OF NON-MILITARY AND COMMERCIAL FACILITIES TOWARDS ENHANCED COMMUNICATION FOR BANGLADESH ARMY

Lieutenant Colonel Rakibul Karim Chowdhury, afwc, psc, Signals

Communication plays a vital role in disseminating command from military hierarchy to grass-root levels. Beside conventional military communication system, a vast communication resources of various organizations are scattered all-over Bangladesh (BD) like a web.BD Army is yet to develop a fully integrated

communication system of its own that can be relied upon during war. As a resource scarce nation, it would be difficult for BD to procure and maintain full-scale of advanced communication equipment. However, that gap can be bridged by integrating national communication resources. National communication resources has a good prospect to be of great value for utilisation by BD Army, if coordinated and integrated appropriately. Study has been carried out to examine and explore possibilities and challenges of integrating existing non-military and commercial resources with military communication system with a view to enhancing communication capabilities of BD Army. Besides, endeavour has been also taken to find out credible operational modalities for integration, which are conducive for uninterrupted, reliable and secured communication. The study also leads to requirement of policy guideline at both national and army level. Analyses of major non-military and commercial communication resources positively indicates the scope for supporting BD Army in regards to enhancing its communication capability. Integration options has both advantages and disadvantages, but may be implemented with balanced approach to have the main or alternative secured communication backbone. Lack of well-articulated policy, communication security and compatibility issues has been found to be the major impediments for effective integration, which may be resolved by formulating correct policy from the highest level of the government in conjunction with other required actions at functional domain.

OPTIMUM UTILIZATION OF ARMED FORCES' BUDGET: IMPLICATIONS ON BANGLADESH NATIONAL BUDGET

Lieutenant Colonel Md Imrul Mabud, afwc, psc

'Military Budget' is a widely discussed issue in Bangladesh. The dichotomy amid keeping a standing military and socio-economic growth is existent in the academia. Apropos, military budget has seen a horizontal apportionment in the recent years. Again, Bangladesh is a sovereign country and military must have the operational readiness to safeguard its territorial integrity. As such, Bangladesh Armed Forces should have some reforms to maximize the effects of budget and contribute to the optimum utilization of national budget. The purpose of this study was to ascertain the prospects of integrating the budgetary resources of three services with a view to determining a viable operating model for optimal application. Analysis of budget environment revealed that it has limitations. So, necessity has been felt for an umbrella organization which can resolve the issues. It can also direct all budgetary activities of three services by integrating their isolated efforts

and drive towards optimum utilization. Consequently, this will ensure the best use of apportioned national budget. Bangladesh Armed Forces should therefore try to achieve the full potentials of its budgetary resources through integration. The paper proposed a policy option in the form of creating a Joint Budget Directorate at Armed Forces Division by 2020. It will centrally operate all the budgetary resources of three services to ensure best use of national budget as well as can yield a capable military for Bangladesh.

IMPACT OF PARTICIPATION IN UN PEACEKEEPING CONTINGENTS ON OPERATIONAL CAPABILITY OF BAF

Wing Commander Moqbul Ahmed, afwc, psc, ATC

Bangladesh is a peace-loving country and contribution to international peace and security is one of her foreign policy commitment. Bangladesh's contribution in UN peacekeeping stems from these noble values. BAF is firmly committed to support the national interest of establishing world peace and harmony. To uphold this national interest, BAF has been participating in UN peacekeeping operations for more than two decades and has developed its competencies in this regard. Present BAF deployment in UN peacekeeping missions involve a significant number of combat support air assets with support personnel and a few personnel from combat operational units. The large involvement of BAF in UN peacekeeping has certain impact on its operational capability. This research paper has analysed the factors that are associated with impact of UN participation on BAF operational capability. Additionally, this paper has also analysed various challenges of BAF participation in UN peacekeeping contingents and measures to address them for optimizing BAF operational capability. Impact of UN experience on combat support operational capability has been measured using the indicators like quality over quantity, operational tempo, capacity building and sustainability. Through various analysis, it has been found that experience of UN participation has moderate to strong effect on combat support capability of BAF, thereby it enhances operational capability of BAF.

**REGIONAL PHYSICAL CONNECTIVITY IN SOUTH ASIA:
IMPACTS ON NON-TRADITIONAL SECURITY THREATS IN THE
REGION**

Lieutenant Colonel Syed Jamil Ahsan, afwc, psc, AC

The regional integration is a buzzword in the present days as it has vast potential for accelerating economic growth, reducing poverty and economic disparity within and across the countries involved in a region. South Asia is one of the least integrated regions, especially in terms of physical connectivity. Recognizing the fact that physical connectivity can boost up the economic growth of this comparatively backward region, presently the governments of the South Asian countries are coming closure on the issue than ever before. However, this region has another fact to its record that it is overwhelmed by the non-traditional security threats apart from the traditional ones in every countries of the region. There are good number of research on regional integration, physical connectivity and non-traditional security threats of South Asia. There is hardly any research found to determine what effect 'better regional connectivity' might have over the phenomena of non-traditional security threats, especially manmade societal threats like arms trafficking, drug trafficking, child trafficking, women trafficking, terrorism, etc. existing in this region. The research focuses on that issue by consulting good number of hard and soft copies of books and articles in the dailies and magazines; in order to gather and analyse empirical data, conduct survey among military officers and civil counterpart and conduct interview of resource parsons related to the research topic. The research was limited to some types of manmade non-traditional security threats to derive the result. It is found that regional physical connectivity would directly or indirectly create environment conducive for reduction of manmade non-traditional threats like in South Asia. However, the research also highlighted the importance of further detail research on this issue.

DEVELOPING NATIONAL POLICY GUIDELINES ON UNITED NATIONS PEACE OPERATIONS

Brigadier General Saleem Ahmad Khan, SGP, ndc, afwc, psc, te

Introduction

Bangladesh (BD) has engaged in a spectrum of UN peace operation since 1988 and is considered as one of the key players in the peace operations context. International peace and stability are indispensable foundations laid in the constitution and foreign policy of BD. BD's contribution so far did not follow through a national policy or strategy. As such, it is very important for BD to dedicate its national efforts proactively through well-articulated national policy guidelines on UN Peace Operations. Through the policy guidelines, BD would focus different dimension of peace operations. In addition, peace operations have become increasingly multidisciplinary, encompassing civilian, police and military tasks. Improving the effectiveness of peace operations can only be achieved by working together. BD's support for peace operations can yield valuable benefits as part of economic diplomacy too. Despite, being one of the top troop contributors in global peacekeeping initiative the gain in economic and diplomatic field is insignificant. Absence of concerted efforts by all stakeholders is depriving BD from extracting enormous potentials in the field of economic as well as diplomacy in the host countries where military establishes its footprint. BD peacekeepers created ground for subsequent diplomatic as well as economic opportunities in different countries. But absence of policy directive and missing of 'agenda setting' remain as a 'stumbling block' for a possible collective gain of the country.

BD peacekeepers created ground for opportunities in number of countries through participation in UN peace operations. There are no concerted efforts with respect to decision- making, assessment, sharing of resources, knowledge sharing, expertise development, training, budget management, logistics, procurement, diplomacy vis-à-vis military diplomacy and other fields in the context of issues related to UN peace operations. Besides, there is absence of established coordination mechanism between stakeholders resulting to duplication of efforts and missing of comprehensive approach for a collective gain. Though Ministry of Foreign Affairs (MOFA) is developing National Policy on UN Peace Support Operations by taking comments from different stakeholders, but this is not based on a research.

UN Policy Guidelines for Member States on Peace Operations

The UN Peace Operations

The term “UN peace operations” cover instruments ranging from special envoys and mediators; political missions, including peacebuilding missions; regional preventive diplomacy offices; observation missions; to small, technical-specialist missions such as electoral support missions; multidisciplinary operations both large and small drawing on civilian, military and police personnel to support peace process implementation, and that have included even transitional authorities with governance functions; as well as advance missions for planning (UN High-level Independent Panel on Peace Operations, 2015).

Consultation with Troops Contributing Countries (TCCs)/ Police Contributing Countries (PCCs)

Consultations with TCCs/ PCCs at all stages of the planning and decision-making process are critical to the success of any UN peace operation (UN Department of Peacekeeping Operations and Department of Field Support, 2008). Effective dialogue between the Security Council, TCCs/ PCCs and the UN Secretariat is the key to keep all stakeholders onboard in different phases of peace operations (UN Secretary-General, 2015). These discussions would also accompany memorandum of understanding (MOU) negotiations including Statement of Unit Requirement (SUR) for peace operations. Such consultations are domain of experts for TCCs/ PCCs both at the strategic and operational level.

Protection of Civilians (POC)

POC is one of the key responsibilities of TCCs/ PCCs deployed under UN mandate, which needs to be done at any cost. As such, each and every peacekeeper—military, police and civilian—must be willing and able to pass that test to protect civilian at any cost (UN Security Council Resolution 2222, 2015).

Operational, Training, Logistics Requirement, Leadership, National Caveats, and Selection of Peacekeepers

Member States bear responsibility to ensure personnel operating in high-risk environments have the necessary tactics, techniques and procedures to do so effectively (UN Security Council Resolution 2150, 2014). All personnel deployed must be therefore, trained, equipped and commanded to protect civilians, defend mandate as well as meeting threats to peace. Leadership at different tiers must be selected on the basis of merit and the specific requirements of each situation which will be reflected in tailored post profiles and competencies. (UN Secretary General, 2015).

National caveats become issue while dealing with operational matters in multi-national environment. Any national caveats beyond the national restrictions expressly accepted by the Secretariat at the outset will be treated as disobedience of lawful command. The Secretariat will immediately inform the concerned Member State and, on a regular basis, the Security Council and, where no remedial action is forthcoming, will repatriate the unit concerned (UN Secretary General, 2015). A very high standard should be maintained for the selection and conduct of personnel. Member States and the UN have a clear responsibility not to allow those responsible for acts of gross misconduct to go unpunished. UN peacekeeping personnel should act in accordance with international human rights law and understand how the implementation of their tasks intersects with human rights (UN Department of Peacekeeping Operations and Department of Field Support, 2008).

UN Peacekeeping Capability Readiness System (PCRS)

UN PCRS came in to effect in July 2015 (UN PCRS, 2015). The PCRS aims Member States for ensuring readiness and timely deployment of quality peacekeeping capabilities. The levels of commitments include three levels for a TCC to pledge and prepare for rapid deployment in forthcoming UN peace operations.

Sexual Exploitation and Abuse, Women, Peace and Security

UN prohibits and is committed to zero tolerance for sexual exploitation and abuse (SEA). Member States should support victim assistance programme to support individual victims and children born as a result of SEA (UN Secretary General, 2015). Member States to ensure increased representation of women at all decision-

making levels. Side by side in resolution of conflict including involving women in all peacekeeping and peacebuilding measures (UN Security Council Resolution 1325, 2000).

Achievements and Challenges of BD's Contribution in UN Peace Operations

BD's Achievement through Contribution

BD has contributed a total of 140,028 personnel in UN peace operation. Total fatalities include 126 death cases and 172 injured personnel (Armed Forces Division, 2016). BD receives reimbursement against its contribution like any other member state. The reimbursement is received from contribution of personnel, equipment and services. Through such contribution, the Armed Forces and Police Force has also contributed to national economy by earning foreign currency. However, these contribution need to be viewed as operational achievement and sacrifice to world peace.

Operational Challenges and Achievements

BD is widely known as, 'Humanitarian Peacekeepers'. It has always maintained deployment timeline indicated by the UN Security Council Resolution. In Mali and Eastern Congo, BD was first to deploy infantry unit under blue helmet. In Cambodia, Sierra Leone and Democratic Republic of Congo, when no other countries were willing to enter into rebel held territory, BD peacekeepers were the pioneers to negotiate, enter into rebel held territory and maintained peace. In Central African Republic, BD demonstrated rapid deployment and is tasked to maintain security over 600 kilometers plus main supply route, which is a lifeline for the landlocked country.

In 2014, BD took leadership role in COE Working Groups Meeting with one of the issue papers titled, 'Rotation of equipment under UN expense'. During the meeting, BD could ensure consensus amongst all member states to bear expense of rotation of essential equipment by UN. In 2015, BD organised regional consultation on 'UN High Level Panel on Peace Operations'. During the consultation meeting BD proposed a good number of recommendations to face current as well as future challenges in peace operations. Most of the recommendations were later became part of the report of the High Level Panel.

BD is contributing a good number of female peacekeepers. Two ‘female only’ units from Police are deployed in Haiti and Congo. Besides, female officers from Armed Forces are deployed in different missions. A female officer is also given the command responsibility of a medical unit by BD Army in 2015.

BD military works with Non-Governmental Organisations (NGOs) too. Through initiative of BD Army, BD Rural Advancement Committee (BRAC) got its footprint in South Sudan. A good number of projects in the field of health, education and agriculture sectors were jointly undertaken by BD Army units and BRAC. Through this initiative sustainment and local ownership of the projects have been ensured in absence of peacekeepers.

While performing operational responsibility, BD had challenges and setback too. An ambush in Eastern Congo, killed nine peacekeepers in 2005. BD had to withdraw camp under intense pressure of a rebel group in Ivory Coast drawing criticism in 2006. In Rwanda, BD was blamed for being ill equipped to perform the mandated tasks in 1994 (Anyidoho, 1998). But BD deployed as per MOU and other requirements set by the UN and the equipment was still onboard ship for the mission area through UN contracted shipment. However, BD took lessons out of these incidents for preparing subsequent contributions through appropriate approach.

Training Related Achievements

BIPSOT has trained over 10,000 personnel including 1420 overseas participants from 39 countries since inception (BIPSOT, 2016). BIPSOT is a member of International Association of Peacekeeping Training Centre and organized two Annual Conferences. BIPSOT is also a member of Association of Asia Pacific Peacekeeping Training Centre, it’s secretariat is located in BIPSOT. But the secretariat is not vibrant at all. BD contributed significantly to prepare UN Military Unit Manual in different fields along with other member states, which are considered well-structured roll-out manuals.

Logistics Challenges and Achievements

BD maintains a ‘Force Structure’ for contribution in UN peace operations. Through the ‘Force Structure’, the Armed Forces and Police Force keep ready for deploying different type of contingents in terms of logistics preparation. However, provisioning and procurement of major equipment, major self-sustainment

items including consumables remain as major challenge. Procurement difficulties remain as a nightmare and time consuming due to non-availability of adequate time for procurement, need for procuring new items following the lengthy system especially procuring from foreign countries.

Logistics challenges for new deployment include: ascertaining correct type of major equipment and self-sustainment items both in MOU and SUR; absence of professionalism during reconnaissance in mission area as well as in MOU negotiation; lack of knowledge and experts on SUR, MOU, COE Manual and other UN related policies and documents. Despite all challenges and difficulties, BD Armed Forces has attempted to reduce dependency on UN by providing prefabricated accommodations for all its personnel in UN missions.

Human Rights and Peacebuilding Issues

BD became member of UN Human Rights Council for consecutive third time in 2015 and contributed significantly to international human rights issues (MOFA, 2015). Besides, BD was the Chairman of UN Peace Building Commission (PBC) in 2012 and played leadership role in promoting peacebuilding as part of sustained peace operations.

BD Peace Building Centre (BPC) has been established in January 2016 under MOFA. Its objective are: to train pool of human resources; engage stakeholders in the effort of peacebuilding; facilitate implementation of peacebuilding activities globally; policy formulation; and creating awareness about peacebuilding activities among the mass people (MOFA, 2016).

Budgetary Issues

UN reimbursement through contribution of personnel and equipment are received directly in the Government exchequer. BD Armed Forces and Police Force receive yearly budget on UN peace operations from respective ministries. Through the allotted budget expenditure related to procurement of equipment, pay and allowances, and operational contingencies are met.

Research and Development

Research and Development (R&D) needs comprehensive approach by different stakeholders. R&D is a grey area for BD. BIPSOT also gives less attention in this field. Different public and private universities undertake Peace and Conflict higher studies, which are not adequate considering the global need. By now, BD has produced a good number of experts in different fields of UN peace operations. These experts can contribute a lot through institutionalized approach of R&D.

Approach of Different Countries on UN Peace Operations

China

China is the largest contributor among the permanent members of the UN Security Council. “China will join the new UN PCRS, and has thus decided to lead in setting up a permanent peacekeeping police squad and build a peacekeeping standby force of 8,000 troops,” Chinese President Xi Jinping said in his speech during UN Peacekeeping Summit in 2015.

India

Indian Armed Forces have practical experience based on the conduct of counter insurgency operations in some parts of own country and thus have advantage over most other forces from other parts of the world (Permanent Mission of India in UN, 2016). Centre for UN Peacekeeping was set up in September 2000 under the aegis of the United Service Institution of India to exploit expertise and experience in peace operations.

Indonesia

Indonesia pledged deployment of 4,000 peacekeepers worldwide as part of UN forces by 2019 during the UN Peacekeeping Summit in 2015. To realize the vision of 4,000 peacekeepers, Indonesia established a security and peacekeeping centre to train future peacekeepers.

Japan

Japan is the second largest financial contributor (1.8% of annual UN budget) to UN peace operation. Its intellectual contributions are through: contribution to the discussions in UN; hosting seminars and symposiums regarding UN Peace Operation, program for human resource development in Asia for peacebuilding; senior mission leaders' course; support to training centres.

Malaysia

Malaysia's participation in the UN peace operations is derived from Defence Policy. It's policy covers need for individual and family support system through pre-deployment support, family support, post-deployment care, psychological adjustment and financial management.

Nepal

In Nepal, "Law on Participation in the UN Peace Operations" is under consideration. The law would cover key aspects of troop's deployment including establishing standing forces, parliamentary approval procedures for dispatching forces, extension of operation period, etc.

Nigeria (Nigeria Armed Force, 2007)

The operational relationship between the Ministry of Defence (MOD) and the MOFA is maintained to ensure better flow of logistics, information and coordination for troops participating in peace operations. Nigeria establishes National Support Element (NSE) to serve as a coordinating headquarters for the force. Nigerian contingent commanders have several specialist advisers: Political Adviser (MOFA official), Legal Adviser with international law and legal affairs experience, Humanitarian Adviser appointed from relevant Ministry or agency, and Police Adviser.

Pakistan

Pakistan's national strategy focuses on the Peacekeeping Troops understanding on different dimensions related to peace operations. A proposal is under

consideration to establish Peacekeeping Operations Brigade, which would be dedicated to integrate, train and arrange all formalities of departure/arrivals.

United States

The United States (US) will seek to become a leading “technology contributing country” to UN peace operations. The US would seek to assist the UN, regional organizations, TCCs, and PCCs to integrate technologies into, and apply innovative concepts to address operational requirements and capability gaps.

Proposed National Policy Guidelines on UN Peace Operations

Objectives of the National Policy

To continue, be proactive in engaging with greater and more coordinated responsibility in the UN peace operations considering future trends and challenges.

To strengthen BD’s diplomatic and strategic engagement with concerned stakeholders for enhancing national image as well as ensuring sustained peace (MOFA, 2015).

Compliance with International Law

It is mandatory for BD to participate in UN peace operations under international law. Government may consider enacting “Law on Participation in the UN Peace Operations” to cover key aspects of troop’s deployment including establishing standing forces, parliamentary approval procedures for dispatching forces, extension of operation period, etc.

Diplomatic Engagements and Opportunities in Other Multilateral Platforms

BD may have to go along with the reforms in the UN at the strategic and operational level time to time. Efforts may be directed to ensure more participation in UN peace operations through diplomatic engagements by the PMBNY. Additionally, BD may support the Peacebuilding Commission at the strategic level as well as at the field level. Diplomatic efforts may also be directed to get leadership and

appropriate key positions considering the ratio of contribution in the UN peace operations. The Government of BD may consider exploring diplomatic relations by opening up embassies in those countries, where BD troops and police has had an effective role in maintaining peace and stability. BD may aim to further increase the extent of cooperation, for instance by examining the option of collaboration among friendly nations, especially rising troop and police contributors for UN operations.

Rapid Deployment Strategy

BD Armed and Police Forces may always put PCRS as the top priority to be proactive, equipped, trained and maintain forces for call of world peace. All concerned government machineries may as well be directed to ensure the highest state of readiness in this regard. If necessary, bilateral arrangement may be signed with friendly country (ies) to get special equipment which is normally not readily available.

Decision-Making Process

The President, as the Supreme Commander of the Forces has the authority to take ultimate decisions for the participation under the UN based on Security Council resolution. PMBNY receives this request on behalf of the MOFA and examines it in light of BD's broader foreign policy priorities and existing international commitments. Requests relating to troops are directed to the AFD. The Ministry of Home Affairs (MOHA) receives requests related to the deployment of the police personnel for the UN missions (MOFA, 2015).

National Committee on UN Peace Operations

The Government of BD may form a national committee that shall be responsible for giving broad policy directives for effective implementation of the national peace operation policy (Bangladesh Army Headquarters, 2015). The National Committee may be chaired by the Prime Minister, Government of the People's Republic of BD with following members: Minister from Ministry of Defence, Finance, Foreign Affairs and Home Affairs; Chiefs of Army, Navy and Air Force; and Inspector General of Police. Following personnel may remain in attendance: Secretaries from Prime Minister's Office, Ministry of Public Administration, Home Affairs, Foreign Affairs, Defence, Finance; Principle Staff Officer, AFD;

Commandant BIPSOT; Director General BD Peacebuilding Centre (when appointed). Member Secretary will be Director General of UN Desk, MOFA.

Establishment of 'UN Peace Operations Wing' under the MOFA. This wing will be established, where all relevant stakeholders will be absorbed through a separate organisational structure. 'UN Peace Operations Wing' will be the best option to deal with peace operation related matters. Upon establishment, its functioning will become routine affairs. And matters related to peace operations will always be in focus. It then becomes secretariat to the National Committee. The 'UN Peace Operations Wing' may be composed as under:

- Secretary (an expert on UN Peace Operations)
- Additional/ Joint Secretary (one each from Army, Navy, Air Force, Police)
- Joint Secretary (one each on Operations, Training, Logistics, Finance, R&D)
- Required number of officials and staffs to support the wing

Roles and Responsibilities of Stakeholders (MOFA, 2015)

The prime stakeholders for UN peace operations are: MOFA, MOD, AFD with BD Armed Forces, MOHA and BD Police. MOFA may form a pool of civilian experts who shall contribute in such operations. MOFA may perform diplomatic endeavours and shall convey and coordinate any request of troops and police to the concerned authority in the shortest possible time. AFD may facilitate the promulgation of policies and Government approval for the acceptance of offer and deployment of troops from BD Army, Navy and Air Force in the UN missions. AFD may also coordinate all the operational and administrative activities regarding UN related tasks among the three HQ. BD Police may formulate its respective policy document for force generation, training and deployment.

Resources and Capabilities of BD Armed Forces and Police (MOFA, 2015)

BD Armed Forces and Police may have the rapid-response capability cooperation. In this regard, logistics preparation with state-of-the art technologies will be the key. Thus a comprehensive planning with adequate budget allotment, timely procurement of equipment, etc needs to be kept in mind by different stakeholders. There may be necessity to share national resources of different stakeholders in order to accept an offer of contribution in the UN Mission.

The forces may be logistically prepared in all aspects. The HQ of the forces may pursue 100 percent reimbursement of the equipment and services provided as per agreed MOU. Resource sharing in mission area may be required to attain collective gain. A pool of experts may be developed by concerned forces to deal with logistics issues as well as provide institutional memory.

Training, Capacity Development and R&D (MOFA, 2015)

The Government may regularize the development process of all training facilities of the Armed Forces and BD Police. Universities may introduce research and academic study programmes in the relevant areas of peacekeeping. Academic collaborations may be explored among universities and research institutes at home and abroad to expedite academic discussions that enrich BD's contribution to UN peace operations. By now, BD has produced a good number of experts in different fields of UN peace operations. These experts can contribute a lot through institutionalized approach of R&D.

Regional Cooperation (MOFA, 2015)

The Government may promote constructive engagement with regional and sub-regional forums that would enhance its participation in the UN-led operations. BD may support a joint role of South Asian countries in the UN Peacebuilding Commission. Government may consider to assisting the rising TCCs/ PCCs to train and organise to perform effectively in peace operations.

Efforts to Enhance Future Involvement in Peacebuilding Endeavours (MOFA, 2015)

BD may take necessary steps to develop trade infrastructure and contribute in the foreign direct investments in the countries where forces establish footprint. Thus, BD may aspire to play a crucial role in the sustaining peace through economic development. MOFA may arrange regular dialogue with the business communities to set a separate policy on trade promotion, especially in African nations.

National Support Elements and Non-Governmental Organization for Sustained Development

BD may consider deployment of NSE along with the contingents (United Nations, 2015). The Government may also consider forming JICA, CIDA, KOICA or DFID type organization(s) in mission area for economic diplomacy as well as for development work in the host country (Country Director DFID, 2016) and (Department for International Development of UK, 2016). By establishing such type of organisation (other than providing aid), BD can gradually play a role in geo-economics and exert power in world economics as a 'soft power' (Rahman, 2016).

Death, Disability and Family Welfare

The peacekeepers are sacrificing lives for the world peace. Their family(ies) may be given appropriate lifelong welfare as a special consideration. Besides, injured peacekeepers may be supported lifelong through a welfare programme.

International Forum on UN Peace Operations

There are a number of international meetings that take place on UN peace operations like C34, COE Working Group, and 5th Committee at the General Assembly. BD needs to attend these meetings through appropriate representation with experts having institutional memory in order to get a better dividend as well as image building.

Budgetary Issues

The present system of receipt of UN reimbursement to the Government exchequer needs to continue. The Government may consider separate allocation of budget for PCRS to allow timely procurement of equipment as well as preparation of different types of contingents well in time.

Conclusion

BD has become one of the key actors in UN peace operations context. It's armed and police forces, not only contributed personnel but had a significant contribution to national economy through participating in world peace. BD Armed and Police forces have gained rare experience in multidimensional operational

tasks and through the process had setbacks as well as logistics difficulties. Now BD needs to consolidate gains, continue greater contribution to world peace as well as focus on sustained peace in the host mission areas. An approach can be to establish organisation like DFID/ JICA/ CIDA (with extended mandate to operate like NGOs) which will operate along with military or police forces in the mission areas in order to carry forward foot print of peacekeepers for economic development. Besides, the Government may focus on diplomacy in the countries where peacekeepers are deployed. Establishments like BIPSOT and BPC may be proactive to meet the future requirements of training to prepare next generation. BD may also develop institutional memory to retain achievements and develop experts to remain as a key actor in world peace.

National policy guidelines on UN peace operations set the agenda with well-articulated farsighted objectives. It needs to comply with international law, consider the diplomatic engagements with opportunities, deployment including rapid deployment strategy to expose state of readiness, workable decision making process through a national committee, roles, and responsibilities including capabilities to share and optimize resources. BD may form an organisation to get engaged in the mission areas for development through bilateral engagement.

Through the national policy, BD will have the opportunity to ensure greater and more coordinated roles in the UN peace operations. Besides, it will provide different stakeholders' the opportunities to engage more effectively utilising platform of peace operation in strengthening sustained peace.

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Brigadier General Saleem Ahmad Khan has wide range of 29 years' experience in the military including international peacekeeping experience with the UN Mission in Sierra Leone and Sudan. General Saleem participated in Contingent Owned Equipment (COE) Working Group 2004 meeting held in the UNHQ. Brigadier General Saleem facilitated the UN Integrated Mission Staff Officers' Course, conducted by Pearson Peacekeeping Centre, Ottawa, Canada in 2010 and enlisted as Community of Expert. In 2012, he was a facilitator in a seminar on UN Peace Support Operations (PSO) organised by Canadian Defence Academy (CDA) in Uruguay. He served in the Election Commission Bangladesh as Director General National Identity Wing and Project Director of Identification System. In military he has undergone Armed Forces War Course and National Defence Course. He earned his Bachelor of Technology from Jawaharlal Nehru University, New Delhi, India and became a telecom engineer. General Saleem was commissioned in the Corps of Signals. He served in three tiers of Army, in an infantry brigade as operations officer, in an infantry division as operations, planning & training officer and in the Army HQ as Staff Officer of joint operations, overseas deployment and the United Nations Peacekeeping Affairs Officer. He has command experience in an infantry division communication unit in peace and counter insurgency operations and number of field communications companies. While serving in the Army Training and Doctrinal Command, he developed training doctrine and field formation training system of Bangladesh Army. He also served as the Director Overseas Operations of Bangladesh Army. He was a faculty member in the Armed Forces War Course Wing of National Defence College and served as an instructor in Signal Training Centre and School and Bangladesh Military Academy. He served as the Dean of Faculty of Technical and Engineering Studies in Bangladesh University of Professionals (BUP).

SOCIAL COMPLIANCE IN READYMADE GARMENTS (RMG) SECTOR: TOWARDS ENSURING EQUITABLE JUSTICE FOR GARMENT WORKERS AND BOOSTING BANGLADESH'S EXPORT ECONOMY

Brigadier General Naquib Ahmed Chowdhury, ndc, psc

Introduction

The economy of Bangladesh is predominantly based on agricultural production. However, slowly and gradually Ready-made Garment (RMG) industry thrived. Presently, RMG sector hosts more than 4 million skilled/semi-skilled labour of which 80% is female and contributes around 82% of total export earnings of the country. Employment of a huge number of workers in RMG factories directly have an impact on unemployment problem of Bangladesh. In recent past, RMG industry experienced labour unrest and also has stumbled upon a number of tragedies. In 2013, USA unilaterally suspended Generalized System of Preferences (GSP) facilities which had a negative impact on image of Bangladesh. In order to boost export of RMG products, observance of social compliance issues is crucially important. Essentially, social compliance conforms all labour rights, safety and security along with other facilities. Bangladesh Government took different initiatives to amend/introduce rules and regulations for safety of workers. However, absence social compliance issues is still common in some of the RMG factories. Yet a good number of positive factors are playing an important role for the growth of RMG sector in Bangladesh. World's leading apparel companies are now planning to close their business in China and their next preferred purchasing destination is likely to be Bangladesh¹. Therefore, Bangladesh needs to fully comply with international labour standards.

Overview of Social Compliance

Strengths of RMG Sector in Bangladesh

Over the three decades of experiences, Bangladesh could successfully achieve expertise which along with other external and internal forces act as driving strength

1. McKinsey & Company, Bangladesh's ready-made garments landscape: The challenge of growth,(p 5)

for the growth of RMG sector. The RMG export constitutes around 15.46% of GDP of Bangladesh. More than 4 million people are directly dependent on this sector. However, inadequate infrastructure i.e. road, railway, waterway, port etc. contributes to raise the cost of production. Strength of RMG sector can be summarized as presented below:

- Bangladesh could successfully create a good number of skilled labour and expertise which has become an overwhelming strength of Bangladesh.
- Bangladesh offers garment items to world market in a competitive price with minimal profit margin.
- Through the passage of time, Bangladesh acquired proficiency which assist to produce high quality items.
- Bangladeshi entrepreneurs have resilient spirit to continue with RMG business and against many odds they are capable to make headway.

Social Compliance and Its' Significance

The term 'compliance' or 'social compliance' refers to an establishment meeting its legal obligations as per existing law; often to protect the health, safety, security, welfare, gender related issues etc. of individuals working for the establishment. According to BusinessDictionary.com, the definition of Social Compliance is "a continuing process in which the involved parties keep on looking for better ways to protect the health, safety, and fundamental rights of their employees, and to protect and enhance the community and environment in which they operate".² Adherence social compliance has following significances:

- Increase the global image and global recognition for the performance of Bangladesh which will assist to increase business in other sectors too.
- Bangladesh will have more orders from brand retailers and international buyers and will have consistency in order.
- Job satisfaction will lead to provide more production with better quality.
- Ensuring compliance will prevent accident and will save human life as well as equipment.
- There will be less labour unrest resulting in more production on one hand and less anarchic and destructive activities at the factory, on the other.

2. Business Dictionary, [On Line] <http://www.businessdictionary.com/definition/social-compliance.html>.

Bangladesh Labour Law and Labour Regulation

Bangladesh has formulated labour law to protect rights of workers, keeping in view the ILO convention and international human rights issues. It was enacted as law in 2006 and it provides all workers to uphold rights and individual can go to court if rights are violated. For support of Labour Law, Bangladesh Labour Regulation 2015 is also introduced. Mr. Ghulam Hussain, Commerce Secretary said, “If you (manufacturer) comply with your own labour laws, you can fulfill around 98 percent of the buyers’ compliance requirement”³. Government also took initiative to introduce “The EPZ Workers Welfare Association and Industrial Relation Act, 2010”.

Monitoring Arrangement of Compliance Issues

Department of Inspection for Factories and Establishments (DIFE) under Ministry of Labour and Employment is responsible to conduct inspection of all factories. Government has given due importance to increase capability of this department and already it has been upgraded from directorate to department. Besides, BGMEA also have system to inspect garment factories. The Alliance for Bangladesh Worker Safety is an alliance of 28 North American and Canada based importers and the Accord on Fire and Building Safety in Bangladesh is organized by European based brands and retailers. The representatives from these two organizations inspect factories regularly. A total of 3696 factories have so far been inspected for building, fire and electrical safety by National Action Plan, Accord, and Alliance and during inspection 38 factories were found risky and were closed down instantly. Other 38 are marked for remediation⁴.

Evaluation of Compliant and Non-Compliant Industry: Environment of Workplace

Data Analysis

A detail empirical survey was carried out in three non-compliant garment factories located in Mirpur area and three compliant garments factories in Shofipur and Konabari of Gazipur district. During the surveys, all garment establishments were observed in detail. Alongside, informal interviews with the owners and

3. Business Report, Compliance can help widen market, The Daily Star.

4. Author’s interview with Mr. Siddiquar Rahman, President BGMEA.

management were carried out. Interview of 100 respondents, 50 each from compliant and non-compliant garment factories were taken through a structured questionnaire. To have a neutral idea about RMG factories, interview of randomly selected 10 more garment workers from streets were also carried out. Additionally, empirical survey was carried out on three foreign invested garment factories located at Savar EPZ and interview of 30 workers along with management were also obtained. All the owners of garments factories are having positive mindsets to improve the condition of workplace. But main issue has been arrangement of additional investable money. BGMEA estimated that each factory needs on an average \$500,000 dollar for fire, electric and structural remediation, and it may go up to 2.5 million dollar per factory.⁵The Tables presented in the following section will show a comparative picture of compliant and non-compliant factories on selected 11 variables on which interviews were conducted.

State of Compliant Garments

The owners of garment factories have shown a positive attitude towards ensuring decent workplace conditions, focusing on safety and security of workers' life. They have already refurbished factories and are introducing modern systems, too. As claimed by the owners, they have spent a substantial amount of money towards ensuring safety and security of factories and workers. Details of survey finding along with brief description are appended below:

5. Author's interview with Mr. Siddiquar Rahman, President BGMEA.

Table 1: Survey Results of Complaint Garments		
Item	Yes/Agree in Percentage	No/Disagree in Percentage
Garment Workers' Satisfaction with Wages	94%	06%
Time of Wage Payment	Monthly 100%	-
Working Hours in a Week	65 Hours & above 24%	Below 65 Hours 76%
Days of Leave in a Week	1 Day in a Week 100%	-
Whether the Management Compels to Work	4%	96%
Whether the Management Allows Maternity Leave	80%	20%
Whether Management Allows any facility during Maternity Leave	76%	24%
Whether Overtime Works Performed	66%	34%
Whether Owner Grant Additional Allowance for Overtime Work	96%	4%
Whether the Overtime Allowance Sufficient	84%	16%
Is there any Trade Union for Workers?	30%	70%
Status of Working Environment	92% Good	08% Bad
Are There Hygienic Toilets?	90%	10%
Are there Soap, Tissue Papers and Hand Towel in the Toilet?	60%	40%
Are there Fire Extinguishers	84%	16%
Are there Trained Worker for Fire Extinguishing	64%	36%
Is there any Childcare Centre	92%	8%
Is there any Canteen	100%	-
Happiness and Satisfaction with Work	80%	20%
Source: Prepared by Author on the Basis of Collected Data		

As can be seen from the above table, all the owners are very much particular in paying the wages in time and the workers also have expressed their satisfaction over timely receipts of the salaries and other allowances. As for weekly working hours and holidays, a majority of workers informed that they work less than 65 hours a week, although about 1/4th claimed to have worked for more than 65 hours as overtime works to meet up the requirement of urgent delivery. Due compensations are provided for such overtime duties. They were also of the opinion that the managements do not force them to work overtime. Most of factories with few exceptions provide benefits related maternity issues and workers are happy over getting such benefits. All the garments factories have toilet facilities separately for male and female workers. However soaps, tissues and hand towel were found to be in short supply. As for fire safety, the owners and management give due importance on fire safety arrangement and adequate fire fighting equipment are also marked. All the garment factories visited have childcare facilities. There are canteens within the factory premises, but the services are not up to the mark. The issue of trade unions also came up in discussions. The owners as well as their managements were found to be not in favor of introducing trade unions in their factories. The survey results also shows an overwhelming majority of respondents (84%) confirming nonexistence of trade unions in their respective factories.

The overall working conditions are at satisfactory level, although the managements have been working to improve the situation. Most of the respondents confirms that overall working condition is good, although some workers reported that their workplaces are too hot to work and air passage systems also not up to the mark.

Regarding their job satisfaction, it was felt during the interviews that on the whole, the workers were contented with their jobs. Many of the workers have been working in the factories for more than three years, indicating the level of their job satisfaction.

State of Non-compliant Garments

As can be expected, the overall working conditions of the non-compliant garment factories have not been as good compared with the compliant ones. Details of survey findings are appended below:

Table 2: Survey Results of Non-Complaint Garments		
Item	Yes/Agree in Percentage	No/ Disagree in Percentage
Garment Workers' Satisfaction with Wages	64%	34%
Time of Wage Payment	Monthly 100%	-
Working Hours in a Week	65 Hours & above 76%	Below 65 Hours 24%
Days of Leave in a Week	1 Day in a Week 100%	-
Whether the Management Compels to Work	24%	76%
Whether the Management Allows Maternity Leave	52%	48%
Whether Management Allows any facility during Maternity Leave	38%	62%
Whether Overtime Works Performed	84%	16%
Whether Owner Grant Additional Allowance for Overtime Work	78%	22%
Whether the Overtime Allowance Sufficient	86%	14%
Is there any Trade Union for Workers?	06%	94%
Status of Working Environment	70% Good	30% Bad
Are There Hygienic Toilets?	40%	60%
Are there Soap, Tissue Papers and Hand Towel in the Toilet?	32%	68%
Are there Fire Extinguishers	90%	10%
Are there Trained Worker for Fire Extinguishing	34%	66%
Is there any Childcare Centre	24%	76%
Is there any Canteen	8%	92%
Happiness and Satisfaction with Work	58%	42%
Source: Prepared by Author on the Basis of Collected Data		

As can be seen from Table-2, the level of workers' satisfaction over receipts of wages is only 64%, which is much below that in the compliant garments (94%). The weekly working hours in both types of garment factories are same, although a greater number of workers in non-compliant units (24%) asserted that they are compelled to work for more hours, compared to only 4% in compliant factories. As for maternity leave, only 52% workers said that they are allowed and a lesser number (38%) said that they are given facilities while enjoying maternity leave. The corresponding figures for the compliant factories are 80% and 76% respectively.

As for overtime works, more than 3/4th workers were of the opinion that they do perform overtime duties, and that they are paid overtime allowances which are satisfactory. The hygienic toilet facilities are termed as bad by 60% workers and more of them (68%) stated negatively about availability of soap, hand towel and tissue papers in the toilets. The vast majority of workers stated that there are no canteens (92%) and that, there are no children centres (76%). A majority of workers (90%) admitted about existence of fire extinguishers, but the majority (66%) informed about non-existence of trained fire extinguishers in their factories. Almost all the workers (94%) also stated that there are no trade unions.

Regarding their working environment, more than 2/3rd workers (70%) indicated their satisfaction over the 'good' environment, but a fewer of them (58%) expressed their satisfaction and happiness with their works. The empirical evidences suggest that the working conditions of factories are not that healthy. More numbers of workers remain in small rooms and building are not specially constructed for factory purpose. While talking with the factory owners and their management, it was evident that they are also much concern about welfare of the workers and the safety issues.

During visits to the non-compliant garment factories, it was felt that though many of the issues are yet to be solved at factories level; however the owners are having positive attitude to improve the condition.

State of Foreign Invested Garment Factories

An empirical survey on three foreign invested RMG factories located in Dhaka EPZ (DEPZ) was conducted to have a comparison with Bangladeshi factories. A total of 30 workers -10 from each garment factory - were interviewed. Discussion with the factory management was also carried out, although the management staff wanted to remain unanimous.

From the interviews and discussion with management, it was found that most of the factories provide lunch to workers to save time and ensure maximum utilization of time. The workers are provided with transportation facilities. One factory installed Effluent Treatment Plant (ETP) and air purifier for ensuring environmental safety. Beside air passage system and space management of factory is very good and machines are placed having adequate space in-between. Healthcare rendered to the workers are also good. On the whole, social compliance aspect is given due importance in most of the renowned foreign invested factories. However, there are few factories in EPZ which are yet to be compliant.

Interview Result of Garment Workers- Randomly Taken

It was felt during survey that workers sometimes hesitate to come out with honest answers in presence of management. Therefore, to have a better idea about actual condition of factories, an effort was taken to interview the workers randomly from the street side. Outcome of interview is that, social compliance issues are not given due importance in some of the factories. Most of the respondents view that authority grant maternity leave but without any salary and sometime, they have to work additional time without payment. Hygienic toilet, childcare centre and canteen are not available. Factory have adequate firefighting equipment without trained personnel. However, other indicators are impressive.

Findings of Survey

Above mentioned data analysis reflects a fair idea about the state of both complaint, non-compliant and foreign invested garments factories. Both complaint and non-compliant factories give due importance to abide by the rules and regulations regarding welfare of workers. All garment factories pay wages on a monthly basis regularly. Owners never force worker to work. Non-compliant factories have not yet been able to ensure some of the social compliance aspects such as providing maternity benefits, hygienic toilets, canteen facilities, childcare facilities etc. Alongside safety and security arrangement of non-compliant factories are not satisfactory as yet. There is also allegation that management try to deprive workers of their rights with plea of non-entitlement. Garment owners are not in favor of introducing Trade Union. However through the Welfare Committee, the management looks after welfare of workers and deal with all kinds of issues related to workers. Most of the garment factories have adequate firefighting equipment. But emergency exits are not adequate in non-compliant

factories. Some of the foreign invested garment factories are maintaining very well standard whereas a few are yet to achieve complaint standard. However, some unique systems have been introduced in some foreign invested factories. Comparative statement among the compliant, noncompliant and foreign invested factories are presented in the table below:

Table 3: Comparative Statement					
Serial No	Subject	Compliant Factory	Noncompliant Factory	Foreign Invested Factory	Remarks
1	Free Lunch & Tiffin	No	No	Yes	*All factories do not have same facilities. # Room is earmarked but not in use or having any facilities. ** Try to take advantage of ignorance ### Not up to the mark
2	ETP	No	No	Yes*	
3	Air Purifier	No	No	Yes*	
4	Childcare Centre	Yes#	Yes#	Yes	
5	Maternity Leave	Yes**	Yes**	Yes	
6	Trade Union	No	No	No	
7	Free Transport	No	No	Yes	
8	Medical Facility	Yes###	Yes###	Yes	
9	Fire Fighting Arrangement	Good	Worse	Better	
10	Wage	Good	Good	Better	
11	Working Environment	Satisfactory	Needs Improvement	Better	

Source: Prepared by Author on the Basis of Survey of different Garment Factories

Note: Comparative statement do not reflect overall standard of all the garment factories.

Challenges in Ensuring Compliance at RMG Factories

The role of the Government in RMG Sector cannot be ignored, however main driving force was the initiative of the garment owners singly. In some instances, the factory owners want to abide by rules and also ensure compliance related issues. However, main issue is to arrange investible fund. Bank interest rate is too high to afford. Buyers also have to offer fair price. It is not possible to produce socially fair clothes without a fair price. Besides inadequate social awareness of workers also acts as an impediment to ensure compliance issues though these are minor ones. Strict monitoring system along with penalty is also a factor. Government could not yet allocate any particular industrial park for RMG sector and therefore it is also difficult for factory owners to construct new factory with inbuilt safety and secured condition.

Implication of Compliance for Boosting Economy

Annual Turnover of Compliant Garments Factory

Factory owners are trying to meet up the requirements of the buyers to continue with their business. Many of the export oriented garment factories have already fulfilled almost all the requirements of social compliance issues or on the process of remediation. During research work, it is felt that there is huge gap between aspiration at buyers end and implementation at owners end. However, analyzing annual turnover of compliant factories, we could identify the gradual increase of business, as seen in the Table below:

Table 4: Last Five Years Turnover of Compliant RMG Factories					
Serial No.	Year	Turnover of A Factory (In Million USD)	Turnover of B Factory (In Million USD)	Turnover of C Factory (In Million USD)	Remarks
1	2010-11	18	18.5	17	Factory A has 430 workers, Factory B has 443 and Factory C has 300 workers
2	2011-12	20	20.6	18.4	
3	2012-13	21	21.7	19.2	
4	2013-14	25	25.8	22.4	
5	2014-15	29	30	23.2	
Source: Prepared by Author on the Basis of Data of different Garment Factories					

Analysis

After the catastrophe of Rana Plaza, a good number of initiatives have been undertaken by government to facilitate compliance related issues to be implemented by owners. Ensuring social compliance not only excels business but also ensure safety and security of workers and provide relief to owners and management. Initial investment of compliant garments are more. But compliant garments receive more orders directly from buyers. Table-4 shows that before 2014 garments factories did not give due importance on compliant issues. From 2014 there is rapid rise of annual turnover. That gives an essence of effect of ensuring compliance at factory level. Order of compliant RMG factories have increased in successive years. But owners of factory view that it does not reflect about their business. However, we cannot conclude with analyzing the turnover that ensuring compliance has led to increase profit. There are other factors also involved in overall turnover of factories which need a separate research.

Annual Turnover of Non-compliant Garments Industry

Non-compliant RMG factories are facing problems to receive orders directly from buyers. However, trivial buyers are comfortable to place order to non-compliant RMG factories. Most of the non-compliant factories are small or medium in nature and they are trying to ensure social compliances too. Besides, they also produce items for large factories which is known as subcontract. Study tried to find out the state of annual turnover of noncompliant factories and management did not want to identify the factory name. Noncompliant factories receive less price for their products than that of the compliant ones. Annual turnover of three non-compliant factories in last five years is presented below:

Table 5: Last Five Years Turnover of Non-compliant RMG Factories					
Serial No.	Year	Turnover of X Factory (In Million USD)	Turnover of Y Factory (In Million USD)	Turnover of Z Factory (In Million USD)	Remarks
1.	2010-11	1.9	3.5	4.5	X Factory has 300 workers
2.	2011-12	2.2	4.0	4.3	
3.	2012-13	2.4	4.2	4.4	
4.	2013-14	2.1	3.8	4.6	Y Factory has 320 and Z Factory has 450
5.	2014-15	2	3.6	4.5	

Source: Prepared by Author on the Basis of Data of different Garment Factories

Analysis

Table-5 gives an idea that annual turnover of non-compliant factories increases with little pace. Annual turnover of last five years of three garment factories have been analyzed and it reflects that growth of turnover is minimal and there is not much effects even after the incident of Rana Plaza. Non-compliant factories continue with their business without much of investment for compliance related issues. Therefore there is not much of change in annual turnover.

Economic Impact of Social Compliance Issues

RMG industry has a great impact on national economy. A good number of industries have developed to support garment factories like button, zipper, packaging, management of garment waste etc. Economy works like a cycle and a good number of industries are also developed to fulfill requirement of garment

workers. For instance cheap makeup factories, shoes/sandals, local dresses, bakeries and food stuff etc. have a great impact on national GDP. Any negative effect on RMG sector, will also have a spillover effect on related industries too. It has been found that cost of production of RMG items has increased due to implementation of social and safety compliances at factory level and also due to the payment of minimum wage set by the government. But there were no effort by international buyers/brand retailers' to increase the price of product. Transparency International Bangladesh in their recent research has mentioned, "They (owners) have observed 41% decrease of Bangladeshi garment products in American markets over the last 15 years. The international workers organization opine that all factories can ensure compliance even after making profit if international brands and buyers can increase price of garment products at a rate of 3 cent for each item".⁶ After ensuring fair wage, regular payment of salary and social compliances, labour unrest has reduced. If situation prevail like this, then RMG business is likely to flourish in coming days.

Implication of Social Compliance

Implementation of social compliances has multiple implications. The Bangladesh Garment Buying House Association has informed that the "Orders from 'compliant' factories are rising by 15-20 percent. Association has just released a survey of brands and retailers detailing that 76.9 percent of those surveyed currently source from Bangladesh, with 60 percent anticipating that they will 'somewhat increase' from Bangladesh in the 'next two years'".⁷ Implications of compliance are highlighted in subsequent paragraphs.

- Workers will be able to concentrate more on production line, if social compliance and welfare related issues are given due importance and addressed appropriately by the owners. The owner of factories will have genuine ground to ask for higher price for their product from brand retailers.
- Fair wages will keep workers happy. Thereby garments factories will be free from labour unrest and there will not be any destruction of equipment or strike.
- Social compliances ensure social security of the workers at factories. If workers are free from anxiety, then they will have more concentration on production. This will increase productivity and quality of products.

6. Khoda. E M, Mina H N, Good Governance in the Ready-made Garments Sector: Achievements, Challenges and Way forward,(p-7).

7. Hasanat. R D, The Future of RMG Trade, The Daily Star.

- Ensuring compliance issues will increase global image and global recognition of Bangladesh garment factories.
- A compliant factory will have a bunch of satisfied workers and will also ensure the satisfaction of the prospective buyers.
- By ensuring all these factors, an owner of factory will be able to work with reputed buyers directly and have consistency in order.

Recommendations

The foregoing discussions and cross-cutting analyses point out to the fact that social compliance holds key to further growth and flourishing of the RMG sector in Bangladesh, with all the potentials of an accelerated export opportunities. Keeping this in view, the following recommendations are made for consideration:

Bangladesh Government

- The government authority have to go beyond earnestness and commit itself to ensure full implementation of what has been stipulated in the laws and regulations.
- The first in the government's agenda should be to strengthen the DIFE and to ensure extensive and effective monitoring the factories.
- The Government would do well to facilitate advancement of financial seed capital to factories against sound investment plans to be submitted by the owners.
- The Government machineries need to play a facilitating role in convincing both the garment owners and management as well as the garment workers and their leadership on the benefits of responsible trade unionism in the RMG sector.
- The Government has also an overarching responsibility to ensure proper utility and infrastructure facilities such as gas, electricity, unhindered communication facilities, cargo handling etc. so that the garment factories can optimize their production.
- Authorities have to give due importance to build up mid-level manpower both for production and management and arrange adequate training accordingly.

- There should be proper linkage across labour ministry, foreign ministry and commerce ministry to facilitate RMG business. Foreign diplomacy should be directed towards trade facilitation.
- Government along with BGMEA have to start RMG/apparel diplomacy to promote our RMG products in world market and also try to achieve waiver in regards of taxes from different countries.

Factory Owners and Management

- Factory owners should realize that informed and responsible trade unionism and meeting the workers' needs and requirements would ensure a congenial working environment within their establishments, leading to high-quality production and resultant boost in the export of the apparel products.
- Workplace safety – an essential ingredient of compliance -- is very important and the factory owners and their managements have to take initiative to improve upon the safety issues of factories.
- The factory managements need to arrange frequent and regular dialogues with the workers and their leaderships to motivate them on maintaining a congenial environment in the working places.

Foreign Buying Houses

- Buyers, particularly the foreign buyers, should also pay fair prices for RMG products and this will act as an incentive towards greater compliances. Government along with BGMEA should take effort to raise this issue to respective forum in the importing countries.

Garment Workers and Their Leaders

- There is also a role to play by the working class and their leadership. Assuming that a garment establishment has enforced compliance, they should work responsibly along with the factory managements to optimize their outputs.
- The union leadership has the prime responsibility to educate and motivate their fellow workers to act and react responsibly.

Conclusion

Over a period of time Bangladesh could successfully develop an expertise in RMG sector and that along with low wage has facilitated to establish strong position in the world market. With the increasing level of profit, wealth was not invested much for improvement of factories. Therefore, during its long journey, RMG sector encountered a good number of accidents, which caused a number of lives. It along with suspension of GSP by USA also tarnished hard earned image of RMG sector. There was tremendous pressure on the industry to ensure compliance at factory level by international buyers/retailers along with world community. However, RMG factory owners along with the assistance of government could turn the threat in to opportunity. RMG Sector could recover the image that was at a stake due to the series of accidents that occurred in 2013/2014. During this long journey, the RMG sector of Bangladesh has become strong, confident, polished, compliant, technologically advanced and ready for big jump ahead. Positive assertiveness of owners, workers, government and buyers will act as fuel for flourishing of RMG sector. Ensuring social compliance will facilitate to reach the export target of US\$ 50 Billion by 2021 as set by BGMEA

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THREAT OF GLOBAL TERRORISM FOR BANGLADESH: A REALITY OR A MYTH

Brigadier General AKM Nazmul Hasan, ndc, psc

Introduction

The end of the cold war in the early nineties apparently led to a new global security environment. In early 21st century, a new global threat emerged with the terrorists' 9/11 attacks on United State of America (USA). Subsequent terrorist attacks in western countries and sharp rise in terrorist activities in North African region and Middle East, defined a new threat perception for the world community and United State (US) led 'War on Terror' thereof gave a new height to the spectrum.

In the era of globalization and technological advancement, terrorism has gained multi-dimensional height, where in terrorist think globally, organized regionally but act locally. Due to revolutionary scientific inventions, social media is playing a crucial role to abuse this invention to propagate terrorist's ideologies. Therefore, terrorist domain has now been extended far beyond any national, regional or international boundary.

Emergence of Islamic State of Iraq and Syria (ISIS) in 2014, gave yet another new height to the spectrum of terrorism¹. The ISIS has exceptional capability in the use of social media and online products to address a wide spectrum of potential audiences around the globe.² Like many other regions, South Asia also could not stand beyond the reach of global terrorists. In the recent past, significant activities of the terrorist groups are noticed in Afghanistan, Pakistan and India. The security threat in India is further heightened with the growing ISIS influence and Al Qaeda in Indian Subcontinent (AQIS).³ As a result, South Asian countries remain vulnerable for indoctrination to global terrorist outfits.

In the present context of globalized terrorism, Bangladesh has not been insulated from the phenomenon. Bangladesh witnessed the threat in the form of leftist

1. Gunaratna,R., Global Threat Assessment New Threats on the Horizon, www.rsis.edu.sg, February 16, 2016 .

2. Country Reports on Terrorism 2014, www.state.gov/documents/organisation/239631.pdf .accessed on February 16,2016, p.7.

3. Op.cit., p. 8

and insurgency movement soon after its independence which was successfully brought to an end through peaceful resolution. New pattern of terrorism in the form of 'religious extremism' surfaced in Bangladesh in late nineties and early twenties. But the country has shown credible success in fighting terrorism. Therefore, terrorist outfits of Bangladesh were dormant for couple of years. But again they came in the forefront in 2013 to indicate their resilience. Here question may arise in the global scenario that whether Bangladesh will be affected by global terrorism in future or not. Given the possibility of influence by global terrorist, Bangladesh along with its counter terrorism strategy, is closely working with its international partners to combat the threat. The present government of Bangladesh with its 'Zero Tolerance' policy against terrorism has enacted and undertaken comprehensive legal measures. Despite all these efforts Bangladesh cannot stand immune from the trend of global terrorism. Therefore, it is imperative to continue to adopt appropriate strategy and policy to obviate the influence of transnational terrorist with a view to maintain current progress and prosperity of Bangladesh.

Having this into consideration the paper will discuss about terrorism and global terrorism- a theoretical outlook, trends of terrorism in Bangladesh , ongoing efforts of counter terrorism in Bangladesh, addressed the answer of the question- will Bangladesh be affected by the global terrorism? And finally round off the research with a few recommendations.

Terrorism and Global Terrorism- A Theoretical Outlook

Definitions

Radicalization: The UK Home Office, MI5's parent agency, bluntly defines radicalization as "The process by which people come to support terrorism and violent extremism and, in some cases, then join terrorist groups"⁴.

Terrorism: Terrorism, as defined by US law, is premeditated, politically motivated violence perpetrated against noncombatant targets by sub national groups or clandestine agents⁵.

4. Ibid

5. Title 22, Chapter 38 of the United States Code (regarding the Department of State) contains a definition of terrorism ... https://en.wikipedia.org/wiki/Definitions_of_terrorism visited 29 September 2016.

Global Terrorism: Global terrorism is a term, meaning use of violence and threats by self-financed and organized, international networks of terrorism. Hence global terrorism involves the citizens or property of more than one country.⁶

Pattern of Global Terrorism

Historical Perspective of Terrorism: The history of terrorism is an old tradition to Change the autocratic ruler or express dissatisfaction on any issue of the internal or external matters by the depressed population of a community or a country. The four-wave concept of terrorism of ‘David C. Rapoport’ was the most convincing overarching analysis of the historical evolution of modern terrorism where he mentioned about the Anarchist wave, the Anti-colonial wave, the New Left wave and the Religious wave⁷. But lastly Jeffrey Kaplan gave the concept of “fifth wave” of terrorism theory where he mentioned about the groups organized by foreign patrons or the result of foreign educations or the influence of foreign ideas or religious beliefs on founders of groups.

Terrorism - Post 9/11 Attack: After the 9/11 attack, terrorist’s activities have become more globalized than ever before in the history of terrorism. On retaliation to this, attack on Afghanistan and Iraq by US led collision forces gave more diversification to the global terrorism. AQ led by Osama Bin Laden fought against the US collision forces at Afghanistan and tried to expand their network all over the globe in the name of religion. “Terrorism is now in full bloom around Afghanistan and Pakistan, strategic centre of the Islamic world.”⁸ This has made the Asian Region more volatile and susceptible to new terrorist growth and has further galvanized the radical elements in the Muslim world.

Recent Trend of Global Terrorism: “The withdrawal of US led coalition forces from Iraq in December 2011 and marginalization of Sunnis by Nouri Al Maliki government created the condition for the rise of the Islamic State of Iraq (ISI)”⁹. The proclamation of Islamic Caliphate by ISIS on 29 June 2014 has diverted the loyalties of dispersed jihadist groups and individuals worldwide¹⁰. It has managed to engage a wide audience effectively with extensive use of social

6. Ansari, Asif Ahmed Lt Col, ‘Terrorism in Bangladesh: Home Grown or Beyond! How to combat’, Individual Research Paper, AFWC, National Defence College, Bangladesh, 2008, p.5

7. “The Four Waves of Modern Terrorism”, [http:// international.ucla.edu/media/files/Rapoport-four-Waves-of- Modern-Terrorism,](http://international.ucla.edu/media/files/Rapoport-four-Waves-of-Modern-Terrorism) visited on April 19, 2016.

8. Gupta, K .R., Global Terrorism, Atlantic Publisher, New Delhi, 2004, p.1.

9. Ibid

10. Ibid

media including Internet, Face book and Twitter. The outfit could also successfully draw the attention of the significant segment of Muslims worldwide especially highly educated youth. This has led to a virtual split among diverse jihadist groups in the Middle East, Asia, and Africa, with many groups supporting ISIS.¹¹ As a result, numbers of foreign fighters from different countries are joining ISIS. This indicates wide and quick spread of ISIS ideology all over the world including Asian region. On the other hand, AQIS was created after the depletion of its Arab rank-and-file. “Pakistan and India are the main targets of AQIS. AQIS also seeks to enlist dispossessed Rohingya Muslims to strike inside Myanmar”¹². Bangladesh is having huge number of Rohingya refugees in Cox’s Bazar area. This Rohingyas may be radicalized by the terrorist outfits like AQIS or ISIS. As a result South Asian countries including Bangladesh remain vulnerable for indoctrination to global terrorist outfits.

An Analysis of the Trends of Terrorism in Bangladesh

Causes of Terrorism

Political Shelter: Political shelter helps to grow terrorism in the country. Although very often than not political parties deny their patronization and affiliation with terror outfits, but in reality the situation is different where some of the political parties, especially Islamic political parties were seen intimately involved with act of terror in Bangladesh.

Establish Islamic Law: In late nineties and early twenties Islamic extremism came in the forefront in Bangladesh in the plea of fighting against non- Islamic activists in the country. These groups protested about the different activities of the cultural organizations like ‘Uddichi’ as opposed to Islamic law.

Political Unrest: In the recent time in 2013 and 2015, the country experienced significant drawback in terms of law and order deterioration which was conducive for the terrorist growth. The recent increase of terrorist activities in Bangladesh may be the spillover effect of political unrest of last few years.

11. Ibid

12. Gunaratna, P.R “Counter Terrorist Trends and Analysis”, www.rsis.edu.sg, volume7, issue1, 2015 , accessed on February 16, 2016, p. 8.

Oversight of Government: Due to oversight of the government machineries, religion extremist flourished in early twenties in the north- western part of Bangladesh.

Polarization of Social Media: Homegrown terrorist outfits are extensively using social media for recruitment. Maximum people of terrorist groups are polarized and motivated towards terrorism through social media. As such well educated people from different educational institutions and rich families tend to join terrorist outfits.

Wrong Interpretation of Islam: Islamic extremists always give the misconception of Islamic word 'Jihad' to motivate people. They explain that any one killed during Jihad would become 'Shahid' and enter Haven directly. This wrong explanation of 'Jihad' allures people to join terrorist groups.

Rise of Terrorism in Bangladesh

Before Liberation: "During British rule, first political agitation was marked by the peasant against forced cultivation of indigo by East India Company in Bengal"¹³. Then the communist ideology flourished in 1925 and 1947 in the name of East Pakistan Communist Party, EPCP (Beijing) and the EPCP (Soviet). "These groups later involved themselves in different kind of terrorist activities like arson, anarchy, subversive and extortion activities within the country"¹⁴. After the separation of India – Pakistan, the leftist terror movement of Naxalbari started in 1967 in the then East Pakistan (present Bangladesh) in the south-eastern and northern part of the country by Purba Bangla Communist Party –Janajuddah (PBCP) and the Sarbahara Party (SHP). From the analysis it is found that no transnational terrorist outfits were involved in any terrorist activities in the country before liberation.

After Liberation: After the independence of Bangladesh, the ultra-leftist terrorism continued in 12-15 districts of south, south-western and north-western parts of the country in the form of extortion, killing, abduction, etc¹⁵ "The first attempted abduction of Indian High Commissioner in Bangladesh in 1973 was the first ever incident of terrorism in Bangladesh"¹⁶. In 1980s around 3400 volunteers from Bangladesh travelled to Afghanistan to fight against Soviet aggression. This was the first ever move of Bangladeshi outside country.

13. Sobhan , F., *Countering Terrorism In Bangladesh*, The University Press Limited, Dhaka,2008, p.14-15.

14. Ibid,p.24

15. Sobhan , F., *Countering Terrorism In Bangladesh*, The University Press Limited, Dhaka,2008, p.4.

16. Sobhan , F., *Countering Terrorism In Bangladesh*, The University Press Limited, Dhaka,2008, p.3-4.

They were deeply motivated by religious whims and took it as a Jihad against the 'Kufirs'. These Mujahideens after returned to country did not have enough opportunity for employment except in Madrasas and they started to organize Islamic Extremism in the country.

Terrorism after Late Nineties (Up to 2008): Before 1999, terrorism in Bangladesh was mostly dominated by leftist groups. "The first major terrorist attack other than leftist group was launched on Udichi function on March 06, 1999 at Jessore"¹⁷. Through this incident, Islamic Militancy came in the forefront in Bangladesh from 1999 to November 2005. The main groups came in the lime light were HuJI-B, JMB, JMJB, Hizb-ut -Tahrir (HT), Hizbut Towhid (HuT).

Latest Scenario of Terrorism (From 2009 to October 2016): The older terrorist groups have been decimated by the government since 2009 but surviving groups and new formations have come to the forefront again. Bangladesh has witnessed two waves of religious radicalism in recent decades. The first wave was led by HuJI-B and JMB from 1999-2005. The second wave was sparked for setting up the domestic tribunal in 2010 to try accused of war crimes of 1971 war.

Recently terrorists are mostly targeting soft, specific and very sensitive personalities what has been termed as 'Targeted Killing'. They carry out small scale operation and follow heat and run tactics; i.e. sleeper cell killing missions. They have a circuit break point in every tier.

In 2013, a new terrorist group named Ansarullah Bangla Team (ABT) emerged as a new threat for the country. It appears to have less sweeping goals and preferring to eliminate specifically identified individuals by hacking to death. The outfit has been banned on May 2014. They emerged as 'Ansarul Al Islam' as new identity. This outfit is maintaining its presence in virtual world through online propaganda and seemingly targeting and killing secular and free thinker, bloggers, publishers, and gay workers etc.

Another new terrorist outfit named 'Nabba JMB' emerged in 2015. They claimed to be part of IS. In last 10 months this outfit launched total 42 operations out of which 28 were claimed as IS operations.¹⁸. Most of the members of this outfit are from modern rich families and students of renowned colleges and universities. Reportedly they have launched attack on Shia Mashjid, killed religion people, foreign nationals, Holey Artisan Bakery, Eid congregation in Sholakia, Kishorganj

17. Ibid,p.4

18. Sultan, T, 'Terrorist Activities in Bangladesh Third Phase' Prothom Alo, August 06, 2016.

etc which bear the hallmark of terrorists’ expertise and capability to carry out attack in line with global terror outfits. In this pretext, Rohan Gunnaratna mentioned that terrorists of Bangladesh got financial and organizational direction from IS¹⁹. But so far no concrete evidence found in reality about the claim except photograph of Holy Artisan Bakery incident published through IS site which has a lot of controversy.

Terrorist Groups in Bangladesh

The name of the major terrorist groups is given in figure- 1 below:

Figure 1. Major Terrorist Groups in Bangladesh					
Serial	Terrorist Group	Year of Emergence	Present Status	Probable Ideology	Remarks
1.	Leftist Group	1967-1972		-	Presently Active
2.	SHP	1967-1972		-	Presently Active
3	Shanti Bahini	1973	-	-	
4.	HuJI-B	1992	Banned	Taliban	
5.	JMB	1998	Banned	IS	Presently Active
6.	JMJB	1998	Banned	-	
7.	HT	2000	Banned	-	Presently Active
8.	HuT	2009	Black listed	-	
9.	Allahr Dal		Black listed	-	
10.	ABT	2013	Banned	AQIS	Presently Active
11.	Ansarul Al Islam	2013		AQIS	Presently Active
12.	Shahadat-e-Hikma Party		Banned	-	
13.	Nabba JMB	2015		IS	Most active

19. Ibid

Ongoing Efforts to Counter Terrorism in Bangladesh

Government Steps on Counter Terrorism

Anti -Terrorism Act 2009: Bangladesh for the first time enacted the Anti-Terrorism Act 2009 to combat terrorism which has been amended twice (2013) to bring it in line with the UN's Action Plan on Counter Terrorism Strategy and other resolutions.

Cooperation with UN Agencies: Bangladesh complied with the UN Security Council Resolutions 1267, 1373, 1455 and other relevant resolutions. Bangladesh also worked with delegation of Counter-Terrorism Executive Directorate (CTED) in June 2007. As per the report of the UNCTED, Bangladesh came close to the international standard on combating terrorism in all its manifestation on counter terrorism preparedness.

Motivational Campaign: The government is trying to motivate general mass to stop abuse of religion as a pretext for terrorism. The posters and leaflets decrying extremism have been prepared in consultation with eminent scholars and disseminated through electronic and print media. Besides, rally, seminar, symposium are also being held to aware the general mass. During Friday Congregation, the Imams are condemning such heinous crimes quoting from the Holy Quran to motivate general people.

Formulation of Different Committees: A seventeen member "National Committee on Militancy Resistance and Prevention" headed by the State Minister for Home Affairs and an eight-member "National Committee for Intelligence Coordination," with the Prime Minister as the Chairperson, to co-ordinate the intelligence activities of different agencies". Moreover, after the attack in Gulshan, counter terrorism committees are being formed at district and upazilla level by DC (Deputy Commissioner) and UNO (Upazila Nirbahi Officer) to monitor the situation.

Curbing Terror Financing: "The Bangladesh government enacted the Money Laundering Prevention Act 2012 to curb money laundering and terrorist financing. Bangladesh has also become a member of the Asia Pacific Group on Money Laundering. Due to successful reforms to anti-money laundering and anti -terrorist financing measures, the Financial Action Task Force removed Bangladesh from their "grey list" in February 2014.

Social Measures to Combat Militancy: “The government has formulated a strong anti -militancy National Education Policy including reform of Madrasa curriculum in 2010 and introduced anti extremism chapters in academic text books”. Besides, the government has integrated the civil society, Non-Government Organizations (NGO) and media to strengthen the campaign against terrorism and militancy. Parents, teachers, social elites are also advised by honorable Prime Minister to monitor the activities of their children.

Commitment of Law Enforcing and Intelligence Agencies: Law enforcing agencies have apprehended almost all the top leaders of terrorist outfits during the last few years. A good numbers of successful joint operations were conducted by RAB (Rapid Action Battalion), Police, Coast Guard and intelligence organizations and could apprehend terrorist groups with huge arms, ammunition and explosive in 2015 and 2016. They also launched “Operation Thunderbolt” at Holy Artisan Bakery in Gulshan where 5 terrorists were killed and 13 hostages were rescued alive on 02 July 2016. Yet another successful operation at Kalayanpur , Dhaka on 26 July 2016 bears the commitment of the security forces.

Banning and Black Listing Terrorist Organizations: The government has banned and black listed extremist outfits for their involvement with terrorist activities in the country. As a result members of the banned outfits cannot move and operate freely and they are brought under justice when they are arrested.

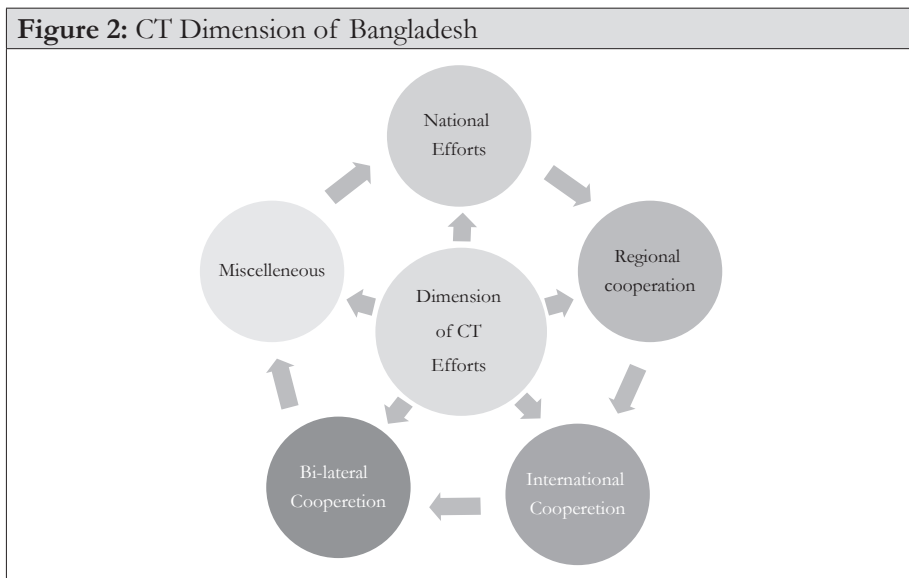
Formation of Counterterrorism and Transnational Crime Unit (CTCU) in Police: CTCU has been formed under the DMP on 31 December 2015 to enhance the capability of the police against terrorism. This newly raised unit is in preparatory stage. They would take some time to come into full effect.

Regional and International Measures: Bangladesh is closely working with regional and international communities to counter terrorism in Bangladesh. “Bangladesh has enacted the Mutual Legal Assistance Act 2012 which provides a legal framework for inter-country cooperation for carrying out enquiries, prosecutions and trial of criminal activities. Bangladesh closely working with South Asian Association of Regional Cooperation (SAARC) countries, Conference on Interaction and Confidence Building Measures in Asia (CICA) and Bay of Bengal Initiative for Multi-Sectorial Technical and Economic Cooperation (BIMSTEC) on intelligence sharing; financing of terrorism; transnational crimes; and legal and law enforcement. On 28 January 2013, Bangladesh and India signed an extradition treaty for disrupting regional connections and networks among terrorist outfits

in South Asia. Bangladesh and India has also agreed to implement a Coordinated Border Management Plan (CBMP). Bangladesh signed an agreement with the USA on 22 October 2013, to enhance counterterrorism cooperation between the two countries in capacity building, information sharing, and ensuring increased training exchanges between law enforcement agencies.”

Dimension of Counter Terrorism (CT) Efforts

Bangladesh is taking lot of steps in different dimension to control the terrorism issue in the country. Dimensions are illustrated in figure -2:



Will Bangladesh be Affected by the Global Terrorism?

Reports of Various Organizations

As per the report of the Global Terrorism index 2015, Bangladesh’s position is at 25th among 162 countries in the world whereas Afghanistan, Pakistan and India remains in 2nd, 4th and 6th position respectively²⁰. It has mentioned that “The government counterterrorism efforts have made it more difficult for transnational terrorists to operate in or use Bangladeshi territory”²¹. As per the report of RSiS,

20. Global terrorism index 2015”,www.economicsandpeace.org, accessed on February 16, 2016, p.10.

21. Country reports on terrorism 2014”,WWW.state.gov/documents/organisation/239631.pdf, accessed on February 16, 2016, p. 224.

there is no specific evidence of transnational terrorist connection or presence in Bangladesh. But it suspect that ABT likely to be a key partner of AQIS. As per the report of Prothom Alo, 15 Bangladeshi have travelled to Syria out of which 2 have been killed.²² There are constant efforts to attract Bangladeshi youths by promoting the concept of Islamic State in the society through social media²³. Members of JMB may have been trying to establish a link with the ISIS²⁴.

International Supports and Perception on Terrorism in Bangladesh

US Assistant Secretary of State for South and Central Asian Affairs emphasized that “USA is very much eager to work with Bangladesh to counter violent extremism before it takes root here”²⁵. Bangladesh and Kuwait also decided to work closely against terrorism at a Prime Minister level meeting in Bangladesh on 04 May 2016. “Besides, Indian Foreign Secretary during his visit to Bangladesh expressed strong support of India to counter terrorism effort of Bangladesh.”²⁶ After the attack on Artisan Bakery at Gulshan, world’s top leaders from USA, Japan, Italy, India and others extended their cooperation and support for Bangladesh. Having such kind of cooperation and supports, growing or existence of transnational terrorism in Bangladesh is a far cry.

Inclusive, Tolerant and Secular Culture of Bangladesh Prevents Terrorism

Bangladesh is a secular country whose cultures are homogeneous. Irrespective of any religion, culture, ethnicity, caste people live in peace and harmony. Bangladeshi culture by default urges people to be united on the basis of friendship, soberness, peace, harmony, mutual respect and cooperation. These attributes greatly prevents the incubation of terrorism in the society.

22. Sultan, T., , ‘Terrorist Activities in Bangladesh Third Phase’ Prothom Alo, August 06, 2016.

23. Basher, I, 2015 “Counter Terrorist Trends and Analysis”,www.rsis.edu.sg/research/icpvtr/ctta, accessed on February 16,2016, p.35.

24. Ibid.

25. Star Report, ‘US Ready to Help Fight Terrorism’, The Daily Star, May 06, 2016.

26. Diplomatic Correspondent, ‘US, India to work together to help Dhaka fight terror,’ The Daily Star, May10, 2016, 2016.

Geo-Political Reality for Bangladesh

Bangladesh being the small country it does not have enough spaces for organized large groups to operate inside country like global terrorists are doing in other parts of the world. Moreover, Bangladesh is far away from main breeding place of ISIS and AQ i.e. Afghanistan, Pakistan, Iraq, Syria, etc. Global terrorist organizations may only influence through social media. They may also try to establish connection with homegrown terrorist outfits of Bangladesh to spread their ideology.

Radicalization of Bangladeshi Diaspora

As per the law enforcing agencies, so far hardly any concrete evidence found to join any person from Bangladesh directly to international terrorist outfits. Recently few persons were arrested in Singapore for allegedly involvement in the terrorist activities which was proved to be doubtful in the investigation of law enforcing agencies in Bangladesh.

Nature of Atrocities by Global Terrorist

The pattern of activities of global terrorist groups involves in mass killing, mass abduction, occupy territory, and fight against conventional forces. In case of Bangladesh sporadic and isolated killing occurs very secretly except in the incidents at Artisan Bakery and Eid Congregation at Sholakia where terrorists tried to put resistance against law enforcing agencies.

Claims of Transnational Terrorist Attacks in Bangladesh Denied

Killing of foreigners, bloggers, secular atheist writers, newly converted Christians, other religion minority groups, worker of gay supporter and attack on Artisan Bakery at Gulshan, Dhaka have been claimed by suspected IS account from SITE Intelligence Group. But so far no definite evidence found and law enforcing agencies and other stake holders strongly denied such claim of SITE intelligence. Home Minister and Inspector General of Police (IGP) denied the involvement of IS or AQIS by saying, "There is no existence of IS or AQ in Bangladesh"²⁷. Above all, honorable Prime Minister Sheikh Hasina said in the closing speech of the 10th session of the parliament, "Many will try to play with the fate of the

27. Press Meet IGP, '37 Terrorist Attacks in Three Years: 90% Causes Identified', Prothom Alo, May 04, 2016.

country in the name of militancy. But I won't allow this to happen as long as I am alive"²⁸. She also expressed her deep concern and added that there will be no space for terrorism in the soil of Bangladesh.

Analysis

Nature and trend of terrorism in Bangladesh is far different than the global one. Geo-political location, people's security mindset, and government efforts would deter transnational terrorist presence in Bangladesh. So far no concrete evidence found about the presence of transnational terrorist in Bangladesh. Sometimes homegrown terrorists are self-proclaiming as the member of transnational outfits for "Global Branding" and to draw attention at home and abroad. However, homegrown terrorists may have some ideological similarity with the global terrorist outfits. Bangladesh being the third largest Muslim country, young population of Bangladesh and, homegrown terrorist outfits like JMB and ABT are also vulnerable for future inclination with transnational terrorist outfits.

Recommendations

- A comprehensive, deliberate and integrated program should be undertaken to monitor on line activities of the terrorist outfits.
- Comprehensive massive awareness campaign against terrorism should be undertaken involving credible voices of the society i.e., teachers, intellectuals, academicians, religious scholars.
- Monitor movement and activities of Bangladeshi Diaspora living abroad with special emphasis where they are working in close proximity to global terrorist's outfits.
- Measures to be taken so that Rohingyas are not exploited by any terrorist outfits in Bangladesh. Rohingyas issues must be solved immediately before it becomes a serious threat to Bangladesh and region as a whole.
- Proper implementation of Anti Money Laundering and Terror Financing Act 2013 to weaken the core strength of terrorist organizations.

28. Staff Correspondent, 'No Place for Terrorism on Bangladesh Soil-PM Tells Jatiya Sangsad', The Daily Star, May 06,2016.

Conclusion

Threat of global terrorism is increasing due to globalization and Online radicalization by social media. Young educated people are being attracted and motivated to join the terrorist outfits. Huge numbers of people are travelling across the world to join the terrorist groups in Iraq and Syria. Now the world is in full bloom of terrorism especially in Iraq, Syria, Afghanistan, Pakistan, and Middle East. This has given the birth of the terrorist outfits like AQ and ISIS. Besides, AQIS is also operating in Indian Sub-Continent which poses serious threat to Asian region.

As part of the globalized world Bangladesh is not out of the influence of terrorism. Bangladesh had the leftist dominated terrorism in the early stages and religion extremism surfaced in the late nineties and thereof. The most dominated terrorist groups like JMB, HuJI-B, ABT and Nabba JMB are active in the country in different magnitude in different phases. Presently ABT and Nabba JMB are most active in the country. In 2015 and 2016, targeted killing of secular-atheist writer's, bloggers, publishers, security forces personnel, gay workers and other incidents have changed the dimension of the terrorist activities. But attack on Artisan Bakery at Gulshan and Eid Congregation at Sholakia by terrorists has showed the paradigm shift of terrorist capability in Bangladesh. They challenged the security forces and carry out attack in line with the global terrorists.

In the scenario of present terrorism, Bangladesh government has given highest priority and 'Zero Tolerance' policy to address the issue. Lot of domestic, regional, international and bi-lateral cooperation and measures are being taken to curb the terrorism in Bangladesh. With the present efforts, Bangladesh has made remarkable progress in controlling terrorism in the country which has been appreciated by international organizations.

Terrorism has always been an internal affair of Bangladesh. A social media like SITE Intelligence group claim the killing in Bangladesh by IS member which strongly rejected by the law enforcing and other agencies of the country. Home Minister and IGP reiterated the issue by saying that there is no IS in Bangladesh. Besides, honorable Prime Minister in her speech in 10th session of parliament strongly clears her position against terrorism. After the incident in Gulshan, world's top leaders from USA, India, Italy, Japan etc extended their further cooperation to counter terrorism in Bangladesh. However, Bangladesh being the third largest Muslim country having huge young population may be susceptible

to global terrorism in future and terrorist outfits might pursue to exploit any opportunity to radicalize the young people. More so, Diasporas living in different countries are also vulnerable to radicalization by transnational terrorist groups. Notwithstanding the fact that ISIS, so far has not been able to established its physical presence in Bangladesh, but the country and its people, especially members of the radical organizations remain ever vulnerable to propaganda campaign by ISIS and its affiliates. But if national holistic efforts can be harnessed together under the rubric of 'Zero Tolerance' policy against terrorism adopted by the present government, Bangladesh with its secular strength can fight the terror in any forms and manifestations. Therefore, with the government's will and people support it may be argued that the impact of global terrorism on Bangladesh appears to be a myth rather than a reality.

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SYRIAN CRISIS: ROLE OF MAJOR POWERS

Brigadier General Mizanur Rahman Shameem, BP, ndc, psc

Introduction

The unrest in Syria started in the early spring of 2011 as a sequel to Arab spring. Protestors raised their voice against President Bashar-al-Assad's government whose military forces responded with violent crackdowns. The conflict turned into an armed rebellion within a short period of time which was overtly sectarian in nature between Alawite-dominated govt forces, militias and other Shia groups fighting primarily against Sunni-dominated rebel groups. Opposition got splited into different groups of rebel fighters instead of having single entity. Meanwhile an extremist group called Islamic State of Iraq and the Levant (ISIL) started taking over large swath of the country using violence. ISIL also persecuted other groups including Christians and Yazidis. Since then.

Syria's internal politics were entangled with inter-Arab competition and the Great Powers' struggle. U.S. wanted to step down President Assad by imparting training to Syrian rebels. At this backdrop, the Russian engagement since September 2015 has turned the tide in favor of the Syrian government. Russia's military operations in Syria have triggered many discussions about their intention in the region and its effects on the regional political-security equations specially geo-political or global standing. With the involvement of international powers namely Russia and China that vetoed UNSC resolution of Syria in February 2012, the situation seems to taken an international dimension from being domestic and regional¹.

The political crisis in Syria has concerned major regional and international actors in such a way that, a new political alignment has taken shape at the regional level as well as in the international arena in a short period of time. Two major regional powers formed coalition i.e. Russia, Iran, Lebanese Hezbollah and Palestinian Hamas form the anti-Western coalition and United States, Turkey, European Union and the Persian Gulf countries are in the opposing side. Peace talks in Geneva began to end the five year civil war peace talk broke up in May 2016 as the opposition groups left accusing Assad govt of ignoring the ceasefire. Resuming further peace talk is yet to be decided.

1. Singh Priya and Chatterjee Kingshuk 2011, Interpreting Arab Spring K W Publishers Pvt Ltd New Delhi, p108.

Mapping Major Theories of International Relations

International relations is defined as the diplomatic strategic relations of states whose characteristics focus on issues of war and peace, conflict and cooperation. IR scholars believe international politics as anarchical because there is no central govt and states are sovereign and autonomous.

Realism, Liberalism and constructivism theories are mapped as major IR theories. Since the beginning of academic IR the dominant theory of world politics was seen in realism that states prevail in a shadow of anarchy and always compete for power and security. The traditional realist emphasizes on the unceasing lust for power inherent in human nature. Liberalism referred as utopianism. Liberal ideas have profoundly shaped how everyone thinks about the relationship between govt and citizens. It seeks to project values of order, liberty, justice and tolerance into IR. Constructivism is a theoretical approach in which states socially “construct”.

Comparison between the Theories

According to realist, states remain critical actors; conflict, competition and rivalry are and will be always predominant modes of interstate interaction international politics. The underlying forces of change are creating opportunities for increased cooperation and a greater realization of peace, welfare and justice.² Realism talks about the role of the state and national power shaping the foreign policy believing in use of force on state and promoting country's national interest. Liberalism focuses more of international institution in shaping state behavior underestimating the role of use of force rather they see the use of diplomacy and negotiation in resolving the disputes. Realism is pessimistic theory whereas liberalism is an optimistic theory. Machiavelli in his famous book 'The Prince', when the entire safety is at stake, no consideration of what is just or unjust,merciful or cruel, praiseworthy or shameful, must intervene.”³

2. R. Thompson William 2001, evolutionary Interpretation of world politics, Routledge new York and London,2001, p 77.

3. Swain James Edgar 1938, A history of World Civilization, Eurasia Publishing House (Pvt) Limited, Ram Nagar, New Delhi, p 384.

Conceptualizing Syrian Crisis

Syrian conflict is a conflict that is prolonging, 4,70,000 Syrians have got killed and the future of Syria is uncertain. Different players have exploited sectarian conflict for fulfilling their own political agenda. Prolonged sectarian civil war in Syria has turned the battleground for a regional proxy where U.S. and Russia have become embroiled in the conflict.

Taking realist view argument is that major powers are playing competing role for which the war is taking this shape. The UN is having ineffective role because major powers interests are not having consensus, talks have become futile as the national interests of major powers are not compatible to each other. The war is prolonging and the humans are humans are having unprecedented sufferings.

Sectarian Conflict

Shia-Sunni conflict in the region remains a primary struggle in the Arab world and Syrian crisis is found to be centre of gravity of the ongoing process of major powers strategic equation in reshaping the environment. Sectarian violence between Shia- Sunni comes from idealism, identities which are basically constructing. Realism fails to appreciate how these differing identities are also shaping this conflict. Identities are playing small role but it is major powers interest that ultimately shape the conflict. Major power competition is a realist discourse in the world.

Regional and International Dimension

The armed conflict in Syria has drawn Iran, Iraq and the Lebanese Hezbollah movement in favour of Assad regime and Saudi Arabia, Qatar and Turkey behind the rebels. The international community is splited by Syrian crisis into two opposite camps. U.S.A, Turkey, France, Britain and other EU countries, The Arab League, Saudi Arabia and Qatar and the other front is headed by Russia, The Syrian conflict became internationalized with the partisan stakes of many global and regional powers who are locked in competing regional and geo-political interests. Realist view is that it is great powers interest that ultimately shape the discourse in this world. Interest of major powers are not compatible to each other. Because major powers are not agreeing rather they are shaping the nature of war. Eventually this is a state centric and power centric explanation determining the conflict pattern.

Overview of the Situation

Following independence in 1946 the country was ruled by Assad family for long who used the sectarian difference as a political tool. Small community became the important power block after 1970. Arab revolt unfolded through Tunisia and Egypt but Assad's brutality by security forces put his role in opposite slant. Subsequently non state actors took the advantage of the situation and foreign intervention finally got through and the scenario turned into a complicated one. From the beginning, Syria had a sectarian conflict between its Shias and majority Sunnis. Besides Jihadist, militant group's command, proxies of regional powers with vested interests continue to operate in the country.

Since World War II, the Syrian crisis has turned into worst humanitarian crisis. Due to civil war different groups had been active in different parts of the country. Certainly, the interplay of geopolitics at global, regional and local level is becoming more complex than ever⁴. Syrians Arab tribal groups are committed to protecting their tribes and autonomy from both the Syrian state and the armed opposition. Tribalism served as a primary form of communal identity in Syria irrespective of their location whether in rural or urban areas⁵. The spark of the Syrian revolution started a predominantly tribal area in Dar'a when a tribal delegation met Atif Najeeb, in Dar'a to request the release of children. By way of response Atif took the headbands and threw them into the rubbish bin⁶. The Country and the economy had stagnated under the repressive rule of army and a party dominated by a minority sect⁷.

Conflict Background

Uprising turned into violence soon after security forces opened fire at the demonstrators. The govt use of force to crush the dissent merely hardened the protestors resolve⁸. Sectarian violence sharply accelerated tensions in neighboring countries, where Sunni fighters are now staging attacks into Syria and also in Iraq. Rebel brigades were formed to fight against govt forces . The rise of the jihadist group Islamic State (IS) has added a further dimension.

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4. Beaumont Peter and H. Black Gerald and Wagstaff J. Malcolm 1976, *The Middle East A Geographical Study*, David Fulton Publishers, London, p548.
 5. The Jamestown Foundation, 2013, *The Tribal Factor in Syria's Rebellion* <http://www.fairobserver.com/region/middle_east_north_africa/tribal-factor-syria-rebellion/> [accessed on] 03 Jun 2016.
 6. Collins, Dylan, 2015, *Tribal Blood Ties and Syria's Civil War: Q & A* <<https://www.newsdeeply.com/syria/articles/2015/12/11/tribal-blood-ties-and-syrias-civil-war-qa/>> [accessed on] 03 Jun 16.
 7. Zogby James 2010, *Arab Voices*, Publish by Palgrave Macmillan, p219
 8. Rodgers Lucys, Gritten David and Patrick Asare and James Offer 2016, *Syria: The story of the conflict*, BBC News <<http://www.bbc.com/news/world-middle-east-26116868>> [accessed on] May 2016.

Opposition Groups

One of the main opposition groups, the Syrian National Council (SNC), an umbrella organization formed by activists in Istanbul on 24 August 2011. In contrast, another main group, the National Co-ordination Committee (NCC) advocated for dialogue with the government. Another group Free Syrian Army (FSA) defected Syrian soldiers executed retaliatory attacks against Syrian forces. The formation of FSA was declared publicly in the summer of 2011 endorsed by the Syrian National Council, the main opposition bloc.

Internal Conflict

Determining Factors for security situation in the conflict those turned into violence in Syria are stated below:

Lack of Good Governance: Syria has been suffering from good governance and rated as one of the worst ranking by the World Bank. The breakdown of social order maintained through repression by authoritarian rulers. The situation was gravely aggravated by the centrally controlled economic system State run industries were overstaff and inefficient⁹.

Law and Order Situation: The humanitarian situation in Syria continues to worsen due to intense fighting, high levels of violence, widespread violation of human rights and other international law and the obligation to protect civilians.

External Terrorist Threat: The general course of the complex war has changed significantly since 2013, as the fighting has moved into a new phase, with the Syrian government and the IS evenly matched in terms of their respective capabilities.

Domestic and Regional Impacts

Human Casualty: Due to 5 years conflict in Syria, approximately 4,70,000 civilians were killed and life expectancy has sharply dropped to 55.4 years from 70 before the war. Prior to the uprising the population in Syria was 21 million out of which more than 4.8 million have fled the country and 6.36 million got displaced within Syria.

9. George Alan 2003, Syria Neither Bread nor Freedom, Zed Books Publisher Limited, London and New York, p25.

Largest Refugee Exodus: Syria's crisis reaches into Europe crossing the regional boundary. The latest wave of fast-moving migrants includes refugees from Syria and Iraq. Most Syrian refugees remain in the Middle East, slightly more than 10 percent of the refugees have fled to Europe.

Human Rights Violations: The human right violation in Syria has been numerous due to extremist group, IS and government forces, including allied militias. IS executed hundreds of civilians and forced women into sexual slavery.

Crime Wave: Many cities have been engulfed in a wave of crime with the expansion of conflict across Syria. Since fighting caused disintegration in most of the civilian state, and many police stations are almost dysfunctional, crime like thievery, looting and kidnapping increased in manifolds.

Loss of Cultural Heritage: The cultural loss threatens to expunge some of the lasting reminders of what binds together Syrians of all faiths, ethnicities and political persuasions¹⁰. Destruction of antiquities has been caused by shelling, army entrenchment, and looting at various museums and monuments.

Global Impacts

Migrant Crisis: The 2015 European migrant crisis, arose through the rising number of refugees and the majority of the refugees come from Syria, Afghanistan and Eritrea. Thousands of refugees are attempting desperate trip across the Mediterranean sea for batter future.

Rise of IS: IS is an organization that is built on the foundation of narrow and dogmatic interpretation of Islam¹¹. IS has established control over vast landlocked territory of Iraq and Syria. Islamists and Jihadists, whose actions were brutal in nature attracted global attention by fully utilizing the prevailing conflict.

Other areas have been cut off by IS militants, leaving their populations dependent on foreign aid and black-market food supplies¹². By 2013, the terrorist group dominated western Iraq and eastern Syria¹³. With changing strategy of IS, it becomes more and more hotspot of international terrorist attack.

10. Eaton Tim 2015, Destroying Cultural Heritage: The End of (Syrian) History <<https://www.chathamhouse.org/expert/comment/17117>> [accessed] on 03 Jun 16.

11. dri Wanto and Abdul Mateen Quadri, Raja Ratnam School of Institutions studies (RSIS), -Islamic State: Understanding the threat in Indonesia and Malaysia Date 29 October 2015, RSIS.

12. Islamic State group: Crisis in seven charts <<http://www.bbc.com/news/world-middle-east-27838034>> [accessed] on 04 Jun 16.

13. K. Anderson Dr. Sean 2016, Indo-Asia-Pacific Defense Fourm ISIL and the Hezbollah Effect Terror Watch Volume 41, Issue, 2016.

Increasing Number of Foreign Fighters (FF): According to data provided by the soufan group between 27000 and 31000 people have travelled to Syria and Iraq to join the IS and other violent extremist groups in the region¹⁴. Foreign Fighters from across the Middle East and North Africa had been pouring into Syria to train and fight while refugees are flooding into Lebanon, Jordan, Iraq and Turkey¹⁵.

Rise of 'Lone Wolf Terrorism' in the West: IS ideology possessing terrorist groups of Western countries are increasing their lone wolf attacks. Europe has been also rocked by a series of shocking terrorist attack perpetrated by lone individuals.

General

The US and Russia, the two main powers got embroiled in Syria, remaining on opposite sides. The great powers are influencing the region, the region is influencing the great powers and the great powers are influencing one another¹⁶. President Barack Obama leads a coalition against ISIS backed by Sunni Arab states and Turkey. While Russian President includes Assad regime, Iran-backed Shia and Hezbollah axis.

Strategic Orientation of USA

USA came forward in 2011 to step down Assad but they started training Syrian rebels in the following year in Jordan. U.S. led coalition launched air strikes in September 2014 inside Syria TO destroy IS .

There have been many criticism of the Obama administration's policy toward Syrian ever since fighting between the Assad regime and the opponents began in 2011. President Obama's nonintervention policy may have different reasons like withdrawing troops from Iraq and Afghanistan . Again limited intervention in Libya but Libya's continued violence might give Obama an impression that same intervention in Syria may not bring positive result. USA did not want to alienate Russia when it was looking for lot of cooperation on different issues.

Russian Intervention into Syrian Conflict

The Russian military intervention started on 30 Sep 2015, Russia waited till the time was ripe. However, Russian strikes killed mostly the western backed rebels including

14. Kirk, Ashley 2016, Iraq and Syria: How many foreign fighters are fighting for Isil <<http://www.telegraph.co.uk/news/2016/03/29/iraq-and-syria-how-many-foreign-fighters-are-fighting-for-isil/>> [accessed] on 12 Jun 16)

15. Miliband David, Syrian's Human Tragedy, The Daily Star 14 Jul 2013.

16. M. Pollack Kenneth, Al-Turk Akram, K.Baev Pavel, Michel S.Doran, Elgindy, The Arab Awakening Brookings Institution Press, Washinton, D.C,Page 278.

civilians as claimed by opposition party. Russia decisively backed Assad regime due to close political link with Syria. Syria enjoyed close ties with the soviet union as a means of countering the west's apparently open-ended support for Israel¹⁷. Moscow's reasoning over the Syrian conflict is manifold, its foremost motivation is to firmly defend the international legal principle of sovereign states¹⁸.

Moscow wants to protect the key naval facility that it leases at the Syrian port of Tartous which serves as Russia's sole Mediterranean base for its black sea fleet¹⁹. Russia launched air campaign against rebels mentioning the so-called IS. The Russian quick and determined action not only prevented the oppositions to establish influence on Assad but also stabilized Assad govt to hold on to power.

Russia is determined to ensure that the Iraq episode is not repeated in Syria and that the present Syrian govt continues²⁰. The West shows no desire to go to war with Russia over Syria since counter escalation might lead to more violence, extremism, breakdown of state and refugees. Putin' gave a clear message to the West through his bold action that Russia is a world power to be reckoned with and Russia is ready to use its military power for achieving its diplomatic goals²¹.

Regional Actors of ME

Saudi Arabia

Diplomatic ties between Saudi Arabia and Syria have long been strained by major events in the region. Saudi Arabia is a closest ally of USA, but remain historically antagonistic against Israel. In order to undermine the Iran-Syria alliance, the Saudi leadership declared its support for the opposition in Syria²². Saudi Arabia has begun supplying the U.S backed rebel Free Syrian Army (FSA) in order to shift a balance of regional power. Sending ground troops by Saudis is aimed at drawing the U.S into a more direct involvement to confront IS to keep Syrian president Basher Al Assad in power²³.

17. George Alan 2003, Syria Neither Bread nor Freedom, Zed Books Publisher Limited, London and New York, p18.

18. Hokayem Emil 2013, Syria's Uprising, Routledge Publisher Limited, p172.

19. Syria crisis: Where key countries Stan, 2015, <<http://www.bbc.com/news/world-middle-east-23849587>> [Accessed] on 20 April 2016.

20. A Chaudhury Enam, The Crisis in Syria, as it Looks now, The Daily Star 15 October 2015.

21. Hasan Mahmood, The Russians have come to Syria, The Daily Star 05 October 2015.

22. Singh Priya and Chatterjee Kingshuk 2011, Interpreting Arab Spring K W Publishers Pvt Ltd New Delhi, p161.

23. James M. Dorsey 12 Feb 2016, Saudi Strategy in Syria: Rewriting Mideast's Political Map? <<https://www.rsis.edu.sg/wp-content/uploads/2016/02/CO16033.pdf>> [Accessed on 12 February 2016.

Iran

Iran have propped up the Alawite-led government of President Assad by enhancing its support. It would be a key player in shaping the new ME order and would take on what it considered to be its rightful role in the affairs of the region²⁴. Iran maintains a strategic relation with both Hafez and Bashar for more than three decades. From geopolitical perspective and balance of power in the region. Iranian-Turkish relations have become more complicated since the Arab spring uprising began four years ago.

Turkey

Development in Syria which was a test case for the limits of Turkey's power projection led it to revising its approach more than once. Turkey beefed up its military presence on its border with Syria and provided the Syrian rebels all material and moral support. The wave of protests spread throughout the Arab World, the Turks, like their regional rivals in Tehran, found themselves increasingly embarrassed by the strong and determined to the rule of their friends in Damascus and the regimes brutality, violent reaction to the opposition²⁵.

Israel

Israel, an overwhelmingly dominant power in the ME regime, has so far maintained a low profile but has long been pursuing a policy to guide any outcome in ME. Focusing on Hezbollah in Lebanon, Israel looks at the Syrian war through the narrow prism. Israel is continuing semi-clandestine war to restrict the flow of sophisticated weapons from Syria to Hezbollah.

Solution to the Crisis

The peace process has been moderated by the AL, the UN peace envoys on Syria, Russia and Western powers which remain as a coordinated outfit for initiatives to resolve the ongoing civil war in Syria. The negotiating parties are represented by the Syrian Baathist govt, and the opposition while the Western backed Kurdish forces have stayed out of the negotiation framework²⁶. AL tried

24. Katouzian Homa and Shahidi Hossein 2008, *Iran in The 21st Century, Politics, Economics & Conflict*, Published by 2008, Canada. p146)

25. Inbar Efrain 2013, *The Arab Spring, Democracy and Security, Domestic and international ramifications*, Published by Routledge, Taylor & Francis Group, London and New York, p19.

26. <<http://ch.wikipedia.org/wiki/syrian.peace.process>>.

twice to accomplish an end to Syrian government and opposition violence and convince both parties to start talks instead of fighting²⁷.

The Kofi Annan drew up six point peace plan, intended to commit both the Syrian government and opposition to a cease fire. On 12 April after Annan had assumed that both parties had agreed to a cease fire on 01 May both the Syrian govt and the opposition were violating the ceasefire²⁸. Lakhdar Brahimi, was appointed as the new U.N.-AL special representative for Syria. Government and most of the opposition groups agreed to his appeal yet, the lull in the fighting lasted very short, according to Brahimi, after which both parties accused the other of not having stopped its violence. Lakhdar Brahimi, tried to pursue the conference in close cooperation with the U.S. and Russia, but ended on 31 January without reaching any agreement.

UN Security Council agreed on Syria peace plan draft resolution calling for peace conference in January 16 and ceasefire adopted unanimously by council's 15 members in ending the war. All 15 members agreed to approve the text which came after hours of negotiation between world powers²⁹. International Syria Support Group (ISSG) was formed following a meeting in Vienna.

The Geneva talks broke up in May 2016 accusing the Syrian govt of ignoring the ceasefire. UN envoy staffen de Mistura informed his strong desire to keep the to keep the momentum. Fresh date of resuming further peace talk is yet to be decided. Defeating extremism in Syria is essential to bring the Syria conflict to an end. For the sake of global security and stability U.S. need to have more balanced policy towards the Middle East which will serve every country's long term interest.

Recommendations

- Constant engagement of U.S., Europe, Russia and the regional allies in constructive dialogue may be ensured for attaining a political solution.
- In order to improve the dramatically insufficient humanitarian responses in Jordan, Turkey and Lebanon, the humanitarian practices and the policy issues need to be reviewed.

27. Ibid.

28. Ibid.

29. Aljazeera, UN Security Council agrees on Syria peace plan, 19 February 2015, < <http://www.aljazeera.com/news/2015/12/security-council-agrees-syria-peace-plan-151218210833550.html>>

- In order to launch large-scale humanitarian operations UN Office for the Coordination of Humanitarian Affairs (OCHA) need to work with civil society to devise a localized relief effort reflective of each area's unique needs and characteristics.
- For the sake of global security and stability de-escalation and freezing of the conflict should be strongly pushed.
- A humanitarian corridor should be formed to ensure the healthy delivery of aid to the battered city or crisis zone.
- Beyond the plan of the U.S. and Russia, an attempt may be made to form the basis for a mediated solution which will address the main drivers including the outcome of the conflict.
- An informal multilateral arrangement may be made with the help of major powers.
- Syria should not be dragged to a situation to be fragmented into pieces rather the integrity of the country need to be maintained having conscientious of all international and regional powers.

Conclusion

The multi-ethnic and multi-confessional Syrian society has now been profoundly and irreversibly torn apart by civil war. The power vacuum in Syria has opened the door for entry of ISIL into the country. The conflict in Syria and the sufferings of the Syrian people is showing no sign of abating. The scale of the tragedy is now the world's largest humanitarian disaster with no parallel in recent history.

Following the unrest in Syria USA govt involved in Syria and started hunting down the terrorist by air campaign in order to degrade and ultimately destroy ISIL. U.S. provided training, besides cash and intelligence to the Syrian rebels Assad to leave the power. In order to arrest the destruction of Syria and protect US security the USA sought both to defeat ISIS and to remove the Assad regime from power.

Russian involvement in the Syrian civil war began in September 2015 which consisted of air strikes to help the Syrian Govt retake the territory from various opposition groups. The conflict in Syria has become one of the greatest humanitarian disasters of recent times. Unless a major geopolitical shift brings change in the prevailing situation inside Syria.

This war isn't over yet. The rebels who mostly hail from Syria's Sunni majority are not strong enough to take Damascus, but nor are they in any mood to withdraw. And the The Alawite minority to whom Bashar al-Assad belongs to won't surrender, out of fear ; they 'll lose their property and lives if the regime falls. Even if Bashar al-Assad himself does not survive, Syria still faces a final showdown of a profoundly sectarian nature³⁰.

Some Syrians become the victims of the game fighting with each other and many others are fleeing the scene, taking refuge elsewhere. Russians are too concerned about the fate of their Naval base in Tartu's and the lucrative market of their arms, Iranians for losing one of its best allies in the regional power game, Americans, on the cannot wait for Assad to go to grab the next big market for their arms the Saudi, Qatar, are waiting for a post-Alawites regime to shift the balance of regional politics, while Israel would be ever happy to see another of its fierce foe down without costing it a single bullet.

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NEED FOR NATIONAL SECURITY STRATEGY: RELEVANT CONCEPT AND PARADIGM AND CONTEXT OF BANGLADESH

Commodore Abdullah Al Mamun Chowdhury (N), ndc, psc, BN

Introduction

‘Security’ is a matter of vital importance to human being and to a nation, a matter of life and death, the path either to survival or to ruin. National Security Strategy (NSS) is the way to rule a country and safe guard its security. It is closely related to the rise or decline, survival or perishing of a country. Almost all the independent need to work out a way to safe guard the national interest and maintain stability of the country. Although there have been numerous practices and discussions on safeguarding national security, it is matter of disappointment that the relevant theories on NSS are scattered in academic subjects on military science, in different institutions without unique concepts, paradigm and laws. Now, it is imperative to clarify of relevant concepts and paradigm, practices and ideas for implementation of NSS.

National Security is a right balance between diplomacy, military power, techno-economic capabilities, interdependent linkages and participation in global institutional mechanism is needed to preserve and enhance national security¹. As such an appropriate NSS should start from the evaluation of domestic and international situation, identifying nation’s role and interest and than gaining better understanding of security threats. Based on this the basic elements of NSS need to be worked out, including goals and tasks, guidelines and principles as well as corresponding policies so as to guarantee national security. As there is no institutionalised planning process for the national security policy in vogue in Bangladesh thus study on NSS of various developing country need to be studied. Under such context it’s undoubtedly of great significance for Bangladesh like any other developing countries to gain in-depth understanding the concept and paradigm of national security strategy. Hence, having studied various documents, books, planning process of security strategy, methodology, an effort has been made to derive the concept and paradigm NSS and relating Bangladesh Context.

1. Issinger, Henry White House year Published by Little Brown, Boston (1979)

National Security: Genesis and Concept and Implication

Defining Security: The word Security in English “A state of safety being free from danger; often referring to the measures and organisation of safety purpose.” In French both ‘Securite’ and ‘Surete’ are used to mean ‘Security’ of English equivalent. In Chinese ‘Anquan’ also indicates ‘Being free from danger or Free from threat. A state where there is no threat, no accident, does not necessarily mean security.

The Encyclopaedia of International social science of USA defines ‘security’ as the “Capability of a nation to protect its internal interest from being attacked by external threats”. Robert Art considers security as capability of a nation to protect itself from attacks, invasion, conquest, and destruction². So to make an accurate definition of Security two things may be taken into consideration. Firstly security is a kind of state, which involves subjective and objective factors. Subjective factors mean to be free from threats or no danger, and objective factor means that the security is the non-existence of fearing mentality. Secondly, security is a kind of action to achieve the process of being safe from threat and dangers. As such security is that which can guarantee that the system is immune, safe and free from danger or least reduced from danger to the lowest degree.

Implication of National Security: The term National Security was used by nations as the expressions like “To bring peace and stability to the country” and “The country is prosperous and people leave in peace”. In his book entitled ‘National Security and International Relations’, American Scholar Peter Mangold believed that national security was an American concept in terms of its origin. According to the textual research, the modern uses of “National Security” first appeared in US Foreign Policy, a book published in 1943 and written by an American Columnist Walter Lippman James Forrestal, Chief of US Naval Operations used the term when he attended the Senators hearing in August 1945 which perhaps earliest use of the term by government official according to the record. Later US passed ‘National Security Act’ for the first time in legal documents since then term ‘National Security’ began to appear as policy documents around the world³.

2. Robert J Art, “ A Defensible Defence: America’s Grand Strategy after the Cold War”, In international Security Vol.15, No.4 spring 1995)

3. Peter Mangold, National Security and International Relations, London and New york: Routledge, 1990).

Strategy and National Security Strategy

Origin and Concept of Strategy and National Security Strategy: To define NSS we must start with basic perception of ‘strategy’. The term ‘strategy’ in English and ‘strategie’ in French, whose roots is Hellenic. The word ‘stratos’ in Hellenic means military forces. And the word ‘strategeia’ means campaign. In around 580 A.D., Maurice, Emperor of East Roman Empire wrote a book entitled Strategikon which means, “Study on Generalship”. Later in 1770, J.D Maizeory, a French translated the book Strategikon and he coined the word ‘strategy’ according to the title of the book and used first time in the War theory⁴. The concept of strategy has undergone a process of development, which can be classified in 3 stages:

- The first stage is strategic period before 18th century in the west when strategy was not separated from the tactics. During that time strategy means ‘war planning’ and always refers to the military struggle in limited time and space.
- The second stage was the strategic period from 18th century to the outbreak of WWI. During this period Heinrich Dietrich Bulow, a Prussian for the first time separated strategy from tactics. Later A.H. Jomini and Clausewitz gave strategy with new definition. For example Clausewitz defines “strategy is the employment of the battles to gain the end of war” these definitions laid a basis for the concept of western military strategy⁵.
- The third stage of Strategic Period of the Contemporary times which refers to the period after WWI and especially period after WWII. The concept of grand strategy came in being where it indicates the role of grand strategy is to coordinate and direct all resources of a nation or group of nations, towards attainment of political objective of the war.

Objective of National Security Strategy (NSS)

The objective of strategy serves as the basis and direction within the composition of strategic system. Dennis M. Drew and Donald M. Snow indicated the significance of strategic objective “if there is no target, you cannot hit the bull’s eyes. If you do not know the objective, you cannot make successful course of

4. Yang Yi Guo Xinning “Theory of National Security Strategy” National Defence University Press, China, 2012.

5. Carl von Clausewitz On War , Amazon Com Wildside Press 2009

action⁶.” In these context objectives are not only the starting point for NSS, but also the destination for the implementation of NSS.

Understanding National Security Environment: Necessity of Systematic Approach

Assessment of National Security Environment: National security environment refers to the situation and conditions of achieving national interests in political, economic, military, cultural and other areas. In today’s world, due to the rapid globalization and multi-polarization of the world, few of the new dimensions of security environment are as follows:

- **Realism:** Realism has long been in the central position in the theory and practice of international politics. As one of the footstones of realism the theory of “Rational Choice⁷” Jeffrey W Legro and Andrew Moravcsik assumes that a subject capable of thinking will choose the action he thinks is the best according to its evaluation of strategic environment. Main signpost of political realism is the “Concept of Interest” defined in terms of power. For example USA (maximal realism), Iran (minimal realism). Some of the prominent realist things about realism:
- **Liberalism:** When liberty and freedom given to the people authoritarian political pattern would likely to disappear, democracies would flourish; there will be no war but peace and prosperity. For Example, Most of the middle power western countries, Canada and Scandinavian countries.
- **Neorealism:** The structure of the international anarchic system rather than power and status characteristics of actors in the system has the most influence of the puzzling behavior of states. In this system no one else can be trusted for the security of the state. Neorealism is a security oriented strategy based on the need to compete for security and Israel is the burning example⁸.

6. Col Dennis M. Drew and Dr Donald M. Snow, Making Strategy: An Introduction the Senate Armed Services Committee,” manuscript briefing, 23 April 1991,.

7. Jeffrey W. Legro is Associate Professor of Government and Foreign Affairs, ...and International Relations (Princeton, N.J.: Princeton University Press, 1999) pp 15- 55.

8. Lt Gen Mohammad Mahfuzur Rahman, rcds, ndc, afwc, psc, PhD, Presentation on “Understanding Global, Regional and National Security Environment: at NDC on 18 Oct 2016.

Basic Contents and Methods of Assessing International Security Environment

Basic contents of assessing international security environment not only involves the influence of external events or relationship on national security, but also the country's reactions to its external security like geostrategic, global, regional security environment. Following features may be considered for assessment:

- **International Security Situation:** It refers to the security situation resulted from interactions of activities of different countries and forces in the international society, which is influenced by both international economic, scientific and technological development and relations between major powers.
- **Geo-security/Geostrategic Environment:** Geo-security is the most basic, direct and popular method in the study of international relations and national security strategy. For assessing geostrategic security environment, British Scholar Helford Mackinder (1861–1947; “Who rules Eastern Europe commands the heartland, who commands the heartland commands the world (Fig 1). Subsequently American Scholar Nicholas Spykman (1893-1943) argued that “Heart Land” theory underestimated inner crescent (Rim Land) the area between heartland and marginal sea. He continued, he who controls Rim land should rule Eurasia. Who rule Eurasia controls the destiny of world (Fig 2) . As the geographical location of a country is unchangeable, geographical factors exert long-term influence on the country's security.

Figure 1: Commands the Heartland Commands the World

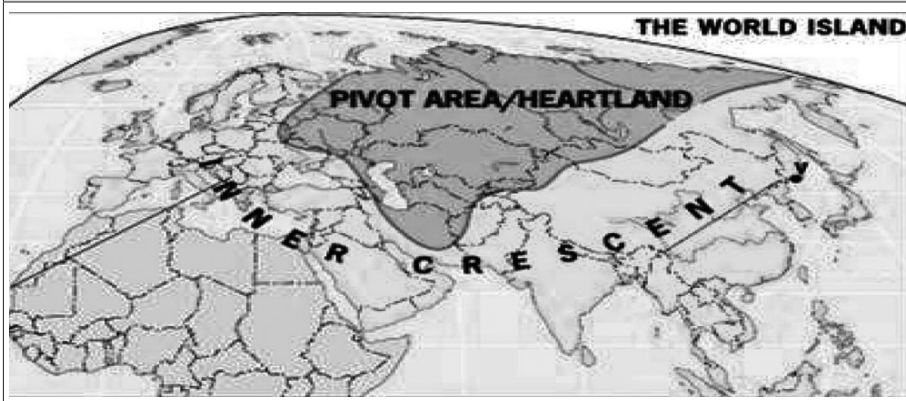
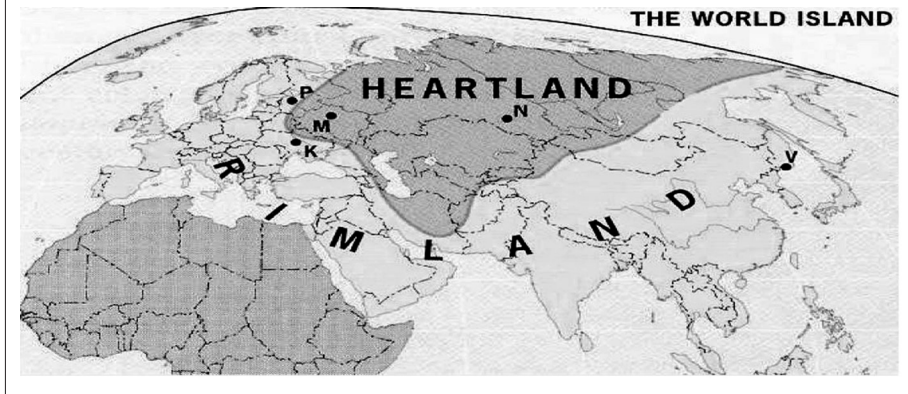
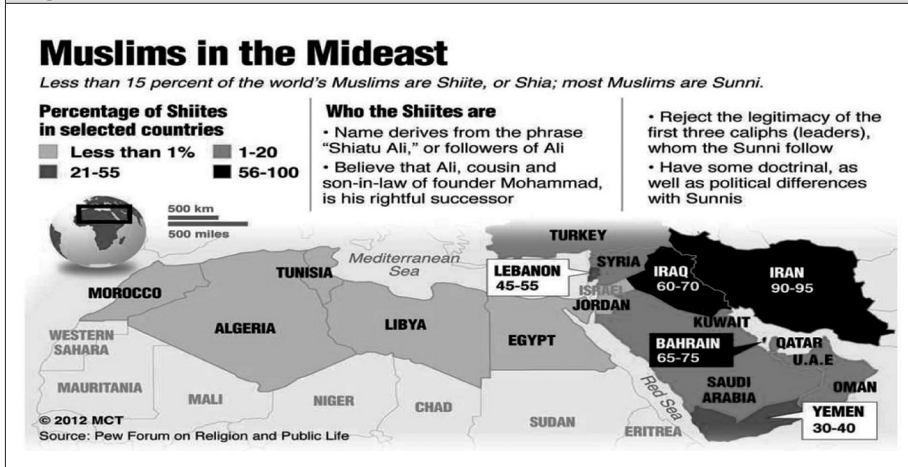


Figure 2: Controls Rim Land Controls the Destiny of World



- **Assessment of Global Security and Climate Change:** Since the end of the Cold War, great changes have taken place in international relations because of emerging global issues like Ideological factors, radicalization and environment etc. Following are the most concerned area for assessing International the Security Environment.
 - Inequality in respect of Economic, Political, Social and maintaining Double Standard
 - Climate Change causing huge number of Environmental refugees including water crisis in China, India, Pakistan & Bangladesh
 - Radicalization using Political Islam, Shia-Sunni divide (Fig:3)

Figure 3: Commands the Heartland Commands the World



Contents and Factors of Domestic Security Environment

Since domestic security is an important guarantee for achieving national development, safeguarding domestic security should be the top priority for a government. Domestic security mainly fall into the following three factors:

- **Economic Security Factor:** Economic factor is the basis for security. And the most basic condition for a country to safeguard a peaceful and stable political and social order, and develop military and diplomacy. Regarding domestic politics, the key for a country to maintain social stability, for a party to win people's hearts and minds, and for a government is administrative effectiveness.
- **Political Security Factor:** Political stability means that political systems are operating and functioning in an orderly and smooth way. In observing domestic political stability, priority should be given whether the social politics is corrupt or not. In today's world where all countries are closely interlinked, one country's unstable politics, social turbulence and occurrences of emergencies will not only harm its own security, but will also have spill-over effects, affecting security of other countries and regions.
- **Social Security Factors:** To observe social security factor, we should proceed from national cohesion. In addition, contradictions among different ethnic groups will also lead to grouping riots, and even social turbulence. On top of that, political corruption and problems in legal systems inside a country lead to social chaos, and hinder national security.

Essence of Strategic Goals and Tasks of National Security

Strategic goals of national security are the reflection of a country's roadmap, guidelines and policies in a certain historical period and it is the starting point to formulate NSS. When determining strategic goals of national security, we should pay attention in grasping following basic characteristics to ensure perfection:

- Strategic Goals of National Security are Matters of Overall Significance.
- Strategic Goals need be Scientific.
- Strategic Goals must be Farsighted.
- Strategic Goals should remain Relatively Stable.

- Strategic goals must have a Clear Orientation.
- Strategic goals can be decomposed.

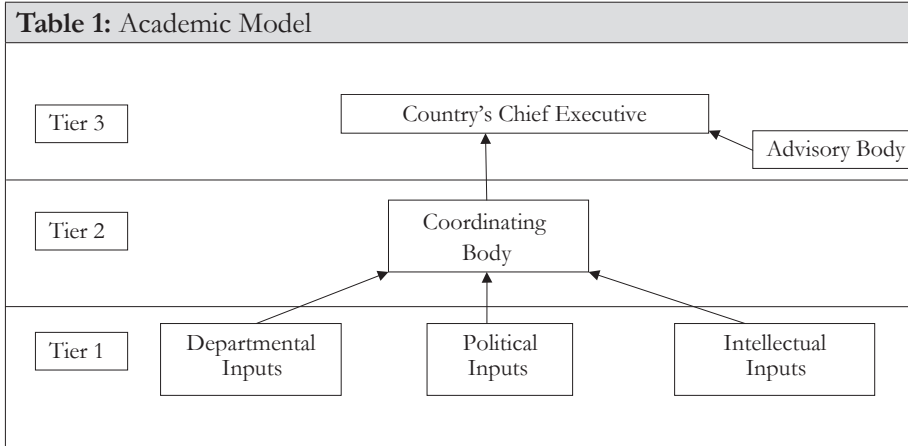
Planning and Formulation Methodology of National Security Strategy for Weaker and Developing Nation

The NSS is the nation's plan for using all its instruments and resources of power to protect and advance its national interests most effectively. The strategies for the weak nations have their inherent characteristics:

- Firstly, due to the limitation in strategic interest and resources, the security strategy of a weak nation is more obviously for self-defence in comparison with that of a strong nation. The internal security issues of the weak nations are grave and diversified as such the strategic objectives for these countries are to protect themselves.
- Secondly, in comparison with strong nations, weak nations have less direct approaches because of their weak strength. In face of strong opponents, if the weak nations are to attain the established objective of maintaining national security, they are usually supposed to develop more extensive strategic resources and more spacious room for freedom of actions instead of implementing direct confrontation and collision with the strong nations or merely adopting direct simple approach.

Planning Process for National Security

Academic Model: Taking into history, practice, analysis of previous chapters planning process may start from academic model for National Security Strategy. The Process would involve a three-tier process (Table:1). First tier involves departmental, political and intellectual input. In the Second tier a coordinating body organizes these inputs and in the Third tier chief decision-maker of the country would accord approval. The first tier inputs generally fed to the coordinating body/advisory body are described in succeeding paragraphs with diagram:



- **Departmental Inputs:** These inputs come from various ministries like those of defence, external affairs, internal affairs and finance. For example, foreign office would give a strategic appraisal on external environment; interior office would provide input on domestic environment including internal political situation; for intelligence appraisal on ‘external as well as internal security scenarios are equally important.
- **Political Input:** Security strategy planning should be based on political guidance. Cabinet ministers, ministers and special committees for security matters provide political inputs. This would largely include the thinking of political organs / parties and their perceptions about national security in the wake of geo-strategic and domestic environment. Such inputs help strategy / policy makers in understanding the degree of consensus on issues of national security. At the same time build environment of consensus before rendering a decision.
- **Intellectual Inputs:** Inputs from think tanks, distinguished scholars and strategic institutions, NGOs and media contribute immensely towards the national security planning process. In some scenarios, think tanks, strategic institutions and even distinguished scholars are assigned to analyse on important security issues.

Core Values/National Purpose

- **Core Values:** Core values of a society or a nation are most cherished on which its entire structure is founded. While evolution of our core values its is seen that it has inhibited by our diverse plurality as well as colonial rule equally

those have been a part of our religion and civilization from times immemorial. No doubt values are the ‘collective will’ of the people but however, in recent strategic environment, in the era of persistent conflict, the survival of the nation as a sovereign entity, prosperity of the nation, equality, freedom of nations are the values which are accepted by majority of the people⁹.

- **National Purpose:** National Purpose lays the foundation for all the national structure as well as serves as the foundation stone for formulating and deriving National Aims and Objectives. It also influences the national interests and objectives that a country seeks to achieve. The purpose of a nation is reflected in the State Constitution. The National Purpose of a nation is founded on following fundamentals:
 - The historical perspective of a nation.
 - Socio political environment.
 - Beliefs and values.
 - Religious leaning.
 - National power potential, and
 - Vision of the nation.

National Interest

- **National Interest - Definition and Implication:** ‘Interest’ or ‘National Interest’ is the most common word for policy or strategy in any form. So, to simply define national interest is the nations perceived need and encompasses three basic issues like values, goal, and aspiration for both national and international environment¹⁰. It is important on two ways, one is pursued of goal or goal to be pursued another is legitimacy and political support. For example border dispute and water sharing with India, Rohingya issue with Myanmar is our national interest, which are determined by governments and keep varying from time to time.

9. Dr. Rashed Uz Zaman presentation on “National Aim, Objective and Core Value on National Security at NDC on 17 Oct 2016.

10 Lt Gen Mohammad Mahfuzur Rahman, rcds, ndc, afwc, psc, PhD, Presentation on “Understanding Global, Regional and National Security Environment: at NDC on 18 Oct 2016.

National Objectives and How to Link with National Interest?

- **Defining National Objectives and Implication:** The national objectives are future state of affair (or end state) that is considered desirable by the government. In a democratic state, these are based on national interests and the coconscious of majority of the population. It is important to know whether the achievement of a nation's aims requires a change or whether it involves continuation of status quo. A Policy should designed to encompass following objectives:
 - Promoted by the national governments.
 - Shared by a sizable or at least an important segment of national population.
 - Directed towards or having considerable effect upon the people of other nations.
- **National Objectives Linkage with National Interest:** According to Frankel, objective national interests are those, which relate to a nation-state's ultimate foreign policy goals, independent of but discoverable by policy makers through systematic enquiry. The objectives should be appropriate, finite, and achievable and should directly secure one or more stated interests. An effective step in articulating an objective is to attach an 'appropriate verb' to each facet of the previously identified national interests like National Interest is Territorial Integrity and Objective is Defend territorial Integrity.

Table 2: Possible Policy/ Strategy Flow for a Developing Nation / Bangladesh				
Step	Policy/ Strategy Flow	Explanation		
Step-1	National Purpose	As an independent sovereign state ensure security, prosperity and freedom to pursue our culture, religion and national aspirations		
Step-2	National Interest	Safeguard sovereignty and territorial integrity ensuring prosperity and well being of the masses.		
	National Aims and Objectives	Ensure defence of the country	Maintain adequate balance of power	Ensure peace and tranquillity
Step-3	National Policy	Deter war Defeat aggression	Active role in the Region Adequate military capability International and economic stability	Avoid war Economic well being Internal Peace
Step-4	Instruments	Foreign policy Defence Policy Economic Policy	Foreign Policy Defence Policy	Foreign policy Defence policy Economic policy
Step-5	National Strategy	Guidelines to ministries in order to achieve given objectives.		

National Security Planning Process in Context of Bangladesh

In the case of Bangladesh so far no formal policy are published. If we consider the academic model, mentioned in Tier 1 involving inputs from various departments, political organs, and intellectuals remains the same. However, in Tier 2 these inputs are received and collated by Defence Committee of the Cabinet (DCC), who drafts and discusses / debates the issues. Having developed consensus, it is then presented to the Chief Executive of country. After approval by the Chief Executive, the National Security Policy would be published and copies sent to all concerned for developing their respective policies and strategies.

Steps for Evolving National Security Strategy for Bangladesh

A format for Evolving National Security Policy has been added, which would illustrate step-by-step approach but without any further elaborate explanation.

Step 1: National Core Values / Purpose and National Interests

National Purpose

- Write down the National Purpose, which is derived from the State Constitution or as agreed in the State Policy.
- National Purpose is:
 - Raison d'être - reasons to be a nation.
 - Desire / will of the people to lead their lives according to their shared common values and beliefs.
 - Non-verbal consensuses of major values of the people.
 - A phrase/statement depicting the shared/common beliefs and values, usually expressed in the preamble to the constitution.

National Interests: List out national interests, which are being pursued by the state as per its enunciated policy considering domestic environment and resources available. National Interest are:

- Interpretation of National Purpose, in the prevailing conditions.
- Assessment of future prospects.
- General and continuing ends for which a state acts.
- A justification for political action.

Step 2: Determination of National Objectives

- National Objectives are derived from the National Interests. In other term, these are broad goals designed to support national interests.
- National objectives are defined as targets, conceptual or physical whose accomplishment would lead to progressive attainment of national aims.

- Vision It is an image of desired future outcome and direction to that shape and control the change to its benefit. It provides direction to both formulation and execution of policy. Vision statement must be:
 - Clear and unambiguous
 - Paints a vivid picture
 - Remarkable and engaging
 - Reflecting aspirations that are realistic.
 - Aligned with the national values and culture

Step 3: Strategic Appraisal - Analysis of Environment

- **Strategic Appraisal:** For Strategic Appraisal every interest is analysed under the prevailing, obtaining or perceived strategic, economic, diplomatic and military context. It can be written in concise format, which is expressed in succeeding paragraphs.
- **Analysis of the Environment:** A review and analysis of global, regional and domestic environments and it should include:
 - Controversies over facts and intelligence.
 - Convergence and divergence of interests with major actors and regional players in the international arena.
 - Projections of future trends.

Reappraisal of the Current National Policy: In the light of threats and the opportunities, carryout a reappraisal of national interests and the national policies in vogue.

Policy Recommendations: This is the most important part of the Strategic Appraisal. The recommended changes must protect national interests against the threats, while exploiting the opportunities. Alternately, altogether fresh policies can be recommended.

Step 4: Assessment of Power Potential and Resources

- This is a very important but tricky stage where realistic and dispassionate assessment of latent or potential power is carried out. Power potential and resource capacity will guide and lead towards correctly prioritization and segregation of national aims and objectives.

- The elements of national power potential include National Determinants and Social Determinants. The National Determinants are Geography, Population and Natural Resources) whereas the Social Determinants encompass Political Stability, Economic Sustenance, Military System. Informational Capacity.

Step 5: Policy Framework

- The prioritized list of national issues confronting the nation at the time of formulation of National Security policy forms the basis of policy framework. Keeping objectives and available time, various policy options or courses of action are worked out for each issue (see table below) and these policy options are analysed and prioritized in light of following factors:

Issue	Option -1	Option-2	Option-3	Adopted
Defence	Deterrence	Defence	Deterrence and Defence	Option-3
Internal Security	Reconciliation	Use of Force	Development	Option-1
Economy	Agriculture	Industry	Services	Combination

Policy Statement: It is a carefully prepared expression on the selected issues, representing Govt’s view on each issue, while advocating a particular course of action. It reflects aspirations and responsibilities of govt. For example, Chief Executive’s vision “ Social uplift of masses through knowledge based economy, while promoting soft image of the nation” may be translated through policy framework as follows:

- Educate and train future generation of Bangladesh through an integrated system of education by bringing modern schools closer alongside vocational training institutions to produce useful and productive members of society contributing towards economic growth.

Step 6: Risk Assessment

This step is vitally important because here the perceived national objectives are weighed in relation to the resources available. A country like Bangladesh will never have resources sufficient enough to ensure complete success of the strategy. If the risk is determined to be unacceptable, the strategy must be revised by way of either, reducing the objectives, or changing the concepts, or increasing the resources, or reducing the threat. Theoretically risk assessment is done at every stage of NSS formulation.

Criteria - Risk Assessment

- What are you trying to achieve?
- How does this fit in the (prioritized) list of national objectives (seeing impact of today's action on other long term objectives)?
- Can you make enough means available to ensure achievement of laid down objectives?
- Are the costs of achieving desired effects worth the benefits? (degree of certainty of judgment)
- Can sufficient support (domestically or internationally) be built for the policy under consideration?

Step 7: Policy Guidelines

The policy guidelines suggest the principles for conduct of national policy, which lays a broad mandate for Stable conduct, and are subject to interpretation by concerned ministries as physical targets. The policy guidelines to be formulated on the basis of bottom up approach as the concerned ministries provide input to NSP in keeping with the policy framework. These may be expressed in executive way with verb at the beginning or as action plan indicating the strategies to put the policy into action.

Conclusion

National Security Policy formulation is a complex as well as an interesting process. Contrary to numerous principles and elements of military and operational strategies evolved by military philosophers, there are no set principles or rules defined for formulating NS Policy or Strategy. Every Nation State and its Government follows methodology most suitable to them. Further, it is influenced by the strategic vision and outlook of the personalities evolving it. However, generally accepted methodology would include strategic appraisal of environment in keeping with the particular features of the time, place and personalities involved. This documents is likely to provide some guidelines have been listed, which would offer an approach and structured methodology for the strategists attempting to achieve the coherence, continuity, and consensus that policy makers seek in designing, developing and executing national security.

The NSS document needs to be concise yet it should flag all major issues concerning a security strategy and provide guidelines to concerned departments to pre-frame suitable action plans. Since the global and regional situation is dynamic, the NSS document should be revised periodically. It is important to underline that a National Security Strategy document should be realistic and balanced. While recognizing the challenges, it should also underline the opportunities. Thus, a successful NSS for Bangladesh can give a boost to our national consciousness, economy and socio-economic development, thus creating a safe environment conducive for national development.

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THE SCOPE OF SUB-REGIONAL ENERGY COOPERATION IN SOUTH ASIA IN THE PERSPECTIVE OF EMERGING GLOBAL ENERGY SECURITY ARCHITECTURE

Director General Shah Ahmed Shafi, ndc

Introduction

The International Energy Agency (IEA) defines energy security as “the uninterrupted availability of energy sources at an affordable price”. Energy security has many dimensions: long-term energy security mainly deals with timely investments to supply energy in line with economic developments and sustainable environmental needs. Short-term energy security focuses on the ability of the energy system to react promptly to sudden changes within the supply-demand balance. Energy security is the ability of a nation to secure sustainable energy supplies to meet its energy needs at reasonable prices—has thus become a major energy policy imperative.

Energy security means rather different things to different people. However, for working purposes, it may be said to include three components: reliability, affordability, and environmental friendliness. Reliability means that a state has regular, non-interrupted access to energy in the amount and shape it needs. Affordability means that it has access to energy supplies at a price that can be sustained economically and promotes economic growth. Environmental friendliness means that a state relies primarily on energy that provides for environmental sustainability and limits destructive social results. It is now also equated by many with the use of forms of energy that do not release climate-changing gasses (Pumphery, 2013).

Energy security is one of the defining policy issues of our day. The predominant focus in policy debates on energy is on “security of supply,” suggesting that states around the world are locked into a competition over access to crucial energy resources that provide the key to continued prosperity and state power. The fundamental energy challenges that individual countries face today are energy security, climate change, and energy access.

The energy security situation is especially acute for South Asian nations, where energy sectors must typically grow by 2-3 percent over the GDP growth rate simply to sustain their economic growth. Each country in the region must therefore address critical energy concerns that will determine not only its national economic expansion plans, but also its ability to bring underserved local populations onto the energy grid and into the economy. South Asia, including Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, is a region of stark contrasts. One of the most populous regions of the world, it has a relatively small land mass and a high incidence of poverty. While growing populations have kept the per capita income in the countries of South Asia stubbornly below the world average, their economies are expanding and the demand for energy has soared. These nations are trying to meet ambitious poverty reduction goals while their growing industrial, commercial, and transport sectors and urban and middle-income consumers are using energy at unprecedented rates. To unleash the region's economic potential, every country in South Asia will have to face critical decisions, ranging from depleting indigenous energy resources to developing long-term plans to secure national and regional energy needs (Sankar, Raza, Barkat, Wijayatunga, Acharya, and Raina, 2005).

Global Energy Security Architecture

A Common Definition of Energy Security Architecture and Global Governance

Energy security is an umbrella term that encompasses a range of issues linking energy, economic growth and political power, such as the security of energy supply, the level and quality of access and uncertainty over prices. The concept emerged in the 1970s as a consequence of supply disruptions and price volatility, which resulted from OPEC oil embargoes in 1973 and the Iranian revolution in 1979. A commonly used taxonomy for energy security, published by the Asia Pacific Energy Research Centre in 2007, is the “four As” of energy security, namely:

- Availability (geological and physical elements)
- Accessibility (geopolitical elements)
- Affordability (economic elements)
- Acceptability (social and environmental elements)

Energy security can also be part of a broader vision, where energy is generally an element of global security. The concept has evolved over time and is more frequently viewed in relation to the vulnerability of energy systems.

Maps and Flow Chart of different Political and Economic Regions:

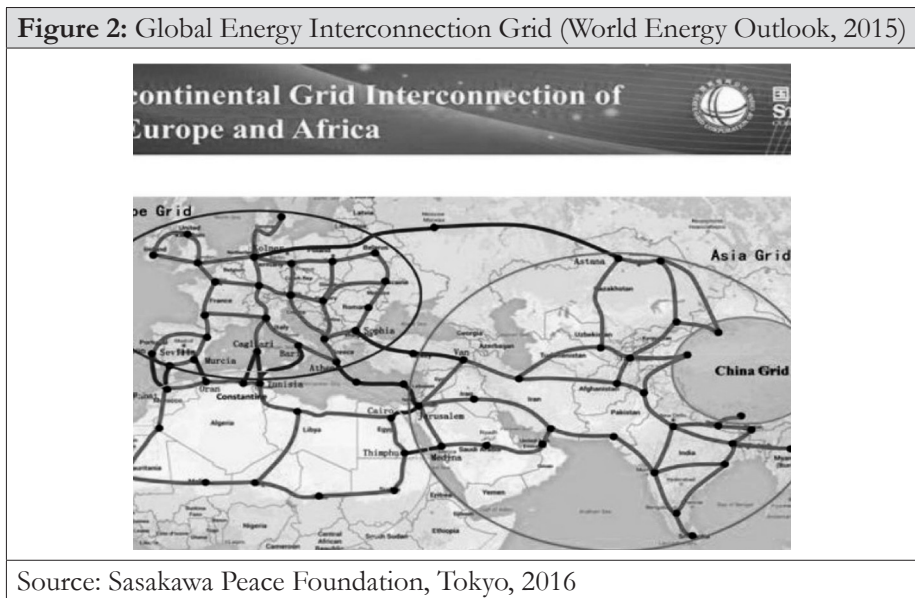
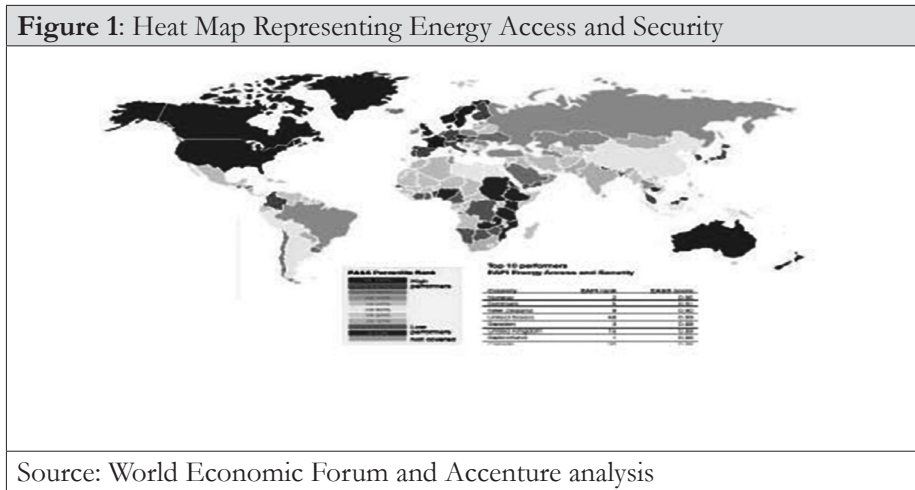


Figure 3: East bound Russian Gas Pipeline extended towards China (World Energy Outlook, 2015)

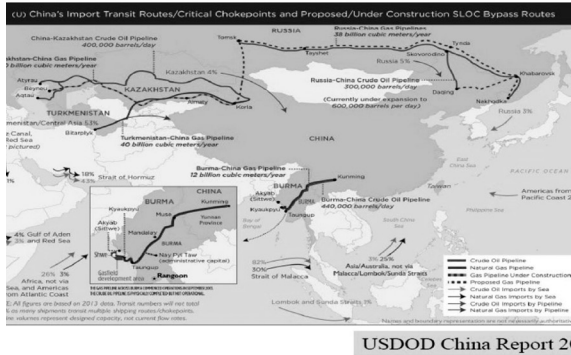
Russian Gas Pipelines Will Extend to the East: Recent China Deal



Source: Sasakawa Peace Foundation, Tokyo, 2016

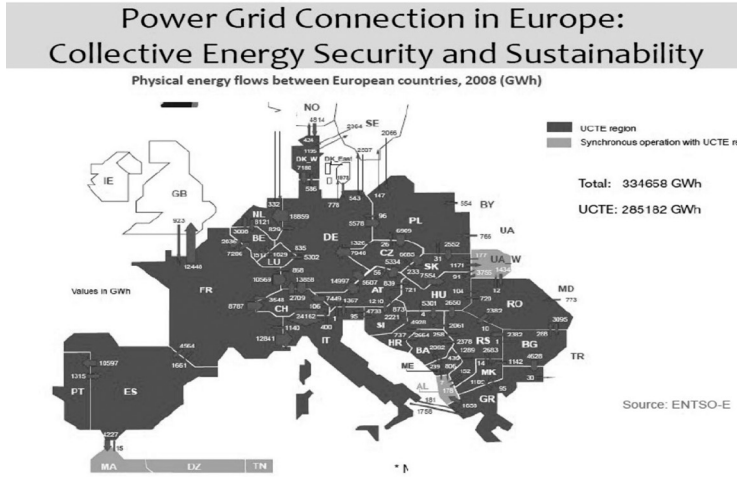
Figure 4: China’s Oil and Gas Transit through One Belt One Road initiative (World Energy Outlook, 2015)

**China’s Oil and Gas Import Transit Routes:
One Belt and One Road (一带一路)**



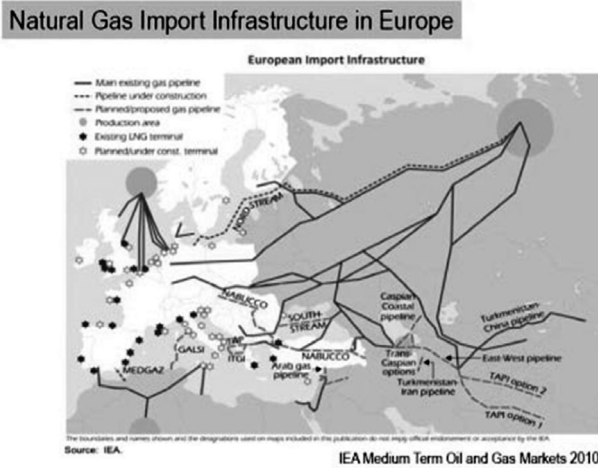
Source: Sasakawa Peace Foundation, Tokyo, 2016

Figure 5: Power Grid Connection in Europe (World Energy Outlook, 2015)



Source: Sasakawa Peace Foundation, Tokyo, 2016

Figure 6: Gas Infrastructure in Europe (World Energy Outlook, 2015)



Source: Sasakawa Peace Foundation, Tokyo, 2016

Figure 7: ASEAN Power and Grid Connection (World Energy Outlook, 2015)

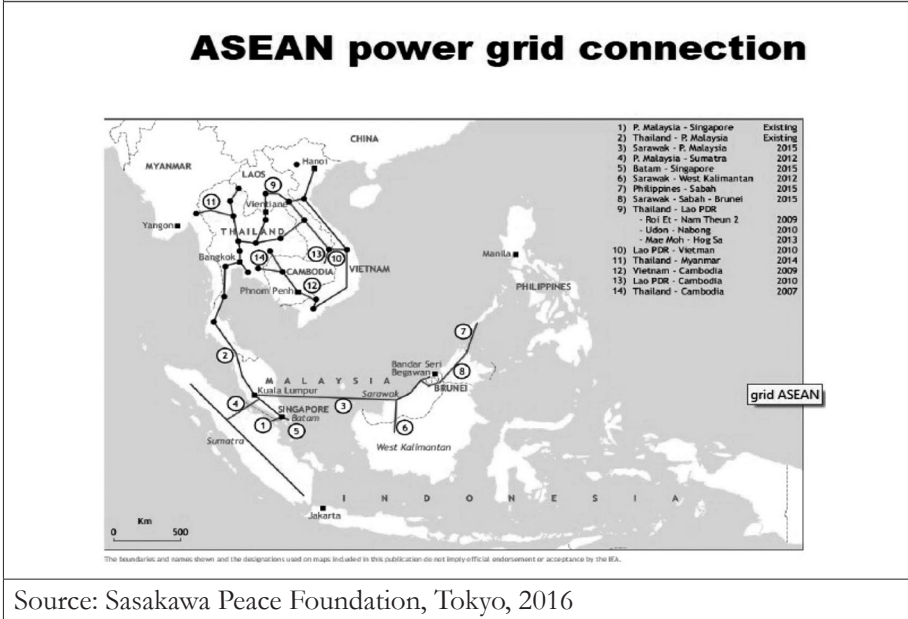
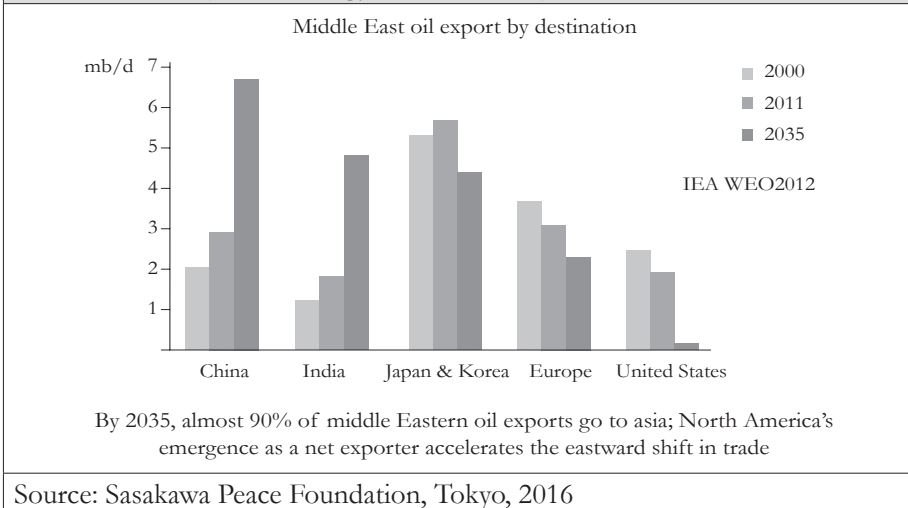


Figure 8: Future Growth of North American Energy Independence on Middle East Oil (World Energy Outlook, 2015)



Energy Cooperation in South Asia

An Overview

There is a wide variation in commercial energy resource endowments and commercial energy demand among the South Asian countries. While India, Pakistan, and Bangladesh account for the major natural gas and coal resources, Bhutan and Nepal have large hydropower resources. All the countries have vast renewable energy potential and the sharing of these resources naturally leads to more optimal energy supply solutions for the entire region. South Asian countries need enhanced regional energy transfer to leverage economies of scale through a more vibrant intra and inter regional energy trade structure.

Key issues faced in energy sector cooperation are centered on the need to develop:

- A regional power market
- Energy supply availability
- Energy trade infrastructure, and
- Harmonized legal and regulatory frameworks

Energy Cooperation through SASEC

Energy cooperation is a main focus of the South Asia Sub-regional Economic Cooperation (SASEC) program. The existing intraregional energy trade among the SASEC countries is limited to electricity trade between India-Bhutan and India-Nepal (in 2011, within the framework of SASEC cooperation, it was around 5,600 Gigawatt-hour (GWh) and 700 GWh respectively); and trade in petroleum products between India and Nepal, Bhutan, Bangladesh, and Sri Lanka. The enhanced electricity trade will be based on the expansion of power transfer links between Bhutan and India, and India and Nepal. The establishment of ongoing and proposed new power transfer links between Bangladesh and India, India and Sri Lanka, and between India and Pakistan would further strengthen the regional power trade.

Initiatives for Regional Energy Cooperation

Inter Governmental Framework Agreement for Energy Cooperation

Energy ministers in SAARC nations have decided to finalize the SAARC Inter-Governmental Framework Agreement (IFA) for Energy Cooperation by mid of this year to ease electricity crisis in the region. Reiterating the importance of electricity in promoting economic growth and improving the quality of lives, realizing the common benefits of cross-border electricity exchange and trade among the SAARC member states this agreement was done. The framework agreement would also include the provision of allowing unrestricted cross-border trade of electricity on voluntary basis subject to regulations of the respective member countries. The agreement would allow the SAARC nations buying and selling entities to negotiate the terms, conditions, payment security mechanism and tenure of their power purchase agreements as normal commercial agreements. It would also allow the national grid operators to jointly develop coordinated procedures for the secure and reliable operation of the inter-connected grids of the member states and prepare scheduling, dispatch, energy accounting and settlement procedures for cross border trade. But would also allow transfer of technology related to the power generation, transmission and distribution among the SAARC member states.

SAARC Energy Trade Study (SRETS)

This has been completed with the assistance of Asian Development Bank. It has identified four trade options, which will be considered by the relevant SAARC mechanism in order to make a road map for implementation. As a follow SAARC has commissioned a study on Regional Power Exchange. The study is likely to be completed in 2012. The Study will explore the development of a regional power market involving SAARC countries that already have interconnection, as well as those that have planned interconnections. It will also examine both economic and technical requirements of establishing a regional power exchange that would maximize the potential for power transfers among SAARC regions to reduce power shortages and take advantage of economic benefits.

SAARC Market for Electricity (SAME)

The 16th Summit of SAARC held on 28-29 April 2010 in Thimpu, Bhutan has adopted an Indian proposal for a roadmap to create a SAARC market for electricity. The summit urged the member countries to quickly ratify the trade in services deal to open their service sectors. The leaders noted the proposal from India for preparing a roadmap for developing a SAARC market for electricity on a regional basis, as SAARC is considering electricity trading, supported by enabling markets in the member states. The leaders emphasized the need to undertake studies to develop regional energy projects, promote regional power trade, efficiency, conservation and development of labeling and standardization of appliances, and sharing of knowledge and technologies, according to the declaration. Bangladesh Prime Minister Sheikh Hasina in her summit speech proposed for a regional grid of electricity in the SAARC region. Energy-starved Bangladesh has been in negotiation with India and Bhutan to import electricity from the neighboring countries.

SAARC Energy Centre (SEC)

The creation of SAARC Energy Centre (SEC) came into picture after the Dhaka Declaration in 2005. In this declaration, the Heads of the State or Government welcomed the joint Statement of the first SAARC Energy Ministers meeting held in October 2005 in Islamabad. They agreed to the recommendation to establish the SAARC Energy Centre in Islamabad: to promote development of energy resources, including hydropower; and energy trade in the region; to develop renewable and alternative energy resources; and to promote energy efficiency and conservation in the region. It has started journey from 1st March 2006 in Islamabad. SAARC energy cooperation program provides a major substantive element for economic prosperity of South Asia through meeting the energy demand of the countries. SAARC Energy Centre is converting energy challenges into opportunities for development. It is the platform involving officials, experts, academics, environmentalists and NGOs to tap potentials of cooperation in energy sector including development of hydropower, renewable and alternative energy, promoting technology transfer, energy trade, energy conservation and efficiency improvement in the region.

Energy Cooperation through BIMSTEC

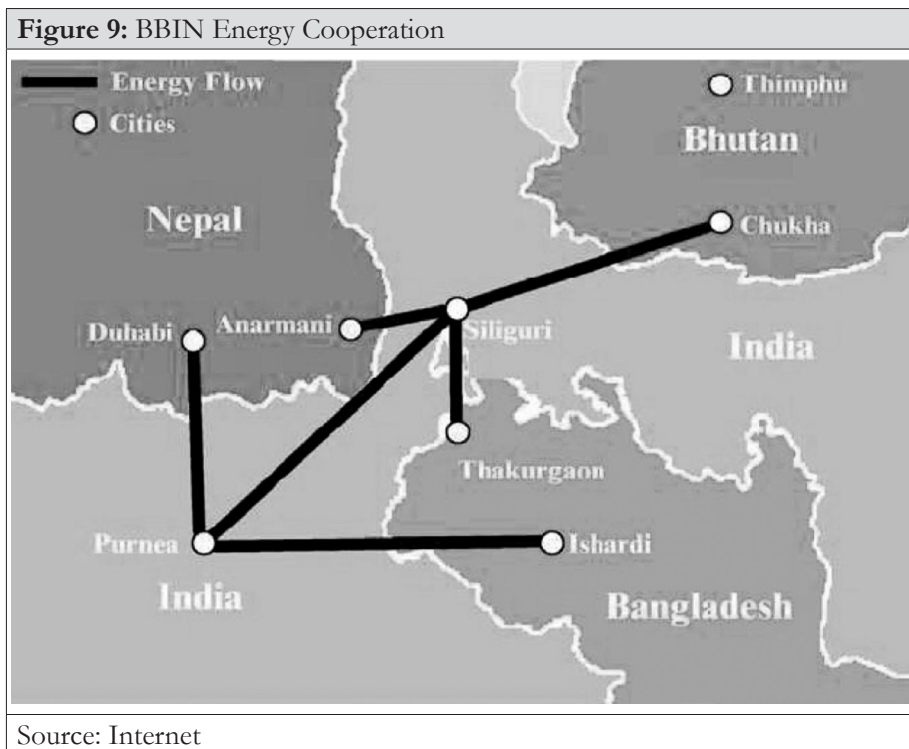
Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organization involving a group of countries in South Asia and South East Asia. The member countries of this group are: Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal. It was formally launched on 31 July 2004 in order to create a link between SAARC and ASEAN. Seven members of BIMSTEC covers thirteen private sectors led my member countries in a voluntary member. Trade and Investment, Transport and Communication, Energy, Tourism, Technology, Fisheries, Agriculture, Public Health, Poverty Alleviation, Counter-Terrorism and Transnational Crime, Environment and Natural Disaster Management, Culture and People to People contact. Out of the seven members five are the members of SAARC and energy is one of the priority sectors.

MOU for Establishment of BIMSTEC Grid Interconnection

Member states of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) have reached a consensus to sign a Memorandum of Understanding (MOU) soon to exchange electricity among them. The proposed MOU will provide a broad framework for the member countries to cooperate towards the implementation of grid interconnection for the trade in electricity based on bilateral building blocks with a view to promoting rational and optimal power transmission in the BIMSTEC region. It also added that the BIMSTEC trans-power exchange and development projects will be implemented through strengthening of bilateral and intra-regional cooperation within the framework of respective member countries' environmental and electricity laws and regulations. According to the MOU, the member states will coordinate and cooperate in the planning and operation of interconnected systems to optimize costs and maintain satisfactory security to provide reliable, secure and economic electricity supply to the member countries. The issue of imposing import, export, or transit fee, duty, tax, or any other government charges on construction, operation and maintenance of the BIMSTEC grid interconnection will be mutually agreed upon under the MOU.

Four Borders Project: Reliability Improvement and Power Transfer in South Asia

During 2001-2002, under the USAID sponsored SARI/ Energy Integration programme, Nexant conducted a study on the “Four Borders Project: Reliability Improvement and Power Transfer in South Asia”, which suggested connecting Siliguri (India) to Anarmani (Nepal) and Thakurgaon (Bangladesh) initially by 132 kV lines, capable of being upgraded to 220 kV as the volume of interchange increases. It also suggested the alternative of connecting Purnea (India) to Duhabi (Nepal) and Ishurdi (Bangladesh). Further connections are possible from Chhukha (Bhutan) to Siliguri and then on to Purnea. The cross-border flows would be around 500 MW and these would represent a relatively low-cost initiation of power trade, which could be extended later.



Status of Power and Energy Sector Cooperation among South Asian Countries

Power sector cooperation in the recent time has been one of the hallmarks of Bangladesh-India relations which have been deeply appreciated by the general people in Bangladesh. Establishment of Bheramara (Bangladesh)-Bahrampore (India) grid interlink stands out as a glaring example of our achievements. More such tangible outcomes can infuse new positivity in our relationship. Bangladesh is now striving to expand our power sector cooperation further particularly through sub-regional cooperation. The SAARC Energy (electricity) Agreement would lend fresh impetus to power sector cooperation in the entire region through inter-country power trade and inter-country grid connectivity. All these would go a long way to ensure energy security for our entire region.

Power Sector Cooperation

In the Joint declaration issued during the visit of Indian Prime Minister to Bangladesh in June 2015, both the Prime Ministers expressed deep satisfaction at the level of cooperation and achievements in the power sector between the two countries and agreed to widen the cooperation further. Prime Minister Narendra Modi expressed his appreciation for Prime Minister Sheikh Hasina's untiring efforts in improving the power situation in Bangladesh and her Government's consistent efforts in implementing the 2021 Goal i.e. to achieve installed capacity of 24,000 MW power by the year 2021. He also conveyed that India can be a major partner in achieving this goal and many Indian corporates have the capacity to cooperate with Bangladesh in this endeavour.

Few ongoing and future projects in power sector cooperation are mentioned below:

- **Diesel/ petroleum products supply by pipeline from Numaligarh Refinery:** Bangladesh requested for expeditiously finalizing the tariff and modalities of implementation of the project including construction of pipeline, to commence the project work and supply diesel. For the very first time 2268 MT high speed diesel has been transported/ supplied to Bangladesh (Parbatipur depot of Bangladesh Petroleum Corporation) on 19 March 2016.

- **Tri-nation (Bangladesh-India-Myanmar) gas pipe line:** It is clear that although many options are available to India, pipeline through Bangladesh provides the cheapest route to transport natural gas from Myanmar. Bangladesh can benefit from the pipeline if it can enter into well-argued negotiation in this regard. Bangladesh needs to prioritize its goals and have a long term view of its relations with both India and Myanmar.
- **LNG and LPG Cooperation:** India is presently interested to supply LNG and LPG to Bangladesh and both the countries already signed MoUs in this regard. The protocols and modalities are however yet to be finalized.

Energy Demand Forecast for South Asian Region

India, Pakistan, Bangladesh and Sri Lanka have drawn up long-term plans for their socioeconomic development in the twenty first century and have projected their energy requirements based on these long-term plans. The increase in energy demand in the region in a decade time is highlighted in Table 1.

Table 1: Energy Demand for South Asian Countries			
Country	2010 Demand (GWh)	2020 Demand (GWh)	Percentage Increase
Bangladesh	28470	67400	9
Bhutan	1749	3430	7
India	938000	1845000	7
Nepal	3200	6910	8
Pakistan	95000	246000	10
Sri Lanka	10718	21040	7
Total	1080537	2197830	7.4

Source: Asian Development Bank, 2013

Renewable Energy Scene in South Asia

In contrast to the situation with fossil fuel energy sources, SAARC countries are endowed with considerable renewable energy sources especially hydro and solar energy. Being in the tropics, SAARC economies are endowed with high levels of solar insolation. An overview of the richness of renewable energy resources in South Asia are given in Table 2.

Table 2: Renewable Energy Resources in SAARC Economies

SAARC Country	Hydropower Potential (MW)	Biomass Resources (million tons)	Annual Average Wind Speeds (m/s/year)	Annual Average Solar Insolation (kWh/m ² /day)
Afghanistan	25,000	18-27	4.3-5.6	4.7-5.47
Bhutan	30,000	26.6	4.4	4.63
Bangladesh	330	0.08	1.9-2.9	4.51-4.99
India	150,000	139	0.9-4.6	3.95-6.07
Maldives	0	0.06	3.7 -5	5.8 -5.88
Nepal	42,000	27.04	2.9-4.6	5.03-5.37
Pakistan	45,000	NA	2.1-5.6	4.02-5.54
Sri Lanka	2,000	12	1.9-5.2	4.8-5.88
Total	294,330	225 (approx.)	22.1-37.9	37.44-43.83

Source: SAARC Energy Centre, Islamabad, 2015

However, despite the rich local resource endowments, SAARC countries have only succeeded in varying degrees to harness their renewable energy potential. Considering that many SAARC countries face electricity shortages in the range of 8-27 percent and are dependent on sources outside the region for their petroleum energy sources, there is a clear need to increase the level of utilisation of renewable energy resources other than hydro, which are widely available in the region (Parthan, 2015)

Hydro Power Potentials of Nepal and Bhutan

Nepal has a huge hydropower potential. In fact, the perennial nature of Nepali rivers and the steep gradient of the country’s topography provide ideal conditions for the development of some of the world’s largest hydroelectric projects in Nepal. Current estimates are that Nepal has approximately 80,000 MW of hydropower potential. However, an estimated half of it i.e. 40,000 MW is economically viable. The present situation is that Nepal has developed only approximately 600 MW of hydropower. Therefore, bulk of the economically feasible generation has not been realized yet. Besides, the multipurpose, secondary and tertiary benefits have not been realized from the development of its rivers. Although bestowed with tremendous hydropower resources, only about 40 percent of Nepal’s population has access to electricity. Most of the power plants in Nepal are run-of-river type with energy available in excess of the in-country demand during the monsoon season and deficit during the dry season.

No wonder both Nepal and Bhutan see this as a win-win situation. In 2006, India and Bhutan signed an agreement “concerning cooperation in the field of hydroelectric power”, whereby India agreed to import at least 5000 MW of power from Bhutan. In just three years after this, Bhutan pushed for acceleration, and a Protocol to the 2006 Agreement was signed between the two countries in 2009, wherein India agreed to support Bhutan to create an installed hydro capacity of 10,000 MW by 2020, and import all the surplus electricity. This is the basis for Bhutan’s ambitious 10/20 program, that is, to create 10,000 MW of capacity by the year 2020. This capacity is expected to come from 10 mega projects. Out of these, three – 1200 MW Punatsangchu-I, 1020 MW Punatsangchu-II and 720 MW Mangdechhu – are under construction. The foundation stone for the 600 MW Kholongchhu was laid by India’s Prime Minister Narendra Modi during his visit to Bhutan in June 2014. The rest, which are at various stages of development are the 540 MW Amochhu Reservoir project, 570 MW Wangchu Run-of-the-River project, 180 MW Bunakha Reservoir project, the 2640 MW Kuri Gongri Reservoir project, the 770 MW Chamkharchhu-I HEP (Hydro-Electric Power) project and the 2560 MW Sankosh Reservoir project (Dharmadhikary, 2015). Establishment of joint hydropower projects in some remote and access unfriendly location in both Nepal and Bhutan require critical policy decision and massive investment and in Bangladesh must work with India to harness the huge hydropower potentials of Nepal and Bhutan and onward transmission. The governments are examining the feasibilities of tripartite projects in the two countries.

Figure 10: Proposed SAARC Energy Ring Power Grid (Usman, 2015)

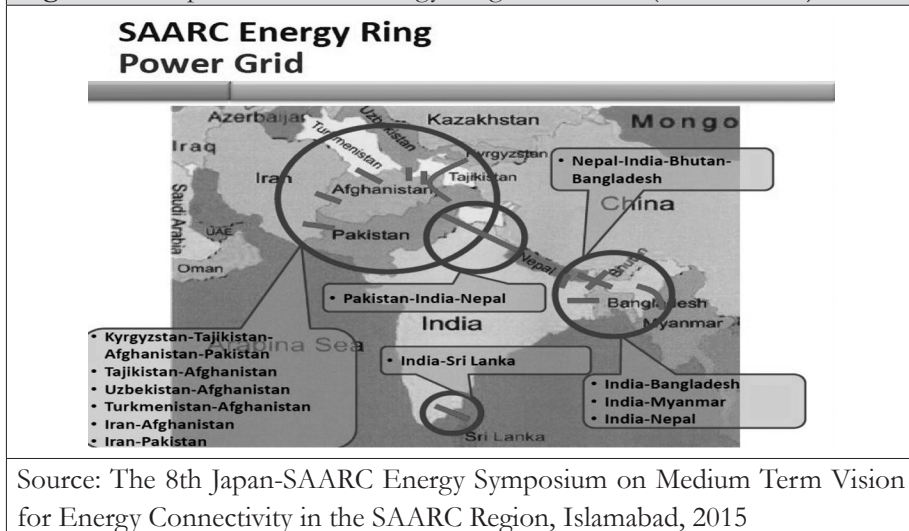


Figure 11: Proposed SAARC Energy Ring Gas Grid



Source: The 8th Japan-SAARC Energy Symposium on Medium Term Vision for Energy Connectivity in the SAARC Region, Islamabad, 2015

Myanmar, the New Frontier of South Asia Energy Cooperation and the New Silk Road

The Missed Opportunity Turned to a Costly Affair

The proposal for a gas pipeline from Myanmar to India through Bangladesh territory was first tabled in 1997 by the Dhaka-based private firm Mohona Holdings. This 900km, one billion dollar pipeline was meant to transfer an estimated 5 billion cubic metres of gas from the Swe field off the Bay of Bengal through the Rakhine State in Southern Myanmar, from where it would turn east to enter the Indian state of Tripura. The pipeline would then enter Bangladesh at Brahmanbaria and traverse the country till it exited at Jessore and terminated at the West Bengal state of India (Ali, 2013).

The deal however, could not be implemented purportedly because India did not agree to Bangladesh's demands of i) transmission of hydroelectricity from Nepal and Bhutan to Bangladesh through Indian territory; ii) corridor for supply of commodities between Nepal and Bhutan and Bangladesh through Indian territory; and iii) to take necessary measures to reduce trade imbalance

between the two countries. Though these were discussed on the sidelines of the tripartite deal and even a formal joint bilateral press statement was issued by the Indian and Bangladeshi Ministers with some very positive views on these demands by the former, the entire deal collapsed. It essentially became a deal between India and Myanmar which never took off. Bangladesh's demands looked very reasonable, particularly in the context of the conspicuous trend of steady liberalisation and economic integration the region has recorded in the last decade or so. The Singh- Hasina agreements of 2010 and 2011 have in fact proved that Bangladesh was asking for what India would have in any case agreed upon. Though this tripartite agreement looks fizzled out at the moment, India lost a major opportunity even in terms of literally handing over the gas fields to China. Even if the gas is made viable to India by Myanmar once again, India could do so now only at a very heavy cost of diverting this gas pipeline through its own territory in Assam. It has also forgone a good opportunity to make substantive geo-strategic and socio-economic gains in the long run. The goodwill and diverse stakeholders generated by this project could have been used by India to resolve its longstanding demands vis-à-vis Bangladesh. This includes getting a better access to energy projects in Bangladesh and transit facilities to reach its North-Eastern States. It could have triggered a number of projects in Bangladesh with large scale development and social impact. This could have in turn in some ways even discouraged the Bangladesh- India cross border movement of people in search of better livelihood. The Bangladesh transit corridor could have been used as a major route to enter into the South East Asian countries via Myanmar under the Look East policy. A transit corridor through Bangladesh is very vital for India (Mainstream, 2013).

One Belt One Road Initiative: A Ribbon of Roads, Rails, Waterways and Energy Projects to Help Increase Trade

In just 30 years, China has developed from a poor inward-looking agricultural country to a global manufacturing powerhouse. Its model of investing and producing at home and exporting to developed markets has elevated it to the world's second-largest economy after the USA. Now faced with a slowing economy at home, China's leadership is looking for new channels to sustain its appetite for growth at a time when developing neighbours are experiencing rapidly rising demand. At the heart of One Belt One Road (OBOR) lies the creation of an economic land belt that includes countries on the original Silk Road through Central Asia, West Asia, the Middle East and Europe, as well as a maritime road

that links China’s port facilities with the African coast, pushing up through the Suez Canal into the Mediterranean. The project aims to redirect the country’s domestic overcapacity and capital for regional infrastructure development to improve trade and relations with ASEAN, Central Asian and European countries (Lee, 2016). In its way the Pearl of String of the new Maritime Silk Road will connect South Asia to Middle East, African costs, and to the Europe through the Suez at one end and South East Asia and China at the other. The One belt, one road will add a new dimension in supper connectivity in the entire region of the three continents, as well as energy trade and security to South Asia (Lee, 2016).

China’s “One Belt, One Road” project aims to make Central Asia more connected to the world, yet even before the initiative was formally announced China had helped to redraw the energy map of the region. It had built an oil pipeline from Kazakhstan, a gas pipeline that allowed Turkmenistan to break its dependence on dealings with Russia and another pipeline that has increased the flow of Russian oil to China. Chinese companies have funded and built roads, bridges and tunnels across the region. A ribbon of fresh projects, such as the Khorgos “dry port” on the Kazakh-Chinese border and a railway link connecting Kazakhstan with Iran, is helping increase trade across central Asia. China is not the only investor in central Asian connectivity. Multilateral financial institutions, such as the Asian Development Bank, the European Bank for Reconstruction and Development and the World Bank has long been investing in the region’s infrastructure (Farchy, Kyngé, Campbell and Blood, 2016).



Source: MERICS, DW, December 2015

Research Findings

In the backdrop of the emerging global energy architecture and governance all the countries of South Asia have to step up a regional energy charter for ensuring own energy cooperation. Cooperation like SAARC and BIMSTEC has been formed and these have been active regarding the energy situation. The 2010 SAARC Regional Energy Trade Study (SRETS) carried out by the ADB suggests four ways of moving forward in regional energy cooperation. The four areas for successful regional cooperation were identified as:

- Regional/Sub-regional Power Market
- Regional/Sub-regional Refinery
- Regional/Sub-regional LNG Terminal and Gas Transmission Expansion
- Regional/Sub-regional Power Plant

Also a free market approach can be adopted, once the essential preconditions for any region to trade in a competitive market are fulfilled, which are:

- Adequate redundancy in generation and transmission
- Electricity sales price reaching its economic value
- Level playing field
- Mechanism for market surveillance to guard against abuse of power

The attainment of these conditions affects the final timeline of market opening in SAARC region. Each individual country should pursue its trading interests. The key issue remains as to get a connection through the chicken's neck area, where Bangladesh, Bhutan and Nepal are separated by only a narrow strip of Indian Territory. Bangladesh is pursuing with India for a connection to the hydropower centers of its neighbors, Bhutan and Nepal. At the same time, the Bangladesh government should support natural gas pipelines from Southeast Asia connecting its own infrastructure if the opportunity comes again. While they are necessary for regional cooperation to happen, they are not sufficient yet. There need a strong political will and commitment for the quick establishment of greater and multipurpose regional and sub-regional connectivity. Once the technical knowledge and feasibility are attained, policy makers and experts of all countries involved must take bold and coordinated steps to implement the policy decisions.

Recommendations

The key issues for regional energy cooperation

The South Asian countries should carry the key responsibility for advancing regional energy cooperation. Without the highest-level approval, progress is not possible and the government has to believe in the success of these types of cooperation. The recommendations for South Asian governments can be condensed into five key ones:

- Separate national utilities, distribution and transmission systems operators;
- Sign more agreements to harmonize and synchronize the grids, which will also facilitate conventional imports and exports;
- Update domestic power grids to allow for feed-in and prepare for future power supply;
- Become the prime project sponsors to create an environment of security for private and foreign investors, as well as upgrade regional infrastructure under different blocks and economic platforms;
- Given the state of energy deficiency in Bangladesh, India and Nepal, the key to cooperation lies not only in the import and export of power and gas to exploit complementarities but also in many softer areas of cooperation that are still lacking significantly. These are energy efficiency, rural electrification, smart grid, grid harmonization, renewable energy and technology transfer, e.g., through exporting solar photovoltaic technology.

Power trading

The South Asian governments should take immediate steps to promote regional cooperation. The governments should find some necessary measure to have some kind of policy established to encourage the power trading. Some guidelines are as below:

- Subscribe to, and become members of the Energy Charter Treaty, as Pakistan has done with number of its neighbours, in order to place the cross border energy trade on a firmer multilateral footing in relation to investment protection, regulation of cross-border energy infrastructure and flows, provide additional comfort and confidence to all participants, and minimize the political risks to prospective investors;

- Create firm political commitment towards energy trade and cooperation;
- Give attention in adequate training to enhance individual country capability in power sector as well as launch educational program under all the regional and sub-regional economic umbrellas;
- Reduce political tensions within and across the countries, with special attention to the integrity of transit countries (such as Afghanistan) and strengthen the viability and operational stability of their energy systems;
- Adopt a sustainable commercial approach to power and energy trade rather than a political ad hoc approach, and use standard commercial contracts, which allocate risks fairly;
- Encourage the private investors and market forces to play a major role in actual buying and selling;
- Keep the price expectations realistic based on reliable market signals and ensure that both the buyer and seller see profitable energy trade;
- Increase high level technical cooperation and best practices with developed and leading countries in the field of nuclear energy and its safe and efficient management;
- Give more emphasis on the production and distribution of affordable, green and renewable energy;
- Promote private sector investment and public private partnership in power generation and distribution.

Long term strategy requirement

To increase energy cooperation, some of the important future steps which need to be taken are:

- Develop a structure for a regional power exchange after reviewing the power system structures in individual countries, along with their operational procedures and regulatory and commercial requirements for cross-border trade;
- Improve investment environment for the private sector for both electricity generation and transmission, particularly in Nepal and Bhutan by streamlining the approval processes and establishing independent regulatory environments;

- Identify the technically and economically feasible cross-border interconnections based on a scenario analysis and possible financing options;
- Legal and regulatory frameworks dealing with cross-border trade along with an Energy Charter Treaty for greater security for cross-border energy transfer related investments and transactions; and
- Considering the geopolitical reality of the region the smaller countries like Bangladesh should establish alternate energy cooperation with other potential neighbours beyond South Asia, like Central Asia, China and Southeast Asia.

Conclusion

Energy security is a critical component of regional stability and plays a key role in supporting economic development and national security. Recent events, such as the political uprisings in the Middle East and Africa; the 2011 Japan earthquake and tsunami, which led to the crisis at the Fukushima Daiichi Nuclear Power Plant; and the economic instability and other crisis in the Eurozone, and the situation in Europe after Brexit, have enlarged the risks and compounded the uncertainties related to energy supply and demand.

In the South Asian regional context, the risks associated with forging an intraregional, cross-border energy cooperation, which include policy, legal, institutional, regulatory, and infrastructural barriers that would be greatly minimized if the economic and environmental benefits were better understood. Other barriers to robust trade include the lack of trans-regional energy infrastructures, such as transmission networks and gas pipelines; inconsistent regulatory framework for regional planning; weak contract enforcement and payment risks; riparian rights and water sharing issues; incongruent pricing policies and access regulations; differences in energy subsidization policies; and the lack of coordination and communication among regional transmission utilities. Balanced against these risks and barriers are several benefits of regional energy cooperation. In theory, cross border trade among the South Asian countries could lead to lower relative prices and the improved welfare of participating countries, because nations would enjoy the comparative advantage of their neighbors' relative energy resource endowments and technologies.

To accomplish its energy demand, Bangladesh needs to focus on both bilateral and regional cooperation. At the bilateral level, India, Myanmar, Nepal, Bhutan, Russia, Japan and Middle Eastern countries are important while at the regional

level, Bangladesh can take lead in the organisations like SAARC, BBIN, BIMSTEC, and BBIN. However, Bangladesh should be aware of the regional and global politics related with energy issues. An uninterrupted energy supply is a compulsion for Bangladesh to continue its economic progress and development to become a Middle Income Country by 2021 and by 2041 a Developed Country of the world by benefiting from energy cooperation with all its neighbouring countries. The scope of energy cooperation in South Asia is really tremendous and bound to happen for the mutual growth of all the countries in this region.

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After completing the post graduation in the Dhaka University he joined the Department of Environment, Bangladesh in 1996 as a Research Officer. In 1998 DG Shafi joined the Ministry of Foreign Affairs of the Government of Bangladesh as Assistant Secretary, where subsequently over the year he worked in a number of political and administrative wings in different capacities, and underwent a series of training programmes at home and abroad including the IIAP, France, French Embassy in Australia and Asia Pacific Center for Security Studies (APCSS), Hawaii, USA. In 2016 he attended the year long National Defence Course at the National Defence College of Bangladesh. Since his successful completion of the National Defence Course DG Shafi has been serving at the NDC as Senior Directing Staff (Foreign Affairs) on deputation.

DG Shafi earlier worked in the Bangladesh Missions in Nairobi, Los Angeles, Paris, and New Delhi in different positions, and served as the Deputy Permanent Representative of Bangladesh to UNEP and UN-Habitat, and Deputy Permanent Delegate of Bangladesh to UNESCO from 2002 to 2015, and actively participated in a number of multilateral negotiations for Bangladesh. He in course of his training, study, and work abroad traveled to fifty countries.

Director General Shah Ahmed Shafi is a passionate reader of fiction and cosmology. Amongst his dozens of hobbies, prominent are watching movies, sports, travelling, photography, interfaith dialogue, and social networking.

INDIA CHINA RELATIONS: IMPLICATIONS FOR GLOBAL PEACE AND REGIONAL SECURITY

Brigadier Padam Singh Shekhawat, ndc

Introduction

The rise of China and India as major world powers has profound implications for world as well as regional peace and security. Both ancient civilizations have many commons, they have peacefully coexisted favouring economics over confrontation, except in 1962 when they went to war. They have developing similarities and stark differences, yet have competing economic and regional outlook. Both India and China have a large conventional military force and are nuclear powers. Cooperation between them can promote peace and stability, while friction can prove to be catastrophic. Despite animosities, misunderstanding and differing perceptions both have progressed well. China believes in the basics of Panchsheel, which continues to remain relevant - a view echoed by India. Is there space for both nations to revive the concept of 'Panchsheel' and collaborate to achieve the rightful place in world order that they deserve.

India China Relations and Failure of the Policy of Peaceful Coexistence in the 1950s: A Historical Perspective

Historical Background

India and China are ancient living civilizations, with a proud history continuing to influence the present. They have been friendly neighbours for several thousand years since 221 BC. By the first century of the Christian era, small Buddhist communities were in existence in the Chinese capital.

Pre-independence, their contact was limited to Nalanda University two millennia ago, trade along the great silk route, spreading Buddhism from India to Far East, and Dr Kotnis's medical assistance during the second Sino-Japanese war in 1938. Colonial influence coloured India's understanding of China, and China's problem towards India stem from British policies. India has inherited its problems with China from its colonial past.

Panchsheel

June 1954, saw emergence of Panchsheel or Five Principles of bilateral relations based on the meeting between Nehru and Zhou Enlai. The five principles are: Mutual respect for each other's territorial integrity and sovereignty.

- Mutual non-aggression.
- Mutual non-interference.
- Equality and mutual benefit.
- Peaceful co-existence.

Both nations viewed that Panchsheel “will help in creating an area of peace which can be enlarged; diminishing chances of war and strengthening peace all over the world.”

Relations Turn Sour: 1957-1961

The relations deteriorated soon after 1957, with subversion of Tibet. In 1959, as fighting broke out in Tibet, the Dalai Lama along with his 1,00,000 followers fled for asylum in India.

The Dispute and Relations Thereafter 1962-1975

India – China boundary is 4056 kms; of which Western, Middle and Eastern Sectors account for 2176 kms, 554 kms and 1326 kms respectively. In addition to 5180 sq kms area illegally ceded to China by Pakistan in 1963. The disputed areas are generally referred to in terms of three sectors:

- **Western Sector:** China claims Aksai Chin, Pangong Tso, Spangur Tso and a strip of land along the Eastern Ladakh border.
- **Middle Sector:** China lays claims in the area of Barahoti and Shipki La.
- **Eastern Sector:** In Arunachal Pardesh and Tibet, China claims areas, which includes Kameng Division and a major part of Lohit Division.

War of 1962

As the dialogue between India and China failed, China attacked India in the Eastern Sector (Kameng and Thagla Sub-sectors) in September 1962. By mid-November, China was in possession of all territory which it claimed in Ladakh and NEFA (now Arunachal Pradesh). China unilaterally declared a cease-fire on 22 November 1962 and then withdrew to its own side of McMahon line to pre 07 November 1959 position, probably due to its inability to logistically maintain troops across the Himalayas in winter. Although it withdrew in the Eastern Sector, it continued to occupy some territory in the Western Sector. The relations between both the countries remained tense till 1975, which includes Indo-Pak Wars 1965 and 1971, and Sikkim becoming part of India in 1975.

Present Situation

The period 1976-2015 generally saw the diplomatic normalization and non-intervention by the Chinese in Indian internal affairs. There have been numerous meetings of the JWG (and Experts Group), primarily to examine the border dispute. During the visit of PM Narendra Modi in May 2015 to China, both leaders reviewed the progress of bilateral relations and concurred on simultaneous re-emergence of India and China as two major powers in the region and that the world offers a momentous opportunity for realisation of the Asian Century. This constructive relationship provides a new basis for pursuing state-to-state relations to strengthen the international system. The policy guidelines, therefore, for both nations have to be aligned to their national aspirations. Issues of convergence need to be strengthened and issues of divergence should be addressed and resolved amicably. Cooperation is preferred over confrontation.

India and China: Divergence and Convergence Issues

“China and India have a great deal of common ground and converging interests just as all neighbours do, they have differences and disputes from time to time. Look at the differences or disputes from a long perspective, seeking a just and reasonable settlement through consultations and negotiations, bear in mind the larger picture. Temporarily shelve issues that cannot be resolved so that they do not affect the normal state to state relations.” This sentiment echoes the feeling and aspirations of majority of Chinese and Indians. China and India continue to grow and reshape the international system to advance their own interests.

They invariably share many commons and certain differences, which have to be concurrently handled to progress on the road of development.

Changing Global Order

India and China gained independence with an anti colonist impulse and oppose superpower hegemony. Sovereignty is the key priority for both nations; and they oppose Western-led interventions in the internal affairs of the developing world. They harbour reservations about international norms that seek to bind the hands of national leaders in domestic matters. China and India currently feel underrepresented in key international bodies and international economic institutions; while India claims a rightful place as a permanent member of the UNSC. At the regional level Beijing is particularly sensitive to increasing security and military relationship of US-India and leverage India possesses regarding Tibet. Although India is still hesitant to confront China out rightly or commit to a strong affiliation with the US; New Delhi and Washington are growing closer on issues such as democracy and humanitarian intervention.

Economy

China and India support Globalization for an open economic order and believe in its future. China is for open, transparent, and rule-based global trade system. India is committed to a free-market-based and liberal global economic order. However, both countries are dissatisfied with existing balance of power in many global institutions. G20, BRICS reflect shift of power from developed world to developing world. Greater representation in international finance institutions like IMF, WB is expected and there is need to alter their structures. They resist rising protectionism among developed countries.

Regional Security

China's security concerns are the confrontation on the Korean Peninsula and the South China Sea dispute. China blames US for complicating issues in South China Sea. India thinks unresolved sovereignty and territorial disputes, terrorism, and the challenge of maintaining high economic growth is critical. China and Pakistan are the key sources of insecurity for India when it comes to sovereignty and terrorism. They see the US as an indispensable actor in Asia. Despite their differences with the US, they need Washington for maintaining regional security

and in promoting economic cooperation and integration. India values existing American alliances to its security, but China wants US to emphasize that it is not balancing against China, and that neighbouring countries do not confront China on the assumption of US backing.

Border Issues

The Sino-Indian border row is an eminently solvable problem. India has reconciled to Aksai Chin being with China and despite its grandiose claims on Arunachal Pradesh, China is not in position to translate that claim into reality. China wants calm western borders. There is very little dispute on the border in the central sector. India and China can easily demarcate the border in Arunachal and the central sector and accept status quo in the north. India lacks the power to alter it anyway.

Terrorism

Xinjiang is China's only Muslim majority province encompassing sixth of its territory, facing terrorist threat since 1990s. The Uighur and East Turkmenistan Islamic Movement camps in Waziristan are a cause of concern since it has the base and support in Pakistan. Tibet has an ethnic, nationalist and religious character and is not terrorism. China has not been affected by terrorism since it has cultivated relations with Islamic states. India on the other hand is afflicted by Kashmiri terrorism with Pakistan support. Differences are primarily because China is supporting the failed cause of Pakistan. The US has chided Pakistan for harbouring terrorists. China's double standard on terrorism is obvious by its veto against Masood Azhar being declared a terrorist by UN, on grounds of 'technical hold' and lack of evidence.

Security in the Maritime Commons

Global maritime system is crucial to the continued prosperity of China and India. Committed to UNCLOS, they uphold it for continued stability. But UNCLOS has no legal foundation over territorial sovereignty since it only applies to maritime boundaries. China sees the US Navy as a powerful tool to pursue American global hegemony to intervene in regional affairs. India considers US naval influence as an Asian power balance that limits China's capacity for domination. It has a robust program of joint exercises, is exploring more expansive forms of military-to-military cooperation and the US Navy is maintaining maritime order and stability.

Sino Indian Maritime Cooperation and Connectivity

China depends on a secure and stable sea lane in the IOR to transport oil and raw material and export goods to other countries. India considers Indian Ocean and adjacent region as its core economic and security priority, it is skeptical of China's long term motive and has taken an ambivalent position since it has deepening economic interdependence with China. India's power projection at the moment is limited and it depends on US dominance till it achieves requisite capability which may take more than a decade. Therefore, at the moment it cannot allow Chinese dominance of China in Indian Ocean and thwart the perceived 'string of pearls'. Improving economy with China will guide option for India, which is to have US-India-China trilateral coexistence and maritime cooperation and interaction.

Energy Security

India and China rely on coal based energy, and are dependent on international sources and markets for their energy needs. Nuclear energy and relations with NEC will shape energy policy of China and India. The two states continue to maintain a high degree of control and influence over their NECs through various political and bureaucratic instruments. Their commercial concerns are predominant than their national security interests.

Overall Assessment

The two ancient civilisations have more in common. They oppose any attempt to challenge their sovereignty but will not join or form any military alliance, yet they have confidence in US led international order. Economic aspiration is the backbone for international cooperation. The differences in the Chinese and Indian positions sometimes arise from the two countries' competing visions and geopolitical rivalry. Both sides conceal their differences in public, and have often struggled to reach some accommodation that might permit occasional practical cooperation. India has to overcome British colonial thinking. China treats India with disdain and India in turn harbours deep fears about China's policies and intentions for securing strategic advantages. Despite the superficial convergence on many global issues, there are subtle disagreements that preclude the development of a meaningful partnership between them. At mutual level have two basic issues to resolve boundary issues and Tibet. Both are not insurmountable problems and can be resolved. Pakistan continues to shape Chinese agenda with respect to

India. China has considerable influence on Pakistan and its dependence on China has increased, which complicates relations with India.

China fears US Pivot to Asia policy favouring India that is significantly tilting regional balance in Asia. The possible exception to this generalization might be the international economy, where the interests of all three powers may align on many of the major issues. Economy is a common driving agenda.

Interests and Challenges of India and China with USA and Other Regional Nations

The rising economic and military might of the two Asian powers impacts not only the region but also the world geopolitical scenario. India along with China can stabilise Asia's security order, particularly in curbing terrorism, proliferation of weapons of mass destruction and climate change. The war against terrorism provides a common platform for the three powers to discuss matters of strategic importance.

Changing World Order

The global political architecture is undergoing a transformation with power increasingly shifting from the West to East. China and India are on their way to becoming economic powerhouses. Japan is gradually increasing its military profile, and the South East Asian economies are back in reckoning. The challenges ahead in the Korean peninsula, South China Sea and Afghanistan, signal that global attention is now shifting to Asia. The future of Asia depends on China and India. But, India-China relationship remains complex and difficult to decipher.

Military Equation

China has built a strong informationized military, reorienting from theater defense to trans-theater mobility. China will unconditionally not use or threaten to use nuclear weapons against nonnuclear-weapon states or in nuclear-weapon-free zones. Indian military strategy is to fight on two fronts with Pakistan in the west and China in the north. The strategy is dominance towards Pakistan and deterrence towards China. Though China does not give clear figures of its defence expenditure its defense budget is more than \$150 billion, three times that of India.

Economy

China and India are the two emerging economies of the world. Their combined global share in nominal terms and PPP is 16.08% and 23.16% respectively. Among Asian countries, they account for 52.77% (PPP) and 48.99% (Nominal) of Asia's GDP. In 2015, India crossed \$2.2 trillion and China crossed \$11.4 trillion. India is the fastest growing economy over the next decade, projected by World Bank at 7.5%. India's economic freedom and political openness will prove to be the decisive difference between rise of India and China.

Russia

India-Russia defence cooperation is an important pillar of the strategic partnership. They have military and technical cooperation in the sphere of research and development, production and sales of armament systems and military equipment. On 15 Oct 2016, they signed \$390 billion deal signaling continued cooperation. Over the past decade, Russia and China too have had closer alignments and bilateral collaborations. There is a shared historical and ideological connection of an authoritarian style government. They are willing to deploy their military/ threaten to use it to further their national interest, and challenge existing regional security orders. Russia in Ukraine or Syria, and China in the South China Sea, has demonstrated a militaristic disposition to resolving territorial grievances. Russia has become more assertive, while China seeks Russian support. India too must reinvigorate its ties with Russia and not be alienated due to proximity with US.

ASEAN

China's reclamation of islands in the South China Sea has made ASEAN countries are suspicious about China's strategic intentions. China's obstinacy in South China Sea issue has raised concerns amongst US allies about lack of US will or ability to assert its influence in East Asia. The Pivot strategy of US aims to bridge the Pacific and the Indian Ocean regions. India and ASEAN have seen deepening of cooperation across politico-military, economic and socio-cultural aspects. India is the tenth largest services exporter in the world, while the ASEAN is a net importer. ASEAN therefore is important player in India's economy and regional assertiveness. India supports with ASEAN countries on South China issue.

Central Asian Republics

India's interests in 'its near abroad' are supply of energy critical for India's economy. In Kazakhstan, it seeks oil exploration. It is engaged in protracted negotiations regarding the 1680 km-long Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, estimated to cost US\$7.6 billion. In Tajikistan India has established a military outpost and refurbished the Ayni airbase in 2004, for \$70 million. In Kyrgyzstan, India plans to open a joint military research centre to train Kyrgyz soldiers for UN peacekeeping missions. But Russian influence is so immense that no worthwhile engagement has so far taken place in the CAR countries. India's ability to access Central Asia is vulnerable because of Pakistan's geography and deliberate policy of obstruction. China's massive economic muscle gives it considerable leverage in the region. China is the most prominent economic actor and main source of foreign investment in the region. Both will continue to constrain India's ability to project meaningful economic/military power in Central Asia.

Regional Equations

The South Asian strategic quadrilateral relationship involves China, India, the US and Pakistan. At the heart of this matter is the India-Pakistan conflict over Kashmir, and continuing US involvement in Afghanistan and Pakistan. China's support for Pakistan is a serious and ongoing source of tension in the Sino-Indian relationship, especially China's reluctance in supporting India on terrorism and hindering India's entry into nuclear supplies group. US has withdrawn military aid and subsidy on purchase of F16 fighter aircrafts to Pakistan. Dr Shakil Afridi's case is sign of deteriorating US-Pakistan relations.

China is concerned about growing closeness between India and the US. It's South Asian interests as firmly linked with Pakistan. If regional security situation deteriorates India and China stand to be losers. Both countries should put their resources together to powerfully collaborate with each other and resolve contentious regional issues amicably.

Pakistan

Pakistan is central to strategic politics in South Asia, and it is arguably Pakistan, even more than Afghanistan, which holds the key to stability in the region. The Kashmir dispute is the heart of South Asia's problems, and until it is resolved India's relations

with its regional neighbours, including China, will suffer. But India views the India–Pakistan and India–China relationships separately. Until the interconnectedness of the wider US–India–China–Pakistan relationship is fully acknowledged and acted upon, tensions in the region are likely to remain high.

Other States of South Asia

South Asia is India’s closest and most vital sphere of strategic action. “India will not be able to realize its own destiny without the partnership of its South Asian neighbours.” But, China’s growing economic, political, and security footprint in Nepal, Sri Lanka, Bangladesh, complicates India’s dealings with these countries. India needs, above all, to build its credibility in delivering on its promises and intentions.

Bangladesh dominates the Bay of Bengal sitting on potential sea trade route which can give access to Chinese goods through India and link the seven sisters for India’s North East. India in the last few years has resolved land issues and developed stronger relations. China needs Bangladesh support for trade and dominate the South Asian region. But, both India and China evince good relations with Bangladesh. It is a point of convergence for both regional powers.

Afghanistan and Myanmar are important to India’s security and geopolitical objectives because they have in the recent past provided havens for insurgent groups that have operated against India. They are the gateways of South Asia to Central and West Asia, and to Southeast Asia. They are crucial to South Asia’s economic links with other parts of Asia. Afghanistan and Myanmar are the hinges on which the open economic doors of Southern Asia will revolve. In Afghanistan, India has expressed its willingness to work with China in joint projects for economic development.

The Road to Future

China and India’s peaceful developments are the most significant events that beckon the new world order. Both nations must embark on the new prospects of pioneering peaceful development in the World. China is now close to achieving national revival, it does not seek hegemony nor does it wish to dominate the world geo-politics. China’s rise has been achieved by peaceful and cooperative development, with self sustaining growth transforming its society. India though still 20–25 years behind China too has embarked on a similar path. Both nations

detest violence. Panchsheel and Ahimsa are central to their core values and thus these two principles should guide their policies and development.

Policy Options for India and China: Peaceful Coexistence in the Changing World Order

Peaceful coexistence should be the central theme for policy options for India and China, highlighting the principles of Panchsheel. As Manmohan Singh said “We should develop our relations on the basis of these principles”. The future prospects and policy options for China and India must address the following five areas in accordance to the basic principles of Panchsheel.

Panchsheel Principle-1: Mutual respect territorial integrity and sovereignty (Boundary Dispute)

The boundary dispute is primarily an issue of perception. Resolving the boundary dispute will eliminate tensions and standoffs on the border, reduce troop deployment, open road and communication axis thereby promoting trade. China has signed border agreements with Nepal, Mongolia, and Myanmar, and exchanged bigger pieces of land for smaller ones during negotiations. India did the same for Bangladesh. Maintaining peace and tranquility on the India-China border areas has been the cornerstone of India China relations. India needs China’s support, which serves as an economic engine for the nation’s growth.

Panchsheel Principle 2: Mutual non-aggression (India’s and Chinese Foreign Policy)

While China has displayed remarkable consistency in dealing with India, India has been uncertain and indecisive over China policy. India needs coherent guiding strategic framework to exhort regional influence underpinning realities of relationship and not base them on future potentials to shape its foreign policy. India will have to overcome strategic culture deficit that pervades foreign policy and overcomes its defensive attitude. There are three broad views on how India should deal with China- pragmatists, the hyperrealists and the appeasers. Pragmatists treat China as competitor; the hyperrealists believe that China is a real threat and the appeasers view China as friendly and benevolent neighbour. India’s ability to exert influence is yet to be developed both economically as well as militarily, hence its power to exert are limited. Both nuclear states must sign a no use of nuclear weapons

to usher in peace in the region. Close economic cooperation between China and India is the best way to build trust and friendship, leading to peace between two states. Confrontation is not the solution cooperation is.

Panchsheel Principle 3: Mutual Non-Interference (Bilateralism)

China is perhaps India's most important bilateral partner in the contemporary era. The reverse is not necessarily the case; although India will certainly rank high in the Chinese list. China and India have their respective foreign policies articulated; they are divergent and rarely consensual on important issues. The border is not the only core concern. There is the critical issue of support to Pakistan, visa issuance and shared water resources that needs immediate attention. Both sides must act with mutual respect and sensitivity for each other's core concerns, aspirations and equality. Tibet is like an albatross around its neck. India accepts Tibet Autonomous Region as an integral part of China but the support to Dalai Lama in exile is a compulsion for India. China and India must again seek to resolve this with maturity. India should limit its support to Tibet. South China Sea is where US wants India's involvement alongside ASEAN nations. India has economic interests and should limit its support to the ASEAN countries. India must strike a balance between maritime security imperatives in the Indian Ocean, and its legal stand on freedoms enjoyed by user states in territorial waters. India should refrain from involving much into the theatre. Along with this is maritime cooperation which facilitates trade and commerce essential for both nations.

Panchsheel Principle 4: Equality and Mutual Benefit (Regional Competition)

China outscores India in economic growth, poverty alleviation, human development index, military balance and in regional prowess. But India's meteoric rise and potential is significant. Competition rather than confrontation is the key to development. It will be in mutual interest of India to work to enhance its collective security and regional and global stability. China and India seek to work with the international community to maintain regional stability and broaden the converging points of common interests and settle differences on the basis of the Five Principles of Peaceful Co-existence, notwithstanding the differences in social systems and ideologies. India has to understand Chinese view point and promote bilateral resolution of South China Sea rather than confrontation in

line with US. The point of convergence is that India takes a back seat in South China Sea and seeks China's support on anti terrorism activities of Pakistan and maintains equilibrium with China and US.

Panchsheel Principle 5: Peaceful co-existence (Global Issues)

China and India have to collaborate at global level they must concur on international policies, and shape them before implementation. The Panchsheel is the basis of guiding their policies. Everything based on Panchsheel will be acceptable. First and foremost is the World Order that preferably is in consonance with US aspirations since US still wields global influence. Second is the economic growth, which must promote freedom of trade, mutual assistance and cooperation and promote brotherhood. Collaboration in economic aspects will give rich dividends. Regional and international free trade agreements are the way forward. Global financial institutions need to be revamped giving more space to China and India. Third is the military balance and nuclear weapons. China's defense policy is as one that does not present a threat to any other state and upholds world peace and stability. China and India have already declared peaceful coexistence as part of Panchsheel; and at this stage a NO war pact and treaty on use of nuclear weapons will guarantee peace globally as well as in the region. India must assertively engage China on all issues especially on terrorism, border settlement, economic cooperation and free trade agreement without compromising its interests. The position is somewhere above appeasing but below confrontation. Competitive is perhaps the better strategy and confrontation is to be avoided at all costs.

Lastly, there is the necessity of the civil society of both countries to constructively engage in promoting peace and harmony. Indian civil society is very vibrant and there are China experts, albeit some are hawkish; but notwithstanding these hardliners, there is space for track II diplomacy between the two nations. Chinese think tank is conservative, governed by the state and is not vocal. There may be a problem of free opinion as Chinese thinkers will speak the government line. Yet some interaction is desirable.

Conclusion

China and India, the two largest developing countries in the world, despite certain irreconcilable differences, have a commonality of history, culture, economy and social characteristics. Both nations are engaged in attempting to put the

past behind and forge new relationships based on the emerging global strategic realities. China has reached a level where it can assert itself on global as well as regional level. India on the other hand is yet to achieve that status. The policies it adopts have to be growth oriented, non confrontational and peaceful. It has to have a collective response to China i.e. diplomatic, economic, military and culturally all agencies work in concert to achieve greatness together. Economy alone cannot achieve pinnacle of greatness. As George Keenan said “Nothing is more likely to make us poor than the single minded pursuit of economic growth, to the neglect of security.” Thus security is as essential as economy. Any friction at regional or global level with China will delay its rise. India must avoid war and promote economic growth.

The economic development of China and India needs America’s cooperation and support. In turn America needs the huge markets of the two big Asian countries. The US could be a positive factor for Sino-India relationships. Policy of non confrontation and competition between India and China is essential for world peace and regional stability. Mutual respect of territorial integrity and sovereignty, non-aggression, non interference, cooperation and peaceful co-existence between China and India is the way forward for both nations to progress.

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IMPROVING ROAD TRAFFIC MANAGEMENT IN DHAKA CITY AND ITS ECONOMIC BENEFITS

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Introduction

Dhaka City is one of the largest and fastest growing cities in the world. With a reported population of over 14 million, its population is expected to rise to 22 - 25 million by 2020 (World Bank Report, 2010). Its population density as at 2013 was 115,000 people per square mile (Joel Koktrin, 2013). One of the most critical urban problems of Dhaka City involves transportation. The number of registered vehicles in Bangladesh increased from 22,381 in 1995 to 1, 343, 719 in 2009 (Nazrul, 2010). Being the fastest growing area in Bangladesh in terms of human population as well as automobile transportation, Dhaka has been unable to cope with the enormous demand that has been put on its existing road systems. The rate of increase in road infrastructure has not been commensurate with the rate of demand.

It has been observed that the density of the Dhaka City population, absence of satellite cities, industrial/commercial activities within Dhaka City and the uncontrolled increase in traffic have given rise to numerous transportation and traffic problems within the metropolis (Mozammel, 2014). Furthermore, the absence of a mass transit system, combined with inadequate or poorly executed development plans and encroachments on road space, poor road infrastructure, failure to adhere to traffic rules and regulations, etc, have contributed to traffic congestion (TC) in the City. These in turn have brought about many critical side effects such as; loss of valuable productive man hours, increased environmental pollution, increased wear and tear on vehicles, extra transport costs and health issues arising from stress and frustration among others.

All the observed effects of TC in Dhaka have had adverse effects on productivity. Study shows that because of TC, about 200 billion taka and 8.15 million working hours are wasted every year (Financial Express, 2013). This is despite several concerted effort by government to ease the problem of TC. Therefore, to obtain optimum output from the transportation sector in Dhaka, there is the need to review existing policies on TM in Dhaka City.

Since independence, Dhaka has been the hub of political, administrative and commercial activities in Bangladesh. This has given rise to rapid growth of its population. There have been several governmental efforts to address the issue of overpopulation, urbanisation and TM in Dhaka over the years. Similarly, government incorporated several urban and TM agencies for the responsibility of TM in Dhaka City (STP 2015). However, these agencies lack efficient, skilled and available manpower and this severely hampers their efficiency (STP 2015). Though the DTCA is the coordinating agency, all the organizations work towards similar goals and find it difficult to effectively coordinate and collaborate in their assignments. These greatly undermine collective efforts towards TM, thus adversely affecting the economic development of Dhaka City.

An assessment of road infrastructure in Dhaka City revealed that despite government intentions, road infrastructure in Dhaka City remains inadequate (Mamud et al, 2012). Generally, a city is expected to have at least 25 per cent road network of its total area, however Dhaka city road network is only 9-10 per cent of its total area. Out of this area, 30 per cent is occupied by hawkers, salesmen and roadside traders and shops. Overpopulation and urbanisation has led to the haphazard construction and expansion of the road network in the City. During the period of expansion of Dhaka City, little thought was given to the construction of an urban mass transit system like the monorail system. Furthermore, some of the over 1800 km of road network around Dhaka (with over 1286km in the metropolis) were poorly designed (Mamud et al, 2012).

Factors Responsible for Traffic Congestion in Dhaka City

There are several factors that are responsible for TC in Dhaka City. They include increased traffic density and corresponding reduction in road capacity, railway crossings around Dhaka City, poor TM and enforcement, disobedience of traffic regulations, lack of education/enlightenment of road users and illegal parking. Others are, personal interest overriding government intentions, poor traffic laws and policies, flooded roads during wet seasons, illegal parking/lack of parking space and lack of mass transit system among others. Since some of the causes are interrelated, only some major causes as assessed by the researcher would be discussed in this study.

Increase in Traffic Density and Reduction in Road Capacity

From a population of over 3.4 million in 1983, the population of Dhaka City has increased to over 15 million in 2015 (World Bank, 2010). The increase in population also led to an increase in the number of vehicles plying the roads in the City which is not commensurate with the increase in road capacity in the City. All types of transport modes such as rickshaws, private vehicles and buses share the same space of every class of roads even in rickshaw -free roads as there is no specific functional classification of road usage.

From proven statistics, it was established that increase in traffic density has led to TC in Dhaka City. This is because as the urban setting became denser this tended to impair circulation. Densities lower than 10,000 people per square mile tend to have limited effect on driving speed, and as soon as this threshold is reached, driving speeds substantially decline (Azad 2009) causing congestion. Currently, the average traffic speed in Dhaka is 6.4 kph as against the average speed of 13.7km in 2010. However, if vehicle growth continues at its current pace, without substantial public transport investment the average speed may fall to 4.7 kph by 2035—about as slow as walking (Gallagher, 2016).

Poor Traffic Management and Enforcement

Poor TM has been identified as a major cause of TC in Dhaka City. Along some major roads, there are either malfunctioning or non-operational traffic lights, absence of road signs, inadequate designs for traffic signaling systems at intersections, inadequate enforcement of laws by the various agencies responsible for TM in Dhaka City and low penalties given to punish violators of traffic regulations. Generally, implementing law to curb human excesses is usually met with challenges and resistance.

To ensure success in enforcement of traffic regulations, there has to be a reorientation of the agencies responsible for enforcement. This is because of reports of widespread corruption prevalent in the agencies. Government must also ensure that there is an up-to-date vehicle data base which should be maintained to keep track of traffic offenders. It would also be necessary for trained man-power to manage this important source of information.

Illegal Parking and Lack of Parking Space

Illegal parking occasioned by lack of parking space is one of the major causes of TC in cities of most developing nations. Lack of parking space causes rickshaws and commercial transport wait at intersections for passengers and make U-turns in the middle of the road, thereby causing TC. In Dhaka City, inappropriate location of commercial buildings, lack of entry and exit facilities as well as wrong planning and design of the existing parking spaces, cause TC. Insufficient parking space force people to park on the roadsides, creating further congestion. Illegal parking at roadside mostly takes place in commercial areas like Motijhil, Gulistan, Old Dhaka, Shyamoli, New Market, Eskaton Road, Banani, Gulshan Avenue and Kamal Ataturk Avenue among others (Mozammel, 2014). Though there is a draft parking policy for Dhaka City, it has never been implemented due to unclear directives as to the agency responsible for its implementation (DUTP).

Effects of Poor Traffic Management on Dhaka City's Economy

Some of the effects of poor TM to the economy of Dhaka City include; loss of man hours, extra transport cost, loss of life and property, loss of time/ delays and lateness to appointments. Others include extra fuel cost, health and environmental effects, accidents and social effects. However, while some of these effects are related, others are not quantifiable despite the severity of their effect on the economic benefits of Dhaka City. Thus, only the quantifiable effects and the more severe unquantifiable effects will be treated in subsequent paragraphs.

Loss of Man Hours

Research indicate that most workers in Dhaka City, work about 8 hours daily, usually between 0800 hrs and 1600 hrs, and 5 days a week, usually between Sundays and Thursdays. On the average, people spend 2.35 hours in the traffic daily during the week (Mamud et al, 2012). This implies a loss of 6.30 weekly, or almost a whole working day in traffic every week. If that amount of time wasted is spread among workers in Dhaka, the effect on the economy is significant. It also implies that some workers arrive at work late or tired (if they have to leave earlier to arrive at work early) and might not be able to function optimally.

The total monetary value of the hours lost per day per worker can be estimated annually as follows; if an employee works 8 hours per day, 40 hours per week, 160 hours per month and 1920 hours per year. This equals to an average of 48 weeks per year leaving 4 weeks for annual holidays. Since the research findings has demonstrated that 1.30 hours is lost daily on congestion, $1.30 \text{ hours} \times 5 \text{ working days} \times 48 \text{ weeks} = 360 \text{ hours}$ lost per year. When these 360 hours are divided by 8 (which is one working day for an employee); almost 45 days are lost per year. This is equal to a month and a half. When the 360 hours that is lost annually is multiplied by half of the working population of Dhaka City which is 10,503,658 (BBS 2011); $5,251,829 \times 360 \text{ hours} = 1,890,658,440 \text{ hours}$ that are lost per year. If we assume that one working hour is paid 160 Tk (using average monthly disposable salary of Tk 26,000), every year about 302,505,350,400 Tk or USD 3,781,316,880 man hours is lost due to TC in Dhaka City by the researcher's estimate. This is a huge loss both at individual and organizational level.

Extra Fuel Cost

A number of drivers in Dhaka City acknowledged the high rate of fuel consumption especially petrol and diesel by cars and motorcycles due to queuing in traffic. The stopping and starting in traffic jams burns fuel at a higher rate than smooth rate of travel on the open highway. This increase in fuel consumption costs commuters additional money for fuel. This is a huge loss for the economy of the individual and the country at large given the price of fuel.

Dhaka City has an average of 12,588 cars, jeeps and microbuses (STP 2015). Assuming that half the number loses a litre of petrol per day due to TC, a total of 6,294 litres of petrol is lost in a day. At the current price of 100 Tk per litre of petrol, an average of 629,400 Tk is lost per day and 229,101,600 million Tk per year to TC. This does not include losses from other modes of vehicular transport like buses, taxis, CNGs and motorcycles. It is however important to note that the fuel cost due to TC is subject to the fluctuations of fuel prices, taxes and/or subsidized fuel and hence constitute a major source of uncertainty in such estimations. Nonetheless, the amount arrived at is the researcher's estimated cost and not the exact figure (which is probably higher) that is wasted on extra fuel cost due to TC. There is no doubt that the huge funds being wasted daily on extra fuel cost due to TC, could be positively channelled to grow the economy of Dhaka City if the current traffic situation is effectively managed.

Environmental Pollution and Health Implications

Environmental pollution is by far one of the most serious concern related to urban transportation. Road TC has been identified to lead to environmental pollution. This is due to the carbon dioxide smoke emitted by the cars which their engines are just on but not moving. During road TC, vehicle emissions pollute air and consequently affect people's health. Likewise, the use of horns causes noise pollution. Noise is a serious health hazard and the health effects of hazardous noise exposure are now considered to be an increasing dangerous public health problem. Prolonged or excessive exposure to noise, whether in community or at work; can cause medical complications such as hypertension disease. Noise can adversely affect performance of various activities such as reading, office work, and problem solving.

In Dhaka City, abnormal health conditions arising from motor vehicle emissions as a result of TC, worsens the health status of many citizens. Specifically, nitrogen dioxide (NO₂), carbon monoxide (CO), sulphur dioxide (SO₂) and hydrocarbon (HC) which are pollutants that react with nitrogen oxides (NO₂) in the presence of sunlight form smog. Smog causes damage to the human respiratory system with symptoms such as pneumonia, shortness of breath, reduced lungs capacity and other Cardiovascular Respiratory Disorders.

Loss of Life and Property

Road TM seeks to provide a safe and free flow of traffic, and minimise Road Traffic Accidents (RTA) on the roads and highways. When traffic is effectively managed, RTAs are significantly reduced, likewise, the loss of lives and property. A total of 2,720 accidents occurred in Dhaka City within 2007-2011 with a total of 3,751 vehicles involved (Bayes Ahmed, 2012). Also, 71 per cent of the accidents occurred where there was no junction, and 63 per cent occurred where there was no traffic control.

The loss of human lives, which is unquantifiable in monetary terms, and property such as vehicles worth millions of Taka, through RTA greatly impinge on the production of goods and services. Therefore, it is safe to conclude that effective TM would reduce the loss of human lives and property thus enhancing the economic development of Dhaka City.

Challenges for Improving Traffic Management System in Dhaka City

The Challenges against an effective TM system include weak enforcement of traffic laws, poor coordination of TM agencies, inadequate TM infrastructure, inadequate funding, inadequate manpower and poor private sector investment.

Weak Enforcement of Traffic Laws

There are mobile courts in Bangladesh and they are empowered by regulation to function under various laws including trial of traffic offenders. They are placed at strategic points in Dhaka City to examine fitness of motor vehicles, driving licences, etc and where necessary punish violators (Gazi D Hosain, S Ferdous, 2010). Despite the existence of mobile courts to address such issues, incidents of the courts punishing traffic violators are rare in Dhaka City.

Trial of traffic offenders in conventional courts are usually protracted and complicated since they are most times executed in magistrate and high court. In most cases, only very serious offences such as RTAs that result in death, disability or destruction of public property are taken to court. Minor offences are treated at the discretion of the traffic police and other relevant agencies. As such, implementation of traffic law is a challenge to effective TM in Dhaka City.

Inadequate Infrastructure

In 2015, the GoB budgeted Tk 111,720 million for the transport sector which was expected to be shared among 9 State Owned Enterprises (SOE) including the RHD and Bangladesh Railways among others (STP 2015). This is grossly inadequate considering the amount expected for the development of road transport infrastructure. This act of underfunding has made difficult the provision and maintenance of road infrastructure. Accordingly, the resultant effects of its non-provision are evident in the rate of RTAs and acute TCs experienced in Dhaka City.

Inadequate Manpower and Logistics

Most of the agencies responsible for TM in Dhaka City are inadequately manned. They also lack necessary equipment to carry out their duties such as vehicles, motorbikes, walkie talkies, speed guns etc. At present the total manpower approved

for BRTA is 824 out of which only about 50 per cent of posts are filled up (STP 2015). Due to manpower shortage and logistics, the DMP was reorganized to operate under the control of Joint Commissioner with an increased manpower of 3,645 (STP 2015). Despite the reorganisation, there was no substantial increase in personnel working in the field. The World Bank financed the DUTP and provided DMP with motorcycles, wreckers, walkie talkies, etc in 2003-2004. However, these equipment have become outdated, spoilt or lost over the years.

Poor Private Sector Investment

Private sector investment in TM in Dhaka City is still in its infant stage when compared with some developed/developing countries. In TM there are numerous areas which are viable for private investors. These include provision of towing services, provision and maintenance of car park services, advanced vehicle and road worthiness testing and traffic information services. The provision of these facilities and services would have immense impact on TM in Dhaka City.

Considering the numerous areas viable for PPP in TM, it is surprising that not many investors have indicated interest in the various opportunities available in this sector. This investors apathy could be attributed to suspicion, lack of trust and poor investment climate in Bangladesh. Furthermore, investors would like the GoB to clear grey areas pertaining to risk sharing and insurance for their investments. Until then, investor response would remain slow, thus adversely affecting TM and economic development.

Strategies for Improved Traffic Management in Dhaka City

Provision of Efficient Public Transport Alternatives

For large urban areas such as Dhaka, the only way to effectively meet transport demand is to provide the city with a high quality public transport system that must be developed in integration with urban development (STP 2015). Given the major increases expected in population and travel demand, MRT was considered more suited for long term development due to its higher carrying capacity over the BRT. Hence, the STP 2015 recommended 5 MRT lines and just 2 BRT lines. To assist decentralization, the STP 2015 proposed focusing future development in sub -regional centres that are expected to hold over 5 million people by 2050

such as Gazipur, Ashulia, Savar, Jhilmil, Narayanganj and Purbachal, with good connections via the new roads and the recently commissioned metro-rail.

Enforcement of Traffic Laws and Empowerment of Mobile Courts to try Traffic Offences

Proper enforcement of traffic laws could mitigate the challenge of disobedience and weak implementation of traffic law. Enforcement should be done with the coordination of the various TM authorities in Dhaka City. It should also be done with the help of mobile courts to expeditiously try traffic offenders. The GoB could enforce the regulation on mobile courts and lay emphasis on their use in the speedy trial of traffic offences. The DCC could also request for the Ministry of Justice to provide adequate magistrates and other relevant infrastructure for the mobile courts to function effectively. This would negate the further need to patronize magistrate and high courts for traffic offences. Such cases would then be tried at mobile traffic courts.

Creating Conducive Environment for Private Sector Participation

To mitigate the challenge of low private sector investment, DCC could create a conducive environment for private investment. This could be achieved by DCC providing guarantees for loans required by private investors. This would not only fulfil basic requirement for the loans but would also encourage potential investors especially in areas of private investment earlier discussed such as provision of towing services, provision and maintenance of car park services, etc. Furthermore, DCC could facilitate the enforcement of traffic laws to encourage patronage of such investment. By this, projects would be assured success which would further encourage both the financial institutions and private investors.

To strengthen its commitment to the PPP agenda and the need for a favourable atmosphere for private sector participation, a PPP office was set up by government to provide institutional support and identify potential projects. The PPP office has conducted feasibility studies, ascertained the level of risk and viability of 15 road, rail, and port related projects for implementation and this has been included in the SFYP 2016-2021. As a show of confidence in the PPP proposal, DCC could commence considering the viable PPP projects involving Dhaka City road transport infrastructure for loan guarantee.

Enhancement of Road Transport Infrastructure

Enhancement of road transport infrastructure could mitigate the challenge of inadequate road infrastructure. To deal with the predicted TC, the STP 2015 proposed a massive programme of road building involving 1,200km of new main road (roughly double the current main road network) including 5 elevated expressways and 3 ring roads (STP 2015). The provision of new infrastructure and the maintenance of existing infrastructure would make for passable roads, free flow of traffic and alternative routes for commuters. This would, in turn, drastically ease up congestion and enhance the movement of goods and services.

Implementation of Parking Policy and Introduction of Area Licensing in Central Business District

The STP 2015 recommended some short term parking policies aimed at the development of efficient parking systems to mitigate the effect of TC in Dhaka City. The policy recommended measures necessary for efficient parking management in Dhaka City such as the enforcement of parking bans at prohibited places, payment of fees for public parking and the introduction of time-based parking fee system for high parking demand areas such as the Central Business District (CBD). Implementation of the policy would reduce TC on radial roads within the CBD and by so doing, reduce air, noise and environmental pollution. It would also encourage the use of public transport, further reducing parking demand in the City area.

Area licensing is also a TM scheme that restricts the use of private vehicles in designated areas to alleviate TC and at the same time promote the use of public transportation. The basic idea is that when an area is specified as restricted, charges are levied on vehicles entering that area during certain times of the day. The charge works as a disincentive for using private vehicles and as such, people may choose to use other modes of transportation to avoid the charge, or change the time of travel to off-peak hours when the charge is smaller or not enforced. To complement the area licensing system, higher parking fees could be placed on parking in public areas. Collected charges from the 2 initiatives could be used for the improvement of transportation facilities in Dhaka City. The collection could be done by DCC or private investors on a PPP basis.

Establishment of a Special Marshal Volunteer Corps

Establishment of a special marshal volunteer corps in Dhaka City would improve RTM capabilities of the DTCA and DMP for enhanced TM in Dhaka City. The Special Marshals would be the volunteer arm of the DTCA and would comprise of men and women of proven integrity capable of influencing their immediate environment in favour of the course of TM and road safety. They would be empowered to control traffic at busy intersections in conjunction with traffic police. They would also be able to detain offending traffic defaulters and hand them over to DMP for prosecution.

Implementation of Road Fund

The challenge of low budgetary allocation to the DTCA for TM in Dhaka City could be mitigated by the implementation of the Road Fund. This issue of road fund has been discussed on various occasions and a Road Fund Steering Committee was set up in 2003 to address the issue but its set up and implementation has been delayed. The basic theory of the road funds is that those who benefit from having good roads will be required to pay for that benefit; It means that road users pay for the services they get from the road network (STP 2015).

Sources of monies for the Fund would include donations from corporate bodies and individuals, and public-private partnership with DCC in response to the challenges of TM in Dhaka City. Other potential sources of the Fund are Vehicle registration fee, Driver Licenses and Annual Road Tax among others. This Fund would augment the budgetary allocation to DCC by the GoB for TM. The Fund would be used to equip and train personnel involved in TM and in the maintenance of traffic and road transport infrastructure.

Recommendations

The recommendations that stem from the research study are categorised into 3 general groups; institutional and capacity development, funding and infrastructural development.

Institutional and Capacity Development

To ensure proper organisation of TM and capacity development of TM agencies, DCC should:

- Establish Special Traffic Marshal Volunteer Corps for Dhaka City.
- Lobby the GoB to empower mobile courts for the speedy trials of traffic offenders.

Funding

To obtain more funds for transport management, It is recommended that DCC should:

- Provide guarantees for loans required by certified private investors in targeted areas of transport/traffic infrastructural development and management.
- Implement parking policy in Dhaka City and introduce area licensing for CBD under PPP arrangement.
- Lobby the GoB for the implementation of the Road Fund for collection of monies to augment budgetary allocations for transport/TM.

Infrastructural Development

To ensure infrastructural development of TM infrastructure in Dhaka City, DCC and GoB should:

- Expedite action on the construction of BRT in the short to medium term and the MRT in the long term (before 2035).
- Enhance RTI to tackle TC in Dhaka City.

Conclusion

This study set out to appraise the economic benefits of an improved TM system in Dhaka City. In the process, the study established that road traffic, when ineffectively managed, creates negative aftermath that have direct detrimental consequences on the economic benefits accruable to Dhaka City.

The study revealed that the GoB and DCC over the years have made giant strides towards preventing and mitigating the various effects of poor TM on the economy, human lives, property and the environment. The efforts, though commendable, have not yielded the desired results, as TC, RTAs, environmental pollution, etc arising from ineffective TM still persists. This goes to prove that there are some fundamental issues relating to TM that need to be addressed for effective and efficient TM towards economic development of Dhaka City.

In X-raying the effects of TM on Dhaka City, it was established that poor TM has negative effects on the economy. Firstly, it reduces the GDP of DCC through loss of productive man–hours. Secondly, it continuously increases environmental pollution which adversely affects human health and economic activities. In addition, ineffective TM results in RTAs leading to loss of lives, and property worth billions of Taka annually. Furthermore, inefficient TM which causes TC leads to extra transport costs for commuters and extra-fuel cost for car-owners. All of these effects have negative impact on the economy of Dhaka City. To mitigate identified challenges to effective TM, strategies were proffered.

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Captain Chijioke Onyemaobi has been awarded the Forces Service Star and the Meritorious Service Star for his unblemished service to the nation. Other awards include the ECOMOG Medal and the Passed Staff Course Dagger. His academic qualifications are, Bachelor of Engineering Degree in Mechanical Engineering, Post Graduate Diploma in Public Administration and a Master's Degree in International Affairs and Diplomacy. He is an associate member of the Nigerian Institute of Management. He enjoys playing scrabble, tennis and volley ball.

INTEGRATION OF NON-MILITARY AND COMMERCIAL FACILITIES TOWARDS ENHANCED COMMUNICATION FOR BANGLADESH ARMY

**Lieutenant Colonel Rakibul Karim Chowdhury, afwc,
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Introduction

Communication is the key element to maintain effective Command and Control (C2). Success of any military operation depends on maintenance of reliable and uninterrupted communication. As such, secured and reliable communication has no alternative. Bangladesh (BD) Army has its own military means of communication which are not enough both in quantity and quality, and lacks in alternative means too. Existing military communication means are also highly susceptible to hostile Electronic Warfare (EW) activities. With the increasing demand of making military decision cycles shorter, and given the lack of strategic depth in the country, the need for having efficient communication systems has become more important for BD Army than ever before. The global trend of ‘convergence of systems’ necessitates that the communication systems must be planned considering the entirety; the implementation may be orchestrated through decentralisation¹.

BD Army takes support of commercial communication resources to facilitate its peace time communication. A good combination of several means of communication enable the military to conduct operations smoothly. It also includes appropriate utilisation of non-military and commercial communication resources. Proper exploration and integration of these resources is likely to enhance the ability in providing and maintaining communication both during peace and war. Integration would also provide reliability and redundancy in military communication system. The best possible integration is the sharing of communication resources during peacetime, the transition of which is automatic during war. National communication resources has a good prospect to be of great value for utilisation by BD Army, if coordinated and integrated appropriately².

1. Bari, E. U., 2013. Forces Goal 2030 : Restructuring Corps of Signals, Dhaka: Concept Paper, 86 Independent Signal Brigade.

2. Khan, S. A., 2008. Integration of National Communication Resources to Enhance the Operational Capability of Bangladesh Armed Forces. National Defence College Journal, 7(1), pp. 159-183.

Integration of national resource for communication being so prospective, still exists in theoretical domain only. There is no functional estimate, planning, coordination and clear policy guideline on the subject. Therefore, to ensure enhanced communication capability, few steps are essential like; establishing need for integration, exploration of suitable resources available, likely challenges and ways to mitigate, operational modalities for effective integration and need for appropriate policy formulation.

Proper integration is going to complement the military communication to a great extent and serve as a redundant communication means. Therefore, the prospects and likely challenges for integrating communication resources needs to be found out. Subsequently suitable options of integration and a viable action plan also needed to be determined. This paper focuses to examine and explore possibilities and challenges of integrating existing non-military and commercial resources with military communication system with a view to enhancing communication capabilities of BD Army. Besides, endeavour has been also taken to find out credible operational modalities for integration, which would be conducive for uninterrupted, reliable and secured communication. The study also leads to requirement of policy guideline at both national and army level.

Analysis of the Existing Communication System of BD Army

Existing Communication Framework

BD Army has two types of communications namely field and static communication. When any formation is deployed out of the cantonment, field communication is provided through various military means. Besides, all the cantonments are connected by static communication through various static communication links. The voice communication depends on the radio equipment, radio relay (RR) links and telephone lines in a field communication system. Data communication depends on Bangladesh Telecommunications Limited (BTCL) and other Nationwide Telecommunication Transmission Network (NTTN) backbone. Dispersion of the forces deployed in any formation Area of Responsibility (AOR) suggests that it is difficult with existing military resources to support the operational plan of the formations³.

3. Brigade, Army Signal. 2005. Integration of National Communication Resources to Augment Military Communication: Prospects and Challenges, Dhaka: Formation Project Study Paper 1/2005.

There are many tangible and intangible reasons for which our communication system could not develop. Economic and technological aspects are the two most prominent barriers. Due to which other causes surfaced like: inadequate infrastructure and modern communication equipment, lack of communication security measures, absence of EW capability, interoperability issue of communication equipment of varied origin/ type and technical expertise of operators and technicians⁴.

Options Available to Enhance Existing Communication System

A survey was also carried out to explore options available to overcome limitations considering the economic reality. Where few effective ways were found like; acquiring modern communication equipment, indigenous production of communication equipment, acquiring modern EW capabilities, developing operators/ technicians' expertise and taking support of other communication facilities available in the country. Most of the respondents opined for taking support of external communication resources as a viable short-term option.

The most suitable solution for backbone between the highest headquarters and field formations is Fiber Optics (FO) backbone. Instead of laying new FO cable by the Army, integration of laid FO by public and private agencies is the easiest solution. However, terms and condition, reliability during crisis and security are to be ensured. Standardization of protocol and interfaces are important so as to enable connecting the interfaces for quick connectivity and safeguarding resources once needed. However, military must plan independent communication and may be it will take long time. The transition period may always be covered by patching the civil communication.

Need for Integration

Historical Perspective: During the Gulf War 1991, the strategic, operational and tactical communications were duplicated by the high quality civilian landlines. Besides, commercial satellite communication and international landlines were integrated with the military communication to bridge the gap. In the Battle of Grozny (in the year 1994), civilian communication system (mobile communication network) was used along with military communication both by the Russian Army

4. *ibid.*

and Chechen rebels⁵. Thus study of contemporary military history suggests that integration of civil communication resources act as an aid and multiple communication means for conducting the military operations.

Global Trend of Integrating Commercial Resources with Military Systems: To meet the modern military communication requirements, presently other advanced military forces in the world are also utilising commercial resource to minimize cost, better service and as an alternative means. In case of US forces in Iraq, given this enormous increase in theatre bandwidth requirements for the operation, it is no surprise that MILSATCOM⁶ alone could not meet the full need and that commercial SATCOM was heavily relied upon. The launch delays of organic military communication satellites, combined with burgeoning operational needs, have caused the military to increasingly rely on commercial SATCOM. Commercial sources accounted for approximately 60 percent of SATCOM provided in Operation Enduring Freedom and 80 percent during Operation Iraqi Freedom⁷.

Integration is for Both Peacetime and War: During peacetime, integration helps to train the communication personnel and users to extract the benefits of the communication system. Quite often Army is deployed for operations other than the war, where for better command, control and communication (C3), an integrated communication system is essential. During war, a superior enemy is likely to target C3 elements at the outset of hostility. Communication infrastructures above the surface are likely to be damaged. As such, maintaining unhindered communication during war will be a key factor with available resources. Considering the existing technological and financial constrain; to ensure secured and reliable communication for BD Army, in a short/mid-term timeframe the best alternative is to take assistance/ integration of military communication with existing commercial resources. Sooner we start doing it, is better⁸.

Policy Guidelines Related to Integration of External Resources

Current Provisions: During any emergency or during war, eventually all the national resources will be extensively used by the military for an effective war

5. Khan, S. A., 2008. Integration of National Communication Resources to Enhance the Operational Capability of Bangladesh Armed Forces. National Defence College Journal, 7(1), pp. 159-183.

6. MILSATCOM means Military Satellite Communications; "SATCOM" is an acronym of, and generic term for, satellite communications.

7. Forest, B. D., 2008. An Analysis of Military Use of Commercial Satellite Communications, Monterey, California: Naval Post Graduate School.

8. Farhad, S. M., 2016. Integration of National Commercial Facilities to Enhance Communication of Bangladesh Army [Interview] (30 Jun 2016).

fighting outcome. However, until now, there is no such written policy which allows the military authority to exercise control over the commercial entities for the purpose of national requirement. In reviewed Telecommunication Act 2011, Clause 41.03 explains the conditions for which government can take the control of mobile operators for the sake of national security. But the act does not clearly specify the definition of the Government to include military or defence forces. A formal request was forwarded from Armed Forces Division (AFD) about the matter, but yet no significant response is obtained from the Government. Therefore, a holistic approach is needed once again from AFD so that Bangladesh Telecommunication Regulatory Commission (BTRC) is taken on board for updating the policy and also enforcing the same on to the licenses for strict compliance⁹.

Ways Ahead: Communication integration planning during peacetime should be aimed towards communication support during war. License agreements of various mobile operator and NTN agencies needs to be studied to find out their obligations to support armed forces during war. Telecommunication Act 2001 needs to be studied to form idea on regulatory aspects to carry out study in further details. BTRC would be the lead organization to formulate the required policy on communication resource sharing/ integration.

Advantages of Integration

Integration will save substantial cost in comparison to have independent communication infrastructure of individual organization and development of technical expertise in the field of integration. A specific model for integration like, Switching Cen Concept need to be identified for overall planning and implementation; in line with a 'Holistic Approach' for integrated communication system¹⁰. As discussed earlier that, military communication can be enhanced by appropriate integration with non-military and commercial communication systems.

It is obvious that individual approach to any communication system is costly and could turn into a duplication of effort. Much can be saved and better communication achieved through resource sharing. An integrated communication system is therefore the need of the day. Following are the advantages of an integrated system:

9. Towhidul, I., 2014. Utilization of Commercial Facilities for Military Communication: A Bangladesh Perspective, Dhaka: AFWC-2014, National Defence College.

10. Zaman, M., 2016. Integration of National Commercial Facilities to Enhance Communication of Bangladesh Army [Interview] (12 July 2016).

- Will ensure better service through a single system.
- Serve as a multiple communication system for the AF and also become an alternative means of communication for the armed forces during disaster management and emergency.
- Will save substantial cost in comparison to have independent communication infrastructure of individual services.
- Will avoid duplication of effort by individual services.
- Will meet present communication requirements and also have the expansion facilities for future requirements.

External Resources Suitable for Integration and Associated Challenges

Non-military/Government Resources

Border Guard Bangladesh (BGB): BGB being deployed in the front will be able to provide early warning by own means of communication. Their maximum Radio Sets are compatible with BD Army used radio sets. Any deployment near BGB sector/units will have alternative means of communication. It can be deduced that BGB communication assets can be integrated with BD Army resources very easily and can increase overall communication efficiency of BD Army.

BD Police: Communication infrastructure of Police is the widest among all organizations of BD. They have remarkable development in the last few years. Police Telecommunication Organisation's (PTO) facilities if integrated properly then there may be redundancy of communication for military use. The sophisticated communication repair workshops at Dhaka and in major districts can also be utilized in case of need.

Rapid Action Battalion (RAB): RAB has fast, efficient, secured modern communication and Management Information System (MIS) network including wireless telephone communication. It uses land based communication for land telephone/ fax from BTCL and uses corporate client facility of GP for mobile use. RAB has independent HF system for long distance wireless communication with battalions and independent VHF system for short distance wireless communication within battalion. The integration with RAB requires incorporation of terminal equipment at the subscriber end with minimum accessories by the Army.

Commercial Resources

Bangladesh Telecommunication Company Limited (BTCL): BTCL has the biggest infrastructure of communication network through Fibre Optic (FO) cable link, overhead lines and microwave links as national backbone covering all districts and upazillas of BD. BTCL provides digital exchanges up to most of the upazillas of the country. Army needs to depend on BTCL for peace and wartime communication through dedicated fibre optics backbone. BD Army is highly dependent on this agency. The huge FO network all over the country will assist to get reliable support and redundancy of communication. Above all, appropriate representation from defence at the policy making body of BTCL is required to deal with the planning and development of the communication means and resources.

Bangladesh Railway (BR): BR is the first organization to introduce optical fiber communication in the country. BR communication network covers a distance of more than 2900 km through FO links spanning the entire country¹¹. The network is connecting nearly 250 railway stations for BR's own use. BR also provided its FO cable for use to Grameenphone (GP) as rent. In recent years, GP has upgraded almost 1600 kilometres of the old FO network of BR¹². Communication infrastructure of BR is a vital sector of our country. Due to expansion of secured fibre optics network to railway stations, Army may integrate the resources in the likely deployment areas to meet future operational need without disturbing the railway communication and GP network.

Other NTTN Companies: Fiber@Home plays a major part in the communications sector in BD in providing better services in telecommunications. They established more than 6832 km optical fiber long haul backbone covering 23 districts, connecting Dhaka with Chittagong, Sylhet, Bogra, Rajshahi, Jessore and Khulna. Summit Communications Limited (SCL) being a NTTN provider, provides customized and integrated transmission solutions through fibre optic network as the country's premier infrastructure solutions provider. SCL has built access to 13,200 KM network and has an ambitious plan of 100% nationwide coverage by 2017. Power Grid Company of Bangladesh (PGCB) has installed OPGW (Optical Ground Wire) on high voltage transmission line to protect the transmission lines from thundering. This technology of placing optical fibre

11. Rana, M. M., Islam, M. N., Morshed, K. M. & Hossen, M., 2008. Fiber-Optic Communication in the Context of Bangladesh. International Conference on Electronics, Computer and Communication (ICECC 2008), 1(1), pp. 210-213.

12. Cellular News, 2008. Grameenphone Starts Upgrading Fibre-Optic Network Back Bone. [Online] Available at: <http://www.cellular-news.com/story/28927.php> [Accessed 25 October 2016].

within the ground wire is being widely used throughout the world at present. PGCB is using some small portion (10 percent) of the FO network capacity and the remaining portion remains spare after meeting different needs of PGCB.

Mobile Phone Operators: BD has six major non-government mobile phone operators namely Citycell, GP, Teletalk, Banglalink, Robi and Airtel. Amongst these, the mobile network of GP has almost entire country coverage. It has the largest number of Base Terminal Stations (BTS) and Master Switching Centres (MSC) around the country. As of March 2016, BD has 128.939 million subscribers in total¹³. Army is already using mobile operators' corporate package as end users. In emergency, their links can be utilised as alternative means to establish communication. Besides, Mobile Virtual Network Operator (MVNO)¹⁴ project for BD Army is under active consideration which will help army users to use mobile phone facilities all over the country using a unique prefix number. This will ease phone usage and ensure significant cost reduction on official mobile phone bill.

Likely Difficulties in Integrating External Resources

Technical expertise of military communicators, breach of security, endpoint patching equipment, compatibility/ interoperability and absence of access points were found to be the major impediments in conducting smooth integration. Exploring and maintaining an updated database of available communication facilities in different geographical location would be necessary. Communication integration plan needs to be in line with the operational plan of various field formations in different phases of operations. Integration seems to pose some difficulties in practical approach. Following are the likely difficulties which may be encountered during integration:

- Absence of a specific policy guideline by the government and the Armed Forces on use of national communication resources in terms of training, utilization, coordination, budgeting aspects, etc. Besides, BD does not have a national communication policy integrated with the military communication system.
- For an effective communication integration, availability of suitable access-points, updated communication information and technical data, necessary interface equipment, technical expertise of the related personnel and appropriate

13. BTRC, 2016. Mobile Phone Subscribers in Bangladesh March, 2016. [Online] Available at: <http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-march-2016> [Accessed 13 July 2016].

14. MVNO is a service provider that sells secured mobile phone service by making use of another company's existing network infrastructure.

cooperation/ agreement between concerned parties are essential¹⁵. While integrating external communication resources with military communication, absence of one or more of the above essentials may pose difficulties.

- Existing communication equipment of BD Army has varied origin and types, which are not inter-compatible. Therefore, in any future need, it will be difficult to bring required national communication resources for military use and utilize to its maximum efficiency due to multiplatform communication means and their compatibility issues.
- Even in war, the other organizations will remain functional; as such there is a need to assess the resources that can be actually spared for the Army during peacetime.
- Military communication is sensitive due to security classifications and it needs to be reliable. COMSEC is of prime importance for military communication system. Therefore, the biggest challenge of communication integration is to ensuring COMSEC, which includes important three security aspects like Transmission Security, Emissions Security and Physical Security.

Modalities of Integrating External Resources with Army Communication System

Concerns Related to Integration

Security Issues: Military requires secure means of communication. And for that reason, integration of civil communication resources is likely to face some challenges as discussed earlier. Communication security will be the influencing factor for any decision of integration method. For our Army, the general advantages of utilising national communication resources are remaining in touch with current communication system/ equipment and training of the communication personnel to remain updated.

Technology and Knowledge Sharing: The integration of civil-military communication resources should be as such that during war it can enhance the capability of our Army communication. And during peace time, it should complement each other in terms of resource, knowledge and expertise sharing. It must be remembered that civil communication resources can only augment military communication and thereby, it can enhance the operational capability of our forces.

15. Brigade, Army Signal., 2005. *Integration of National Communication Resources to Augment Military Communication: Prospects and Challenges*, Dhaka: Formation Project Study Paper 1/2005.

Permanent Communication Infrastructure and Access Points:

Maintaining flawless communication in peacetime as well as during war is a prime requirement for best possible integration. Army should have a permanent communication infrastructure which will meet the requirement both in peace and war. The communication resources available in the country have already been discussed and there is only need of planning, coordination and integration at the national level to multiply the existing resources into a larger communication asset. Besides, for the integration planning purpose there should be some national policy to select potential access points around the country to get connected with the communication systems earmarked for use by the Army.

Suggested Action Plan

Like other countries in the world/ region, BD Army need to plan for Communication Switching Center concept. Integration of endpoint equipment and availability of access points in the area of operation will be a great challenge. For effective integration we need to have up-to-date database of all existing essential communication resources. Besides, involvement of military representative in the future communication infrastructure development is important. National policy framework is required for effective integration. Top-down approach would be the best in this case. Thus, integration will ensure judicious use of costly infrastructure and also ensure economy of effort. Analysing the options in various mentioned aspects, following action plan is needed to be executed:

Formulating Policy: Presently there is no clear policy regarding the use of national communication resources during emergency. Therefore, a policy needs to be immediately formulated. Proper guideline is to be given at the topmost level of all agencies with appropriate directives. A coordinating body in AFD may coordinate this entire effort through BTRC and all other organisations. Army Headquarters (AHQ), Signals Directorate, Armed Forces Division and Ministry of Post & Telecommunication are major stakeholders for planning and implementing communication integration process. Lead has to be taken from Armed forces to match the existing network of different NTTNs in line with operation plan, and also should have adequate mechanism to influence/ ensure future network expansion of NTTNs are complementary to defence need¹⁶.

16. Bari, E. U., 2016. Integration of National Commercial Facilities to Enhance Communication of Bangladesh Army [Interview] (23 August 2016).

Maintaining Updated Information: A database is to be maintained at appropriate level and to be updated regularly whenever any expansion or change takes place. Accuracy of this database can be maintained through cross checks from higher as well as lower echelons of every organisation.

Enhancing Professionalism: Continuous effort should be made to enhance professionalism of all members of Army communicators. It has been seen that there is a lack of technical knowhow in handling latest sophisticated communication equipment. Improved technical knowledge will assist in planning and integrating national communication resources.

Integrated Effort by Related Agencies: Few projects are already undertaken to enhance joint military communication. Likewise, more steps may be undertaken through joint services communication projects. Thereby, inter-operability will increase to a great extent and it will be easier to carry out joint operations. In a broader framework, if this integrated approach can be contemplated with national communication agencies, it will further economize the entire national effort.

Integrate Military Forces in Developing Future Communication Infrastructure: Unplanned development of communication infrastructure may be a threat to national security. Development in the communication sectors by any organisation should properly be coordinated with military authority. It will also economize the entire national effort and enhance the security of the nation. Communication infrastructures are planned and developed after consultation with the military across the world.

Enduring Engagement with Other Communication Agencies in Civil Sectors: Regular engagement in the form of seminar, workshop etc may be organized with national communication agencies to enhance technical knowledge and to keep abreast with the latest developments in the field of ICT.

Recommendations

After unearthing the huge national communication resources and analysing viable options for integration, few recommendations are made. These recommendations are broadly divided into two categories as, Policy Level and Functional/Operational Level recommendations. Details follows:

Policy Recommendations

- Policy on Integration of National Communication Resources at the National Level. Appropriate policy needs to be formulated at the highest level on integration of external communication resources for both during peace and wartime. Related policies also to be formulated for BD Army in coordination with AFD and Ministry of Defence (MOD). Besides, a coordinating body need to be organized for looking after the implementation of external communication resources integration.
- Military Representation in the Communication Policy Making Body at the National Level. To ensure defence and security requirement, and implementation of issues related to national communication resources, military representatives of appropriate status may be placed in Ministry of Post and Telecommunication and Information Technology (MoPITT), BTRC and other related apex organisations.

Functional/Operational Recommendations

- Establishment of Switching Centres. During peace time BD Army should establish permanent switching centres. These should be prepositioned near the probable deployment areas of operational field formation/units. Nodal points of suitable communication service providers in the formation area should be earmarked and updated regularly so that the communication facilities can be utilized during any emergency.
- Maintain Updated Database. BD Army need to prepare and maintain database of available communication resources in the respective AOR of various field formations. This database need be updated and required field test/ exercise also to be done as per operational plan with a view to get maximum benefit out of it during emergency.
- Joint Training Exercise for Technical Skill Development. To develop technical know-how, communication personnel need to remain updated with the technology used by the external communication providers. Regular training exercise and coordination with available facilities and required interface devices will make them conversant and develop expertise in this field.
- Implementing Pilot Project on Integration of National Communication Resources. After attaining a workable policy level development on integration aspect, pilot projects may be taken up in any of the suitable field formation areas, with a view to test, validate and implement the integration concept in a wider extent for the entire army.

Conclusion

The existing communication system of BD Army has limitations in respect to infrastructure, technology and communication security. Weakness in tactical communication, central network backbone, EW capability, repair and maintenance, and absence of redundancy in communication systems were found to be the major limitations. There are many tangible and intangible reasons for which our communication system could not develop. Economic and technological aspects are the two most prominent barriers. While exploring a cost-effective solution to cover the above weaknesses, integration of external resources with military communication surfaced as the most viable option. It is perceptible from the existing communication system that, BD Army has the prospect for enhancing operational capability by integration of non-military and commercial communication system.

The significant findings for integration are: better service, reduction of cost, redundant communication means and compliance with organizational need. In the study it has been found that, government policy guideline though indicates integration of national communication resources, but a clear cut guideline related to integration with military communication is absent. The study of the integration of civil communication resources with military network reveals that, it is very a significant issue which deserves careful consideration from all corners. The overall picture shows that the country has enough communication resources to meet any emergencies. Study makes it evident that the BD Army would have number of options available in addition to their existing communication means.

The major challenges of integration are incompatibility of communication systems, lack of skilled manpower, insufficient security measures, absence of relevant training, and insufficiency in doctrinal aspects. Growing awareness, collection of information of civil communication resources, feasibility study, formulation of government policy, relevant training, and location of nodal points and procurement of interfacing devices are few steps to be taken prior integration. Establishing area switching centres with the help of countrywide optical fibre network may be chosen as an option for physical integration. Finally, after unearthing the huge national communication resources and analysing viable options for integration, few Policy Level and Functional Level recommendations are made. Apposite implementation of the recommendations will ensure smooth integration so as to enhance communication capability of BD Army.

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OPTIMUM UTILIZATION OF ARMED FORCES' BUDGET: IMPLICATIONS ON BANGLADESH NATIONAL BUDGET

Lieutenant Colonel Md Imrul Mabud, afwc, psc

Introduction

'Military Budget' is a widely discussed issue in developing countries and Bangladesh is no exception. The dichotomy between maintaining national security and ensuring healthy socio-economic growth is always existent (Choudhury 2015). Some say that defence spending has impact on productivity and economic growth (Kabir and Waheduzzaman 2016). But, as a sovereign country, none can negate the necessity of maintaining a strong military. Bangladesh Armed Forces consists of approximately 220,950 members (World Bank Report 2016) in its active strength. Bangladesh Government's recent decision of forces' modernization (Budget Speech 2015-16) needs budget. As such, Bangladesh Armed Forces may need some reform for optimum utilization of budget so as to contribute effectiveness of national budget.

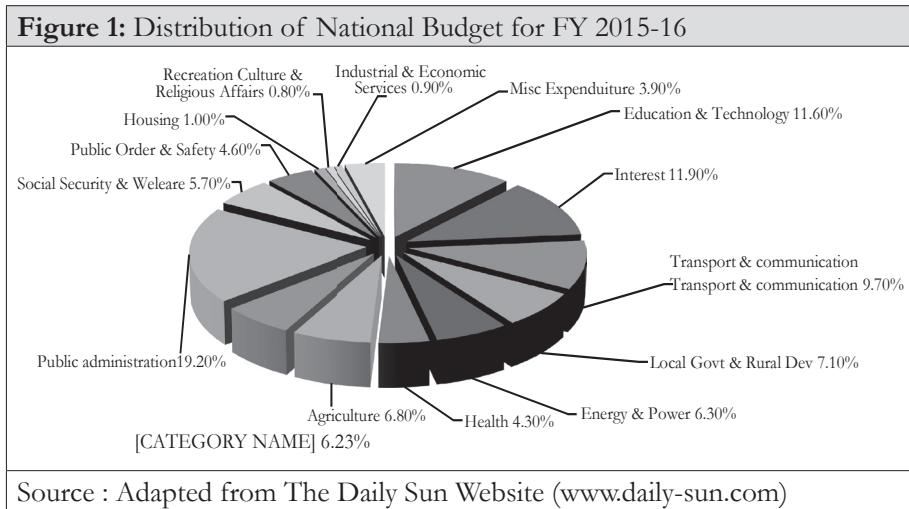
Bangladesh Armed Forces is a well-organized, staffed and managed institution. It needs a handsome budgetary allocation to ensure its smooth functioning. During the Financial Year (FY) 2015-16, defence budget was 6.23% of the national budget which was 6.60% in FY 2014-15 (BDNEWS24.COM 2015). Bangladesh Govt envisions a capable armed forces for Bangladesh. 'Jointness' and 'Interoperability' within services are important planning aspects to fulfil that vision which cannot be done alone. Again, Modernization of Bangladesh Armed Forces hinges on Forces Goal-2030 which denotes asset acquisition and force expansion. So, integration of budgetary resources is crucial to optimize the budget expenditure. Hence, a joint budget planning and execution framework maybe contributory towards optimizing the utilization of national budget.

Budget Environment of Bangladesh Armed Forces

Overview of National Budget

National budget of Bangladesh is a statement of Bangladesh Govt's receipts and expenditures of a particular period and required to be laid before the National

Parliament (The Constitution of the Peoples' Republic of Bangladesh 1972). It is passed by the votes of Members of the Parliament. The graph below shows sectoral distribution of national budget for FY 2015-16 where defence budget comes about 6.23% of national budget.



Defence Budget Recipients

There are total 27 defence organisations who receives their annual budget from defence budget. Budget management lies with respective organizations while MoD acts as the lead ministry. MoD allocates budget according to the demand based on policy guidelines issued from MoF. The final budget allocation authority is vested upon MoF who allocated budget to MoD for the defence organizations. A list of defence budget recipients is appended below:

Table 1: List of Defence Budget Recipients		
Bangladesh Army	Bangladesh Navy	Bangladesh Air Force
Directorate General of Forces Intelligence	Directorate General of Defence Purchase	Directorate General of Medical Services
Bangladesh Ordnance Factory	Bangladesh Armed Services Board	Bangladesh National Cadet Corps
National Defence College	Military Institute of Science and Technology	Defence Services Command and Staff College
MoD Constabulary	Inter Service Public Relations	Inter Service Selection Board
Survey of Bangladesh	Cadet College Governing Body	Bangladesh Cipher Bureau
Bangladesh University of Professionals	Armed Forces Medical Institute	Armed Forces Institute of Pathology
Office of Cantonment Administrative Officer	Bangladesh Meteorological Department	Space Research and Remote Sensing Organization
Military Land and Cantonment Estate Office	Armed Forces Medical College	Controller General Defence Finance
Source : Developed by Researcher Based on Bangladesh MoD Website		

Budgeting Approaches

Bangladesh is following the Medium Term Budget Framework (MTBF) approach of budgeting since 2009. It includes the earning and expenditure for the 01st year, estimate for the 2nd year and expected projection for the 3rd to 5th years (Budget Management Act 2009). Bangladesh Army, Navy and Air Force has switched over from one year traditional budgeting system to MTBF since FY 2011-12.

Key Elements of MTBF

It reorganizes services strategy and prioritizes policy objectives in the formulation of budgets (multi-years). It identifies outputs, acts and projects to contribute to the achievement of these priorities. Differences between previously followed traditional budgeting approach and MTBF is given below:

Table 2: Differences of Traditional Budget and MTBF	
Traditional Budget	MTBF
Budget is prepared only for one year	Consists of the estimates from 03 to 05 years
Two budgets (initial and revised) are prepared separately	Budget is prepared within a given ceiling
Allocate resources based on the expenditure of previous years	Resources are allocated considering the priorities of programs and/or projects
Expected results are not provided or highlighted in the budget	Indicates the expected output from the input
Ministry of Finance and Planning is directly involved in budget execution	Line ministries are given direct authority to execute their budget
Source : Researcher's Compilation	

Rolling Characteristics of MTBF

MTBF plans budget for over a period of 03 to 05 years. The idea is to get rid of traditional one year budget which finds it difficult to complete a project within one year. A ceiling is given to prepare budget for the first year whereas estimate for next year and projection for other years will be available. This is known as rolling characteristics of MTBF. A graph of this characteristic is given below:

Figure 2: Rolling Characteristics of MTBF					
Budget	Estimate	Projection	Projection		
Current Year	Budget	Estimate	Projection	Projection	
		Budget	Estimate	Projection	Projection
	Year-2	Year-3	Year-4	Year-5	Year-6
2016	2017	2018	2019	2020	2021
Source : Developed by Researcher					

Functions of Services' Budget Directorates

The budget directorates of three services function to achieve their respective organizational goals. The key functions of all the budget offices of the three services are as follows:

- Prepare initial and revised budget.
- Allotment of budget in local currency.
- Re-appropriation of budget where necessary.
- Fund placement (Nastokoron) to other organizations.
- Monitoring budget expenditure.
- Prepare various reports and returns.
- Budget surrender to MoD.
- Reconcile budget expenditure with Finance Controller (FC) (Army).

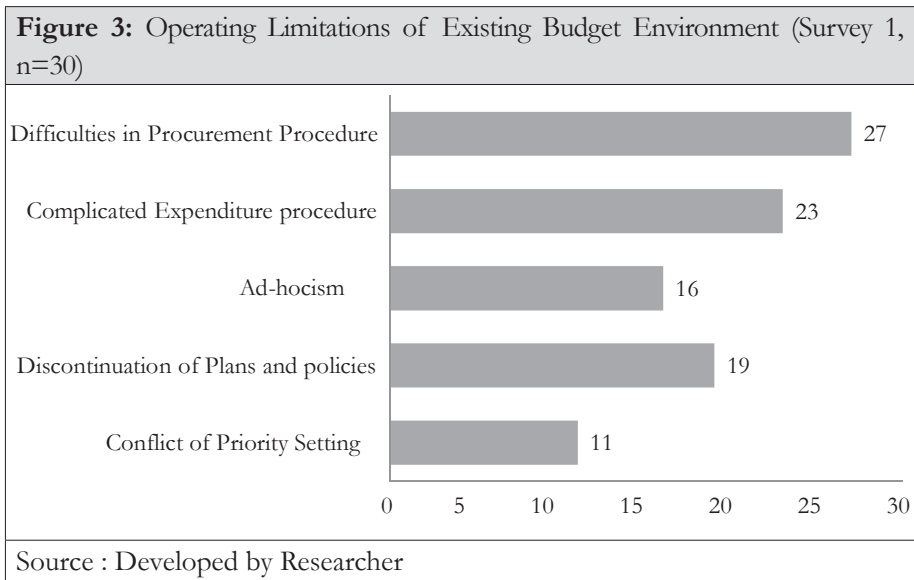
Budget Management by Services

Services spend from specific budget code according to their demands. However, owing to various organizational requirements, services internally shift money from one budget head to another.

- **Re-appropriation:** Services shift budget from a surplus code to a deficit code which is known as 'Re-appropriation' of budget. This is usually done to meet the unforeseen requirement of the services or to implement a new plan.
- **Nastokoron:** Services, at times, need to place their funds to other organizations like BOF, BMTF etc to buy armaments and ammunitions etc. All three services do it individually.
- **Budget Surrender:** When budget remains unspent at the end of a FY, the unspent budget may be re-appropriated to other codes if time permits or surrendered to MoD by 30th Jun of each FY. The trend of budget surrender by three services has declined considerably in recent times.

Operating Limitations of Existing Budget Environment

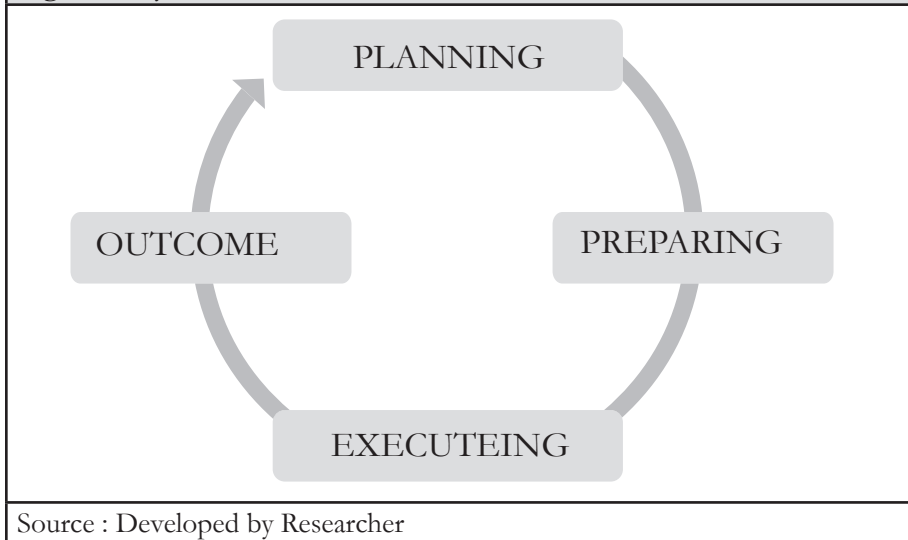
There is no denying that present organization, system and procedures have inherent difficulties which pose challenges to optimum utilization of armed forces' budget. Few of the important limitations came up during several discussion sessions. Results of the survey (multiple responses) is appended below:



Prospects and Challenges of Tri-Service Integration

Services desire to be a capable force and budget is the most important tool available. Understandably, an efficient joint budget management system for Bangladesh Armed Forces can make the optimum utilization of budgetary resources. Range of tri-services integration is enormous with dimensions of epic proportion. However, it will be prudent to explain the proposition by cyclic pattern of course of action method as shown below:

Figure 4: Cyclic Order of a Course of Action



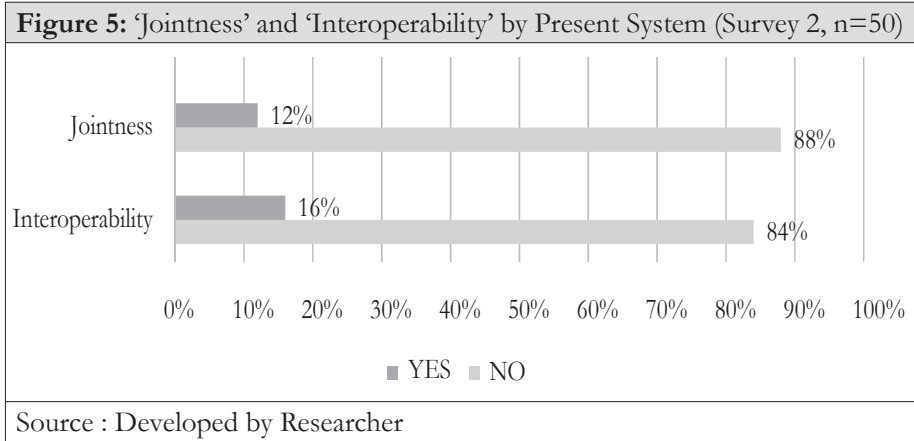
Source : Developed by Researcher

Planning Prospects

Nothing gets bigger to describe the importance of budget as a planning tool. It considers the forces' projected goals, expansions, operational readiness etc. It is needless to mention that Bangladesh Govt is the only contributing source for the services. Therefore, defence planners should formulate the development plan in three categories of time frame. These are: Perspective Plan, which is a long-term forecast over a 10-15 years' time frame; Five Years Plan, which is a firm plan and Annual Plan which is a plan of only one FY.

Prospects in Preparation

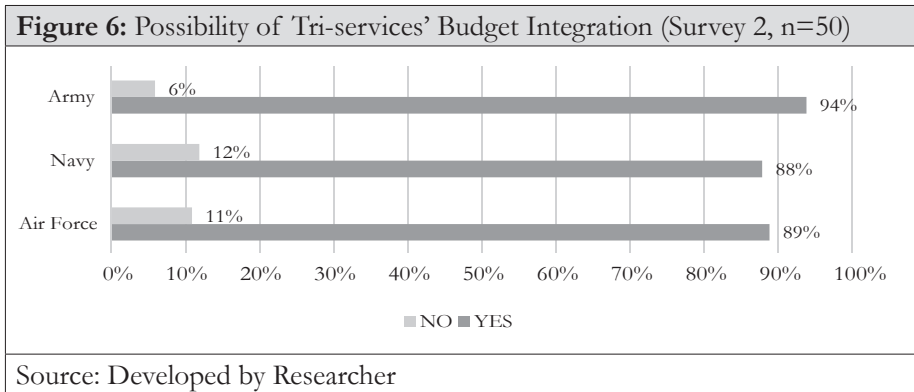
'Jointness' and 'Interoperability' are two terms commonly heard in the military world to prepare for fighting in the 'battle space' (Mitchell 2013). Technology now has allowed force planners to prepare forces' with modern high technology equipments as 'system[s] of systems'(Popper 2004) and joint approach can be the answer. This will pave the way to enhance joint capabilities and interoperability of Bangladesh Armed Forces. A field survey was carried out to know about bringing 'jointness' and 'interoperability' by present system. The results of the survey is appended below:



Prospects in Execution

Basing on 'Draft Defence Policy', a force structure has been suggested which is known as 'Forces Goal 2030'. This is the services' perspective plan. The physical components of this force structure are weapon systems, trained personnel and supporting logistics. However, budget may not permit us to achieve it shortly. Services often embark on joint operations (Operation Thunderbolt, Holey Artisan 2016) but budget goes out from three sources. A single source can easily accommodate the expenditure. So, there is no other alternative but integration of tri-services' budgetary resources.

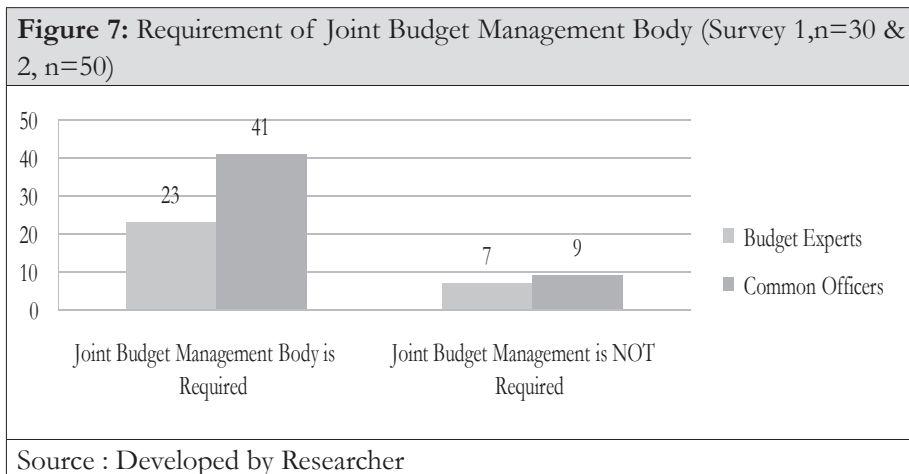
To reconfirm the above discourse, a field survey was carried out within tri-services' officers to know whether integration of tri-services budgetary resources is possible or not. The results of the survey is appended below :



Requirement of a Joint Budget Management Body

In the existing budget management environment, limitations largely emanate from the absence of an umbrella organization. Many opined that a Joint Budget Authority will help in prioritizing as well as proper allocation of our limited military budget (Ahsan 2016). If so implemented, this can ensure optimum utilization of all available budgetary resources of the services leading to better contribution in utilizing the national budget.

In response to know about the requirement of a joint budget management body, 76.67% responded positive in survey 1 and 82% in survey 2 respectively.



Joint Budget Management Body: An Operating Model

Every military while expanding must optimize its budget and should frame a matching operating model (Eloranta 2005). Bangladesh Armed Forces have grown in many dimensions but budget management by the services is yet to reach the apogee. Productivity of these organizations for the overall development of armed forces' are yet to be sensed in the joint environment. This happens mostly owing to their single service orientation in all facets of budgeting. Therefore, to attain balanced advancement, a joint budget management entity is a demand of time.

Options for Joint Budget Management Body

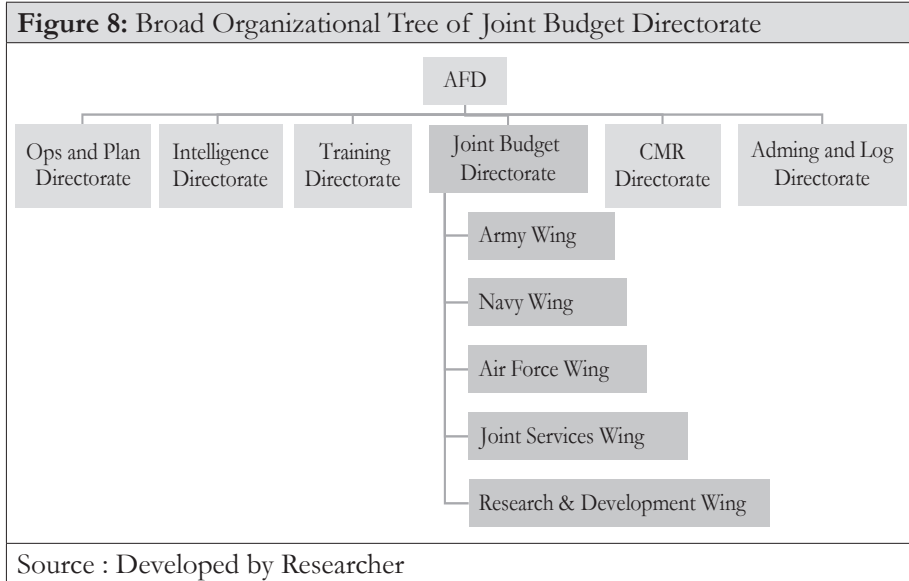
Analyzing and evaluating the entire budget management environment, it is revealed that there are major changes required in the budget management system. Focus should be on the optimum utilization and maximizing effects of armed forces' budget. As such, the establishment of a joint budget management organization for Bangladesh Armed Forces will have to be done from a top down approach. A central organization at the top may be established and then connected to the lower echelons i.e. services budget offices. In this connection, there could be two broad options available for consideration described as under:

- **Option 1 : Creating a Military Budget Branch (MBB) at MoD:** To run all kinds of budgetary functions for Bangladesh Armed Forces, a central military budget management organization may be created at MoD. This organization may be created as a subordinate branch of MoD incorporating manpower from three services, qualified civil service officers and resource personnel from academia.
- **Option 2 : Establishing a Joint Budget Directorate (JBD) at AFD:** A joint budget management organization may be established at AFD to drive all kinds of budgetary functions for three services. This organization may be created as a subordinated directorate of AFD. The existing budget offices of the services will be the main functional units under this proposed directorate. This directorate will be composed of both armed forces' officers and civilian experts in the form of staff officers.

After taking all previous analyses into consideration, it seems that option two has overriding advantages over option one. Thus, preferred option is 'Option Two' and that is establishment of a 'Joint Budget Directorate at AFD'. The 'JBD' will operate under AFD and have control over the budget offices of the services. All the budgetary affairs of the services will be regulated through JBD both up and downlink. The JBD will also act as a bridge between services and joint service institutions like DSCSC, NDC etc on budget issues.

Outline of Joint Budget Directorate at AFD

The Joint Budget Directorate or JBD will be a new directorate of AFD in addition to its already existing five directorates. It will have five separate sub-branches or wings under it to efficiently conduct all the budgetary functions of Bangladesh Armed Forces. The broad outline is depicted below:



Role of Joint Budget Directorate

To make optimum utilization of budgetary resources, all budgetary functions in Bangladesh Armed Forces should be coordinated both horizontally and vertically. As an umbrella organization, JBD should perform the following tasks:

- Be part of AFD and act as lead organization to services on budget issues.
- Receive three services total budget from MoF, plan and allocate budget to the services.
- Coordinate with MoF and other related ministries in regards to all budget functions on behalf of Bangladesh Armed Forces.
- Provide budget vision, mission and direction to the services as received from the Govt from time to time.
- Control and regulate all budget related activities of services through services wings.
- Keep account of all ongoing and forecasted budget activities of services to avoid duplicity of efforts.
- Monitor progress of all budget functions of services.

- Evaluate budget approaches, planning and preparation of services and provide analysis as and when necessary.
- Coordinate with all joint service organizations and other defence budget stakeholders to undertake budget related functions on behalf of services.
- Keep senior military leaders informed about the budget functions of the services and seek advice for improvement.

Implementation of Proposed Joint Budget Directorate

Timeline

The initial setup may start immediately as basic infrastructure is readily available at AFD. It may take approximately a year to establish the preliminary arrangements for JBD to start functioning. Posting of officers from tri-services is also possible within this timeframe. Second year may have the recruitment of Civilian Staff Officers and incorporate them into the system. Thus, JBD may start functioning from the third year. Subject Matter Experts or Resource Persons may be appointed in the third year to start the Research and Development Wing. The JBD is expected to be fully functional within a timeframe of five years.

Manpower

It is possible to generate most of the work force required for JBD from within the Bangladesh Armed Forces. Concerned offices responsible for posting plans should look for officers who have passion for budgeting. There are already a good number of business graduates available in the services. Military Secretary's Branch of all three services may look for them too. Service HQs should appoint officers on attachment basis for the interim period. Civilian Staff Officers are already available in the system. Only thing is to find out the qualified officers and post them accordingly. The Subject Matter Experts or Resource Persons for the Research and Development Wing may be appointed through competency examinations as per service rules. The same can be done through a 'talent hunt' from civil society with appreciable incentives.

Budget

JBD, at the beginning, may have a steady start for a good opening and avoid preliminary complexities. Proposed TO&E may be forwarded to the Govt for necessary approval. AFD and services HQs should constantly pursue to get the approval at the earliest opportunity. Budget for the initial setup may be generated by the services till a separate budget is sanctioned against the approved organization.

Effectiveness of the Proposed Model

The defence budget of Bangladesh for the FY 2015-16 is 18,377 Crores Taka which is about 6.23% of the national budget. This contrast clearly suggests that an effort is of utmost importance to make the best use of available budget. One prime approach should be to integrate the budgetary resources of services through some organizational structure. The proposed JBD if created at AFD, may be one such structure which will make armed forces' budget a strength by not allowing it to be used in piecemeal. This will ensure effective utilization of apportioned national budget.

Bringing Uniformity between Services

Proposed JBD at AFD has the ability to bring uniformity between services. It will provide long-term budgetary vision, mission and direction to the services as received from Bangladesh Govt. It will also control and regulate all the budget activities of three services. The authority of JBD will be effective in regulating all the budgetary functions of services to unitarily achieve budget goals for Bangladesh Armed Forces. The bookkeeping of all expenditures in the armed forces' will enable JBD to identify isolated efforts and synchronize tri-services energies. Its ability to coordinate budget issues directly with joint service organizations and other defence budget stakeholders will shorten lead time and keep uniformity of purpose. Evaluation of budget plans along with their analysis will be from a tri-services' perspective which is desirable for a better future. Lastly, JBD will be able to keep the senior leaders informed to enable them for better decision making on services budget.

Budget as a Planning Tool

Defence budget plan must be productive and ensure quality of defence expenditure (Rahman 2016). Armed forces' plan fixes the scale of defence expenditure according to the general missions of national defence policy and military build-up. While defence policy may determine capability requirements, affordability is a prime concern. The long term vision or perspective plan designed to meet the requirements of Bangladesh Armed Forces is known as 'Forces Goal2030'. It encompasses force expansion, capacity building etc which incurs a great deal of expenditure by services. A close look at the plan will reveal that it is mostly Omnidirectional. JBD will provide a sound set of policy guidelines to bring all services in the same track of planning. It can also fulfil the obligation of forces' accountability by explaining military spending with clarity.

Jointness and Interoperability

World military speaks only one language now and that is 'jointness' and 'interoperability'. No armed forces can operate or wage a war with their single service orientation. While such operations are not new (examples include: Gallipoli Campaign 1915, Arab-Israel War 1973, Falklands Conflict 1982, Gulf War 1991 and so on), today, increasing emphasis is being placed upon joint operations. Unfortunately, most of the equipment requirements and doctrine for our armed forces are currently developed independently by each of the three services. Interoperability is another very important issue which has been overshadowed for quite some time. Complex risks and uncertainty in the modern world mean that forces must have the adaptability to meet rapidly changing tasks. Furthermore, joint operations require forces that are truly interoperable. Bangladesh Armed Forces have barely any interoperability among its services. JBD may be able to address these issues by having access to budget plans which influences the system.

Procurement and Capital Purchase

Modern weapon systems are very expensive and the costs of procurement must also be balanced against availability of time. Procurement plan often upset due to technical difficulties, budgetary constraints and redefinition of requirements. Tendency to alter or grow new requirements (a phenomenon known as 'requirements creep') by the services face difficulty in maintaining the timeline as well as the procurement plan. This starts the process afresh right from square

one. Capital purchase is very time sensitive in a sense that price of equipments jump in the international market every now and then. As such, a procurement lapse in a FY will certainly drain away important budgetary resources from the services. JBD will be able to regulate all capital purchases in terms of cash flow and in doing so, help the services to remain within the timeframe.

Operational Effectiveness

The effectiveness of the proposed model has many operational facets. JBD will be able to minimize inter-code transfers and zero the budget surrender. It will highly reduce the inter service bureaucratic complexities, frequency of reports and returns, and duplication of efforts. It will also be able to better coordinate the resources with MoF being the single focal point. Needless to mention that services primacy and hunger for resources will automatically be reduced as a most sought after product of JBD. Progressively, the organization will bloom further to meet the ever growing requirements of Bangladesh Armed Forces.

Recommendations

Optimum utilization of all available budgetary resources can yield a capable military for Bangladesh. Therefore, Bangladesh Armed Forces must try to achieve the full potentials of its budgetary resources for future development through tri-services' integration. To attain the possibilities, this research recommends one operational level recommendation and one policy option as follows:

- A Board of Officers may be formed by each of the services to evaluate their respective budget management system and recommend necessary reforms by 2017 (operational level recommendation).
- A Joint Budget Directorate may be created at AFD to centrally control and operate all budgetary resources of three services by 2020 (policy option).

Conclusion

Defence budget and military spending are two most talked about issues among many scholars. Defence budget of Bangladesh for the FY 2015-16 is 18,377 Crores Taka. It is about 6.23% of the national budget. The economy of Bangladesh is burdened with a huge population of 171 million people dwelling with natural disasters. So, the present socio- economic situation may not permit armed forces

to obtain additional budget for modernization. This contrasts suggest that an effort is necessary to make the best use of available budget. And one prime approach may be to integrate the budgetary resources of three services to make it a strength rather than spending it in piecemeal.

An effective budget plan can only survive with a co-related guiding or management body. Services budget plan is no exception to it. Analyzing and evaluating the entire budget management environment, it is revealed that major changes are required in the system. Focus should be on the optimum utilization and maximizing effects of armed forces' budget. As such, the establishment of a joint budget management body for Bangladesh Armed Forces is envisaged from a top down approach. A central organization at the top may be established and then connected to the lower echelons i.e. services budget offices. The limited services budget comes out of hard earned recourses of Bangladesh. As such it is imperative to maximize its effects and ensure optimum utilization. It is ascertained that a 'Joint Budget Directorate at AFD' can drive towards effective development of Bangladesh Armed Forces through optimum utilization of armed forces' budget and contribute to the best use of national budget.

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IMPACT OF PARTICIPATION IN UN PEACEKEEPING CONTINGENTS ON OPERATIONAL CAPABILITY OF BAF

Wing Commander Moqbul Ahmed, afwc, psc

Introduction

The geo-strategic situation of Bangladesh implies her to maintain strong and capable air force with balanced assets. In order to uphold national interest in promoting international peace and security, BAF has extended her services beyond national airspace through deployment of contingents in UN peacekeeping missions. Current BAF deployment in UN mission involves a significant number of air assets in 03 countries of Africa and North America (Mahmud Hossain 2016). In most of the mission areas, BAF peacekeeping contingents conduct air operations in volatile, high-risk and uncertain environment. Deployment of peacekeeping contingents in distant continents and their rotation involves planning, training, staffing, equipping and sustainability. BAF operational capability is likely to have various degrees of impact because of such large participation in UN peacekeeping contingents.

UN maintains a stringent standard of operational readiness for the peacekeeping contingents. Air operation being sophisticated, technical and costly affair, maintaining the UN standard of operational readiness of 06 BAF peacekeeping contingents is associated with numerous challenges. Since BAF has not taken part in any war after the Liberation War, exposure to high-risk combat environment gives the contingent members a wide range of experience, which may significantly contribute to the operational capability of BAF. Hence, it is required to identify and measure the impact of BAF participation in UN peacekeeping contingents on her operational capability.

Operational Capabilities of BAF

The term 'Air Power' inspires a fascinating vision of aeroplane and its capabilities. BAF, being a small nation's air force should strive towards becoming strong with credible deterrence. The flight of progress of BAF has now spanned over 45 years of progressive growth. This has equipped BAF with the means to undertake

a diverse range of combat and combat support operations in support of national interests (Al-Mamun 2016). Besides utilizing these capabilities in national sphere, now BAF has attained certain capacity to support national interest in international arena. The operational capabilities of BAF are briefly discussed below:

- **Control of the Air:** Control of the air is an intangible condition which gives the air force freedom of manoeuvre in all of the service environments: air, land and maritime (UK, Ministry of Defence, Air Staff, 2009, p. 38). With effective utilization of assets, BAF is capable of achieving a certain degree of control of the air, while denying the same to enemy air force. The primary role of BAF is 'To safeguard/defend the air space of Bangladesh' (Air Headquarters, 2014 p. 2B-1). This implies BAF to prioritize air defence of homeland over other aspects of air power. Along with the combat support units, BAF deploys personnel of combat units in various jobs related to planning and supporting air operations. As such, there is scope of making indirect impact on the control of the air aspect of operational capability of BAF.
- **Quality vs Quantity in Operational Functions:** In simplistic view, the sheer number of air assets could be the determinant of capability of a strong air force. Alternatively, quantity may be substituted with quality. Although meagre in size, today's fleet of modern aircraft allows BAF certain capabilities to undertake diverse combat and combat support operations. BAF needs to gain qualitative edge in operational functions to overcome the restraining influence of budget on its ongoing modernization process.
- **Operational Tempo:** The efficient and comprehensive employment of air force assets would require air force to maintain a high operational tempo. The limited resources and lack of geographical depth posit myriad challenges for BAF. All possible ways to further enhance operational tempo of combat operations and combat support operations of BAF is needed. Participation in UN peacekeeping mission could be one of such ways.
- **Capacity Building:** A highly trained and professional force would invariably translate to a higher operational capability. Weapon systems can only be as effective as the people operating them. BAF attaches more importance on training of personnel with the aim of producing knowledge-based and 'multi-skilled' professionals. Yet there are areas to improve the professional competence of BAF airmen.

- **Sustainability:** Logistic considerations are often the decisive factor of a campaign. BAF attaches importance on a sound, capable and effective operational logistic system. In BAF, engineering and logistic staffs work in close coordination to achieve operational tasks (Air Headquarters, 2014 p. 9-1). Sustainability of BAF needs to overcome certain restraining factors like limited capacity of existing logistics personnel, lack of aviation related defence industries, dependency on foreign supply etc.
- **UN Peace Support Operations (UNPSO):** Bangladesh is considered as a ‘brand name’ in UN peacekeeping (The Daily Star 2014). The national interest in international peace and security implies for BAF to consider UNPSO as one of her core competencies. BAF puts significant importance in developing this core competency (Mustafizur Rahman 2016).

BAF Participation in UN Peacekeeping Contingents

BAF Contingents in Past UN Peacekeeping Missions: BAF has been operating high value air assets in UN peacekeeping contingents for over 02 decades. So far, BAF has deployed 05 contingents in Past UN peacekeeping missions and has generated total 23,222.42 flying hours in Bell-212 helicopters in these missions (Fakruddin Masud 2016).

BAF Contingents in Ongoing UN Peacekeeping Missions: Current BAF participation in UN involve deployment of 06 contingents in 03 countries namely Democratic Republic of Congo, Haiti and Mali. Details of BAF participation in ongoing UN peacekeeping contingents are shown in the table below:

Table 1 : BAF Participation in Ongoing UN Peacekeeping Contingents				
UN Mission	Country	Deployment Started	Strength	Air Assets
Banuau, Monusco	DR Congo	August 2003	190	06 MI-17/MI-171/MI-171SH Helicopters
Banasu, Monusco	DR Congo	August 2003	128	–
Banatu, Monusco	DR Congo	June 2010	40	One C-130 Aircraft
Banuau, Minusma	Mali	December 2014	130	03 MI-171SH Helicopters
Banasmu, Minusma	Mali	December 2014	110	–
Banuau, Minustah	Haiti	September 2015	130	03 MI-171SH Helicopters

Source: Mahmud Hossain (2016)

Mission Environment: The security situation in UN mission areas are generally characterized by existence of various kinds of threat including acts of aggression, armed violence, ambushes, abductions, attack against government troops and UN peacekeepers etc. (MONUSCO 2016, MINUSMA 2016 and MINUSTAH 2016). BAF peacekeeping contingents are expected to confront asymmetric threats, rebel groups armed with rocket-propelled grenades, mortars, machine guns and various small arms (Mahmud Hossain 2016). ‘Case Study – 1’ explains security situation of mission area:

Case Study 1: An Airman’s Mission Experience in Mali

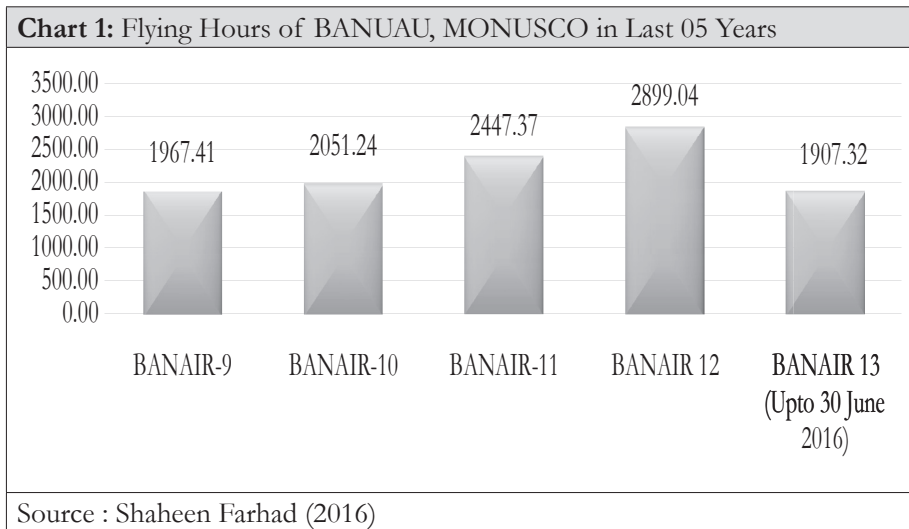
The UN compound in Kidal is a rebel-held city in Saharan desert area. BAF contingents are located at Kidal. Between October 2014 to February 2016, there were 06 deadly attacks on the Kidal UN compound. Rebels attacked with rockets, mortar shells and once with suicide car bomb. These attacks left 11 UN troops dead. We had to use bulletproof jacket, helmet and carry arms all the time. Most of the attacks involved indirect fire from long distance. We had to stay at underground bunker for prolonged period, especially at night during last phases of the moon. Kidal being in desert region, sand fog and sandstorms lasting for 02 to 03 days and reducing visibility to less than 15 meters seriously affected normal activities.

The terrain features differ from one mission with another. Terrain of DR Congo is mostly inaccessible, with characteristics of deep jungles, hills, lack of landmarks, dust and extreme surface condition of few airfields (Atiquzzaman 2016). Terrain of Mali is characterized by mostly rugged hills, desert and semi-deserts (Mazharul Karim 2016). Haiti, the Caribbean Island, has hills all over the country (Mahmud Hossain 2016). Weather in these areas is very unpredictable, changes rapidly and occasionally extreme thunderstorm occurs (Mahmud Hossain 2016).

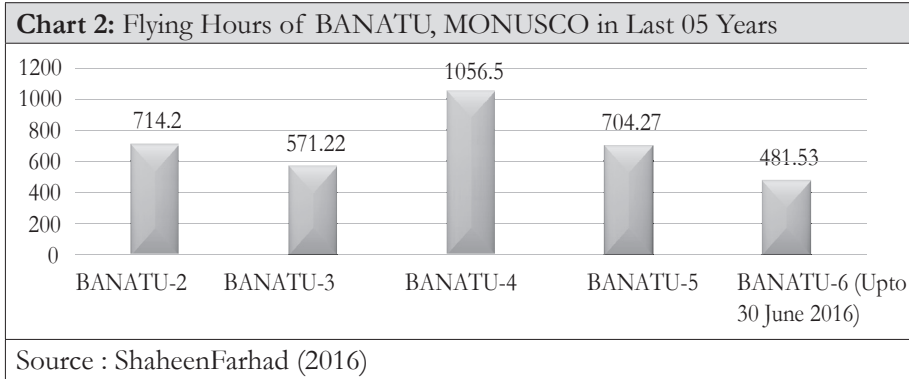
In UN peacekeeping missions, military and civilian aviation assets have distinct, complementary and sometimes overlapping roles. These are managed and tasked centrally by mission’s civilian authorities, although military aviation assets remain under operational control of Force Commander. This unique nature of UN military aviation command and control differs from operational environment of air force and often causes hindrances in contingent activities (Mazharul Karim 2016). Pilots need to display utmost efficiency in environment of lack of navigational aids; critical landing and take-off paths; extreme runway conditions; constraints of parking and maintenance space; uncontrolled airspace etc. (Atiquzzaman 2016).

Tasks of BAF Contingents in UN Peacekeeping Missions: The operational tasks of BANUAUs generally include troops transportation, insertion/extraction; air patrol; combat search and rescue; casualty evacuation (CASEVAC) and medical evacuation (MEDEVAC) etc. The contingents also conduct passenger and VIP transportation. The primary task of BANATU is to provide support for the Force Operational Reserves and the Special Forces Task Force Units. Secondary tasks include logistic capability augmentation; VIP and liaison; air operation in emergencies and natural disasters (Mahmud Hossain 2016).

Activities of Banuau, Monusco: Banuau consists of 190 personnel, 06 MI-17 helicopters and operates from Bunia and Dungu. In last 13 years, BANUAU has worked relentlessly in upholding the professionalism of BAF peacekeepers. Till 30 June 2016, BANUAU has maintained 100% serviceability rate; generated 26,520.01 hours without any major incident (Fakruddin Masud 2016). Flying hours of BANUAU in last 05 years is shown in chart – 1:



Activities of Banatu, Monusco: Banatu consists of one C-130 transport aircraft and 40 personnel. With 92 passenger carrying capability, BAF C-130 has higher lifting capability compared to other transport aircraft of MONUSCO. Till 30 June 2016, BANATU has maintained 100% serviceability rate; generated 4,184.30 hours without any major incident (BANAIR 2015, Fakruddin Masud 2016). Flying hours of BANATU in last 05 years is shown in chart – 2:



Banatu operates Monusco strategic air asset. Its special assignments have enabled the contingent to lay their footprints in 19 airfields of 5 African countries (Mahmud Hossain 2016). This exemplifies air power’s characteristic of ‘reach’. Banatu’s performance in UN despite being based far away from homeland has created a firm reputation of BAF in multinational environment.

Activities of Banasu, Monusco: Banasu has 128 personnel and works jointly with air operation elements of Monusco to provide essential airfield services. Banasu has successfully handled all civil and Monusco flights operating from Bunia airfield in last 13 years and Dungu airfield for last 06 years without any major incident. In last 05 years, Banasu has handled 67,605 air traffic (ShaheenFarhad 2016).

Activities of Banuau and Banasmu, Minusma: Banuau and Banasmu were deployed in Mali in December 2014. Due to various security issues, helicopters were deployed in September 2016 and Banuau has recently assumed full charter of duties. Meanwhile, Banasmu has been providing essential airfield services at Kidal airfield since 2014. Till 22 June 2016, Banasmu has successfully handled 1,262 flights without any major incident (Mizanur Rahman 2016).

Activities of Banuau, Minustah: Banuau was deployed in Haiti in September 2015. Within this short tenure, the contingent has participated in 02 operations and is providing air support to the ongoing Operation Hurricane. Till 03 June 2016, besides maintaining 100% serviceability rate; generated 1151.17 hours without any major incident (Ashiful Islam 2016 and FakruddinMasud 2016).

Analyzing Operational Impact of BAF Contingents in Mission Area

Image of BAF: Through the peacekeeping contingents, BAF has created a firm footprint in UN as well in global arena. The 2014 deployment of BANUAU's 03 MI-17 from MONUSCO to South Sudan under UN 'Inter Mission Cooperation' status; BANATU's time-critical response to crises of South Sudan, post-coup evacuation of UN personnel from Bujumbura are all testimony of reliance of UN on BAF contingents (Mazharul Karim 2016).

Lead Role in UN Peacekeeping Operations: BAF contingents had been instrumental in performing operational tasks. Flying tasks are never denied by BAF contingents unless weather or minor technical issues arise. Those tasks are also carried out as soon as such issues are over (Mazharul Karim 2016). The operational mindset of BAF contingents has earned high confidence from UN. The 13-year long deployment in Monuscobears true recognition of reliability of UN on operational efficiency of BAF.

Uphold and Promote International Peace and Security: Four decades back, in his maiden speech at the UN General Assembly, Father of the Nation, Bangabandhu Sheikh Mujibur Rahman envisioned, "The Bengali nation is pledge-bound to establish a global order based on peaceful coexistence, social justice and freedom from poverty, hunger, exploitation and aggression" (UN 2014). The size of current participation of BAF in UN peacekeeping contingents exemplifies firm commitment of BAF towards national interests in promoting international peace and security.

Operational Experience in Combat Environment: Each year BANUAUs take part in a good number of multinational operations. During the last 13 years, there were few incidents where pilot and passengers of BAF helicopter were hit by hostile fire. BAF pilots have shown their true professionalism in such situation (Mahmud Hossain 2016). These operational experiences have contributed on the skill development and capacity building of BAF aircrew. BANUAU's one of the multinational operational experience is briefly discussed in 'Case Study – 2'.

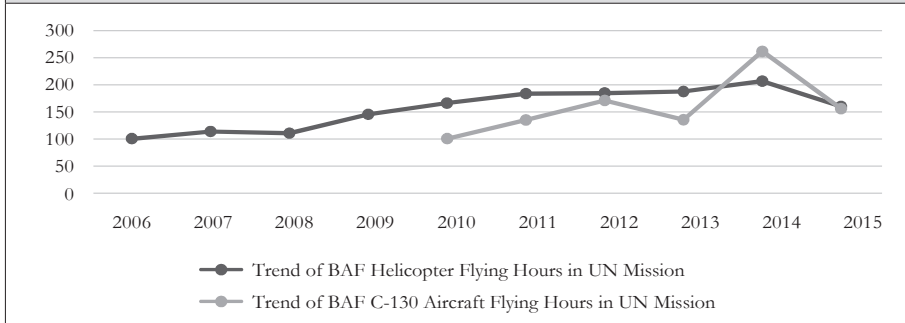
Case Study 2: BANUAU’s Participation in OPERATION MONGOOSE

Foreseeing requirement of spares, in December 2014, Air Headquarters sent spares of MI-17 helicopters to Mali. In 2015, on request from UN, BAF agreed to deploy MI-171SH to Mali instead of MI-17 helicopters. As such, spares of MI-17 helicopters (08 line items – weight 02 Tons) were not required at Mali. UN did not agree to transport these items back to Bangladesh during the yearly contingent rotation. Through extensive planning and coordination, inter-mission transportation of the MI-17 spares from Mali to DR Congo was done using commercial courier system.

Quality Vs Quantity: The contingents deployed in UN mission consists of personnel from various trades. Trade wise personnel strength is determined emphasizing quality jobs to be performed by comparatively less manpower. Air Headquarters follows strict selection criteria to ensure quality of jobs. Operational Efficiency Inspection (OEI) is a UN system of measuring capabilities required for optimizing contingent’s efficiency. In 2015, OEI of MONUSCO rated BANUAU 88.23%, BANATU 89.11% and BANASU 87.64%. This testifies quality jobs performed by BAF contingents in UN.

BAF contingents in UN mission have a trend of steady growth in achieving flying hours. Flying hours of BAF helicopters deployed in UN Mission was 206% in 2014 compared to that of 2006. Flying hours of BAF C-130 transport aircraft deployed in UN Mission was 260% in 2014 compared to that of 2010. These testifies the stride of all personnel of BAF aviation units in producing quality jobs. The following chart shows trend of BAF helicopter flying hours for last 10 years (baseline 2006) and C-130 flying hours since deployment (baseline 2010):

Chart 3 : Trend of BAF Helicopter and C-130 Aircraft Flying Hours in UN Mission



Source: Al-Mamun (2016)

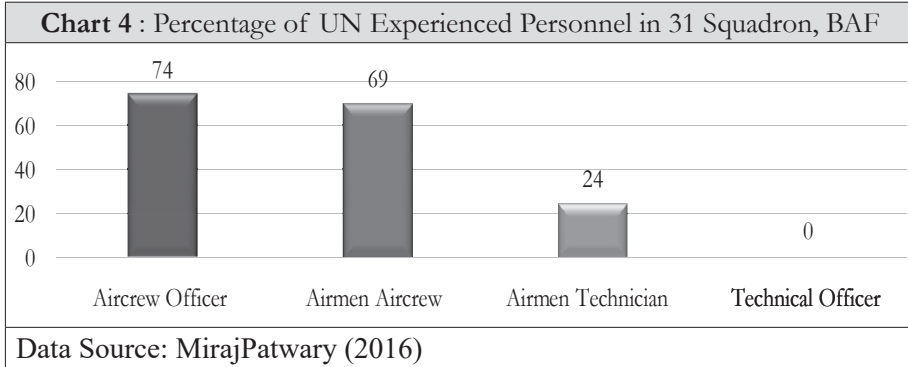
Capability to Operate in Distant Areas: Conduct of sustained air operations far away from Bangladesh gives BAF the priceless experience of overseas basing, which directly contributes to war readiness. The logistic management system of BAF comes under test every time a contingent is deployed to UN mission. Due to deployment in UN mission under ‘self-sustainment’ status, a large range of COE is required to be carried by BAF contingents. Reimbursement to TCC is made on the basis of the report of the COE inspections (Aziz Khan 2016 and Siddiqur Rahman 2016). Logistic personnel are engaged in establishing and maintaining logistic chain in every UN mission area where BAF operates. Example of standard achieved by BAF operational logistic system is shown in ‘Case Study – 3’.

Case Study 3: Flexibility of BAF Operational Logistics

OPERATION MONGOOSE was one of the largest joint operation by MONUSCO against armed rebel group Front for Patriotic Resistance in Ituri (FRPI). In January and June 2015, BANUAU flew 91 operational sorties in risky environment involving hostile fire. Despite mandated to provide 04 helicopters at a time for day flying only, during OPERATION MONGOOSE, often BANUAU simultaneously flew all 06 helicopters and flew at night many a times. Among those, most significant was on 15 June 2015, when BANUAU carried out a night CASEVAC in a sharp ridge and jungle area to rescue an Egyptian Special Force patient. Despite unstable strong wind at sharp ridge made the CASEVAC very risky, the helicopter hovered at 6500 ft and rescued the patient by winching at night (Atiquzzaman 2016).

Analyzing Impact on BAF Operations

Impact on BAF Combat Support Capability: Flying hours allotted to air force contingents are limited by UN budgetary allocation. But the actual requirement is much more. Many a times, BAF contingents fly more than LOA hours (Mazharul Karim 2016). Through performing all tasks of UN, BANUAUs and BANATUs are enhancing BAF combat support capability. After the mission, these personnel are posted to various BAF units. A study on 31 Squadron, BAF shows that UN experience of significant number of aircrew and technicians benefit in executing combat support tasks.



Impact on BAF Combat Capability: The personnel of BAF combat units are deployed in BAF contingents work with the UNair operations personnel of various nations. They make significant contribution towards taskachievement of BAF contingents. This gives intangible benefit towards capacity building of combat unitpersonnel and thereby has indirect impact on BAFcombat capability.

Impact on BAF Operational Tempo: The sheer volume of flying hours achieved by BAF contingents testifies the positive impact on BAFoperational tempo. Comparing flying hours with similar sized air force, operational tempo of BAF is much higher than others (Mazharul Karim 2016). Achieving high rate of flying hours has impacton overall flying hoursachievement of BAF.

Capacity Building: Morale is a critical enabler of warfighting. The branding of BAF in world forum affects the mindset of an airman sitting in Bangladesh, where an individual is inspired to face the complexities of future UN participation. The diverse experiences of UN participation including flying in combat environment, practical exposure to the Laws of Armed Conflict etchave significant contribution towards capacity building of BAF personnel. The cost of each flying hour in MI-17 helicopter, MI-171SH helicopter and C-130 aircraft is Taka 2,19,778.76, Taka 1,96,261.44 and Taka 7,33,659.27 respectively (Ministry of Defence 2013). Thus besides earning foreign currency through flying UNhours’ reimbursement; BAF gains intangible benefit of saving huge budgetary cost in operational training of aircrew.

UN mission provides a good opportunity to members of BAF contingents to enhance their individual operational skills. BAF operates MI-series helicopters for more than 3½ decades (Al-Mamun 2016). In 2015, for the first time in the history of BAF, 04 pilots have successfully qualified the prestigious ‘Advanced

Test Pilot Course’ from the MI-series helicopter manufacturing country Ukraine (Ishtiaque Chowdhury 2016). Flying experience in UN mission area has bolstered the capability and confidence of BAF pilots to undergo the rigorous training requirements of ‘Advanced Test Pilot Course’. A pilot who has qualified this course is capable of conducting flight test of MI-17 helicopter after factory level maintenance (Mustafizur Rahman 2016).

Impact of UN participation on Quality Vs Quantity: BAF attaches high priority to develop ‘skilled and knowledge based professionals’. BAF utilizes the opportunity of UN participation to develop multi-skilled professionals. Through exposure to multinational environment, these personnel consistently benchmark their expertise against airmen of other air forces.

Challenges for BAF Participation in UN Peacekeeping Contingents

Upholding National Interest: It is one of the key challenges for BAF participation in UN. The recent quantitative and qualitative changes in peacekeeping operations have strained UN’s resources and capacity, forcing it to adopt inclined approach towards regional peacekeeping arrangements. BAF follows an orthodox approach to meet all the requirements of UN. But the administrative chain of UN is quite different from military, bureaucratic and slow in nature. Often BAF contingents has to handle challenging situations through professional competency

Maintaining the Operational Status of BAF Contingents: Maintaining 100% serviceability rate and achieve high rate of flying hours in UN missions involve a wide spectrum of activities by Air Headquarters, bases, units. These includes maintaining the required skill of contingent personnel, conduct of timely rotation, addressing the issue of limited spares, rotation of aircraft and helicopters – these are handled by this concerted approach of BAF in a methodical manner.

Effect on Combat Support Operational Tasks in Bangladesh: BAF adopts a holistic approach in maintaining a balance between air assets in Bangladesh and UN deployment. Assessment of in country requirements is normally done before BAF accepts proposal for new UN deployment. Thus BAF makes endeavour to meet in-country requirements at a satisfactory state (Mazharul Karim 2016).

Modernization of BAF: To meet UN requirement, BAF helicopter and transport fleet are steadily expanding, making significant contribution on modernization of BAF. A significant benefit of UN participation is establishment of major maintenance infrastructure in BAF. BAF has recently established 216 Maintenance, Repair and Overhaul Unit – MRO (U), a dedicated maintenance facility for overhaul and major maintenance of MI series helicopters.

Risk Factor: The tour of duty at BAF contingent in UN mission involves risks to the individual and sacrifices of both individual and family members. Here, financial benefit is a moral factor that inspires a person to weigh benefit over risks and sacrifices. Currently a wider gap persists between the Consumer Price Index (CPI) vis-à-vis the Index of UN allowance. If this wider gap continues, it may lead to a situation wherein more number of officers may show unwillingness for UN mission.

Pre-Deployment Training: To work in mission area, BAF personnel requires certification from competent authority. Every year, a good number of BAF personnel undergo training at various BAF and civil aviation units. To complete all pre-deployment training in due time sometimes become very challenging for BAF contingents.

BAF Deployment in UN Peacekeeping Contingents vis-a-vis Optimizing Operational Capability

Knowledge Management: The challenge of developing knowledge-based and ‘multi-skilled’ professionals requires BAF to adopt a multi-disciplinary approach to make the best use of knowledge. Through a systematic process, their experience on critical issues may be shared with others to enhance the knowledge base.

Representation of BAF at Decision Making Level of UN: Despite significant UN peacekeeping mission, BAF is currently not represented in any of the commanding posts in UN peacekeeping operations. If appropriate representation of BAF at the decision making level of UN could be ensured, it might improve the operational environment of BAF contingents.

Risk Mitigation Measures: The future of peacekeeping operations involves much more complexity and risk. To retain the current pattern of manning the BAF contingents in UN peacekeeping mission require few pragmatic steps so that the ‘unwillingness’ factor does not surface as a significant issue.

Separate BAF Training Institute for UN Peacekeeping Contingents:

To prepare more skilled and capable personnel for air operations in UN peacekeeping contingents, a separate BAF training institute may be established. This institute would enable BAF to develop a pool of air professionals ready for quick deployment to meet any unforeseen UN requirement.

Increasing Vacancies for BAF Airmen: BAF deploys a significant number of airmen in the UN peacekeeping contingents. But their vacancies are yet to be included in establishment strength of BAF (Hassan Chowdhury 2016). This inhibits generation of more skilled manpower of BAF and denies certain critical benefits of BAF airmen.

Recommendations

Based on the findings of the research, following recommendations are made:

- BAF may adopt a multi-disciplinary approach for the best use of knowledge gained through UN participation.
- Strong persuasion may be done by Bangladesh government to ensure appropriate BAF representation at decision making level of UN.
- Pragmatic steps may be taken for risk mitigation and motivation of future BAF peacekeepers.
- A separate BAF institute may be established for conducting pre-deployment training of UN peacekeeping missions.
- The vacancies of airmen in BAF contingents in UN peacekeeping missions may be included in the establishment strength of BAF.

Conclusion

BAF started its journey during the War of Liberation with a scanty inventory. Today it has grown to a state which enables BAF ability to undertake diverse combat and combat support operations. Considering UNPSO as one of the core competencies, BAF has extended her services beyond national airspace through 02 decades of deployment UN peacekeeping contingents.

The security situation of mission areas mostly involves high risk, volatility and uncertainty with threat scenario involving attacks from rockets and mortar. BAF

aircrew are flying in combat environment involving high possibility of hostile fire. BAF aircrew gets practical exposure of adherence to laws of armed conflict. These invaluable experiences contribute towards capacity building of BAF aircrew.

BAF contingents had been instrumental in performing operational tasks of mission areas. Maintaining 100% serviceability rate, achieving high flying hours, participating in operations with forces of various nations, etc. have contributed to branding image of BAF in global forum. UN experience enhances capacity building of BAF of aircrew and technicians. The volume of flying hours achieved by BAF contingents has impact on the operational tempo of BAF as well. The operational training, human resource development, confidence building of individuals, overseas basing experience – all these effect combat support operational capability of BAF.

Deploying large number of air assets in UN peacekeeping contingents involves numerous challenges. Some of these challenges involve coordination with armed forces and the Government. Currently BAF is not represented in any of the commanding posts in UN peacekeeping operations. The risk factor needs a joint approach by the armed forces. To meet the challenges of pre-deployment training BAF peacekeeping contingents, necessity is felt to establish a separate training institute. Addressing all these would allow BAF to optimize impact of UN experience on her operational capability.

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REGIONAL PHYSICAL CONNECTIVITY IN SOUTH ASIA: IMPACTS ON NON- TRADITIONAL SECURITY THREATS IN THE REGION

Lieutenant Colonel Syed Jamil Ahsan, afwc, psc, AC

Introduction

Regional cooperation and integration has vast potential for accelerating economic growth, reducing poverty and economic disparity within and across the countries involved. Physical connectivity is one of the necessary preconditions for this integration. Importance of regional physical connectivity for economic development cannot be over emphasized. Success of regional connectivity in Europe is the best example where countries got integrated successfully for economic development even after the history of hundreds of years of wars among them. South Asia is still one of the most ill-connected regions of the world despite the fact that, this region has had intensive historical, political, economic, social and cultural relations among the nations from ancient times.

Among the multi-dimensional challenges, manmade non-traditional security threats has emerged in South Asia in such an endemic way that it requires serious concerns to combat the widespread crises the region facing to obtain an integrated South Asia [Rahman, 2014]. South Asia is presently experiencing expansion of manmade non-traditional security (NTS) threats in terms of weapon trafficking, drug trafficking, human trafficking, HIV, insurgency, illegal migration, smuggling, etc. which is a growing concern for member states. These threats are mostly trans-national which usually operate through unconventional routes in order to be safe from law enforcing agencies. Poverty and under development being few of the root causes of nontraditional security threats, regional connectivity might have positive effect being root cause of regional economic development. It is important to find out the effect of connectivity scheme in this region on non-traditional threats, domestic or trans-national.

The regional connectivity, being the key to regional economic development and better border management, could be reducing the very causes of non-traditional threats in South Asia. On the other hand, regional connectivity may as well open up routes of expansion of trans-national threats.

Regional Integration Through Physical Connectivity: South Asia Perspective

Connectivity in South Asia: Historical Overview

The first evidence of road development in the Indian subcontinent can be traced back to approximately 4000 BC from the ancient cities of Harrapa and Mohenjodaro of the Indus Valley Civilization. One of the most famous highways of medieval India was the Grand Trunk Road which is one of Asia's oldest and longest major roads. For more than two millennia, it has linked the eastern and western regions of the Indian subcontinent, connecting South Asia with Central Asia. It runs from Bangladesh to Afganistan, through India and Pakistsan.

Figure 1: The Grand Trunk Road.

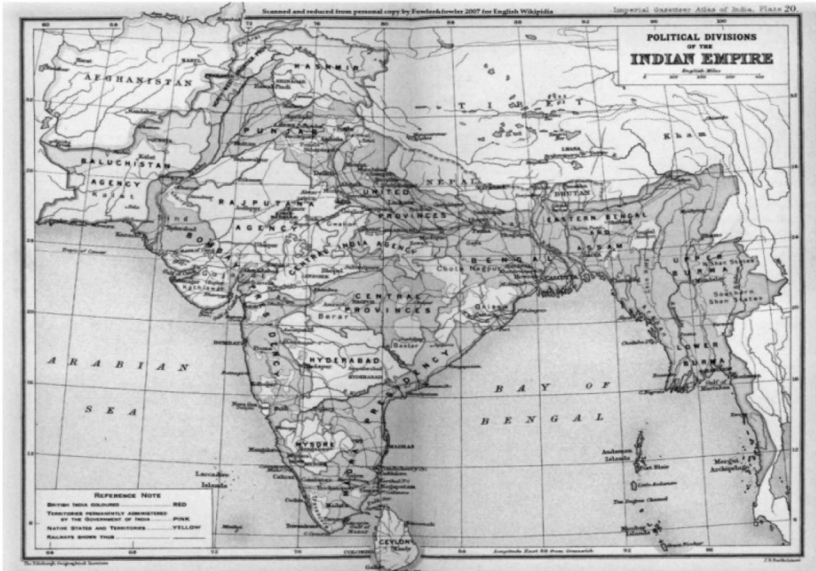


Source: Prepared by the author.

The British colonial ruler successfully separated the South Asia by predominantly two religious groups, i.e. Hindus and Muslims, which was the basis of division in 1947 with separate countries based on religious identities, namely Pakistan and India. It ultimately resulted in unprecedented riots and the displacement of a huge population across the political divisions. The region also experiences economic

disparity unlike Europe which has democratic systems, rule of law and high level of economic and social development and capitalism (Karim, 2014,P:306).

Figure 2: South Asia before 1947.



Source: <http://asiapacific.anu.edu.au>

Regional Physical Connectivity in South Asia: Bangladesh Perspective

Existing Road Network in Bangladesh to Facilitate Regional Connectivity: Bangladesh Sthala Bandar Kartripaksha (BSBK) was in 2001 with a view to facilitate bilateral/trilateral trade with neighbouring countries namely India, Nepal, Myanmar and Bhutan. Presently the numbers of land ports are 20 of which 5 ports are in operation under BOT excepting Birol. On the other hand, Benapole, Burimari, Akhaura and Bhomra land ports are being operated under Bangladesh land port Authority directly (BSBK, 2015). Following road routes may immediately support regional road connectivity:

Table 1: Existing Road Routes in Bangladesh for Sub-Regional Connectivity.		
Serial	Route	Description
1.	Route 1	Petrapole (India) - Benapole-Jessore-Dhaka-Brahmanbaria-Sylhet-Tamabil-Dawki (India)
2.	Route 1A	Petrapole (India) - Benapole-Jessore-Dhaka-Brahmanbaria-Akahura - Agartala (India)
3.	Route 2	Dawki (India)-Tamabil-Sylhet-Brahmanbaria-Comilla-Chittagong Port.
4.	Route 2A	Dawki (India)-Tamabil-Sylhet-Brahmanbaria-Akhaura-Agartala (India).
5.	Route 3	Kakarvita (Nepal)-Phulbari (India)-Banglabandha (Bangladesh)-Bogra-Jessore-Khulna-Mongla Port.
6.	Route 4	Thimpu (Bhutan)-Phuentsholing (Bhutan)-Jaigon (India)-Chengrabandha (India)-Burimari (Bangladesh)-Rangpur-Bogra-Jessore-Khulna-Mongla Port.
Source: Compiled by author.		

Bangladesh is part of Asian Highway Network (AHN) being one of the 32 member states of AHN. Out of 55 routes of AHN, following two routes are planned through Bangladesh:

Table 2: Asian Highway Network (AHN) in Bangladesh.		
Serial	Asian Highway	Description
1.	Asian Highway -1	Japan- South Korea- North Korea- China - Vietnam- Cambodia- Thailand- Myanmar-Bangladesh- India-Pakistan- Afghanistan- Iran-Turkey (Bulgaria border). The route inside Bangladesh would be Benapole- Jessore-Bhanga- Mawa- Dhaka- Kanchpur- Sylhet-Tamabil (495 km).
2.	Asian Highway -2	Indonesia-Singapore-Malaysia-Thailand-Myanmar-India - Bangladesh-India-Pakistan-Iran (Tehran). The route inside Bangladesh would be Banglabandha-Panchagarh-Bogra-Jamuna Bridge-Tangail-Dhaka-Kanchpur-Sylhet-Tamabil.

3.	Asian Highway -41	Mongla Port- Khulna- Jessore- Bonpara- Hatikumrul- Dhaka- Kanchpur- Comilla- Chittagong-Cox's Bazar- Teknaf- Gundhum (Myanmar) (752 km).
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Existing Rail Routes in Bangladesh to Facilitate Regional Connectivity: Though rail network of pre-partition period still exists now, hardly any movement observed between India –Bangladesh and no movement along Pakistan-India line. Existing rail links between Bangladesh and India meet as many as five places namely, Darsana, Rohanpur, Benapole, Birol and Shahbazpur. There is no link to Myanmar. Following existing rail routes would facilitate regional connectivity:

Table 3: Existing Rail Routes in Bangladesh for Sub-Regional Connectivity.		
Serial	Railway Routes	Description
1.	Railway Route-1	Mahishasan (India)-Shahbazpur-Kulaura-Chittagong.
2.	Railway Route -2	Gede (India)-Darshana-Jamuna Bridge-Tongi-Kulaura-Shahbazpur-Mahishashan (India).

Source: Compiled by author.

Bangladesh is part of Trans Asian Railway (TAR) network agreement being one of the members of 28 countries. Three TAR routes plans over Bangladesh as following:

Table 4: TAR Routes in Bangladesh.		
Serial	TAR Routes	Description
1.	TAR Route-1	Gede (India)-Darshana-Ishwardi-Jamuna Bridge-Joydevpur-Akhaura- Chittagong-Dohazari-Gundhum (Myanmar).
2.	TAR Route-2	Singabad (India)-Rohanpur - Ishwardi-Jamuna Bridge- Joydevpur- Akhaura- Chittagong-Dohazari- Gundhum (Myanmar).
3.	TAR Route-3	Radhikapur (India)- Birol - Ishwardi- Jamuna Bridge- Joydevpur- Akhaura- Chittagong-Dohazari- Gundhum (Myanmar).

Source: Compiled by author.

Existing Marine Water Ways in Bangladesh to Facilitate Regional Connectivity: Bangladesh currently has three sea ports with a deep sea port at Sonadia in planning stage. The ports are at Chittagong, Mongla and Paira. Presently three designated inland water routes are available with very limited use. These Inland Water routes are:

Table 5: Inland Water Routes in Bangladesh.

Serial	Inland Routes	Water	Description
1.	Inland Route -1	Water	Kolkata (India)-Raimongol-Mongla-Barisal-Chandpur-Serajgonj-Bahadurabad-Chilmari-Dhubri (India).
2.	Inland Route -2	Water	Kolkata (India)-Raimongol-Mongla-Barisal-Chandpur-Narayangonj-Bhirab Bazar-Sherpur - Karimganj (India)
3.	Inland Route -3	Water	Sittwe Port (Myanmar)-Teknaf (through Naaf river).

Source: Compiled by author.

Existing Aviation Gateway in Bangladesh to Facilitate Regional Connectivity: At present, aviation activities are being carried out from 3 international and 12 domestic airports, about 38 airlines are now operating in and out of the country; about 43 States signed bilateral agreements with Bangladesh. The three International air gateways i.e. Hazrat Shahjalal International Airport (HSIA), Shah Amanat International Airport and Osmani International Airport. There are 12 domestic airports all around the country at Cox’s Bazar, Rajshahi, Jessore, Saidpur, Barisal, Tejgaon, Bogra, Shamshearnagar, Ishwardi, Comilla, Thakurgaon and Bagerhat.

Regional Connectivity in South Asia: Current Initiatives

At the 16th Summit of South Asia Association for Regional Cooperation (SAARC) in Thimphu, Bhutan in 2010, member countries declared 2010-2020 as the —Decade of Intra-regional Connectivity in SAARC. Bangladesh and India have made substantial progress in the field of physical connectivity during the visit of Prime Minister Narendra Modi to Dhaka. Both the sides agreed to open new road linkages and revive the British-era transport networks, especially railways and waterways (Bhattacharjee, 2015).

Land Connectivity Agreements with Bangladesh: Major agreements related to land connectivity are:

- Motor Vehicle Agreement among BBIN on June 2015 to facilitate trade, investment and people-to-people contact among the four South Asian countries.
- Bilateral agreement signed by India and Bangladesh for bus services in Kolkata-Dhaka-Agartala and Dhaka-Shillong-Guwahati routes. Efforts are on to open bus services on the Kolkata-Chittagong, Shillong-Chittagong, Kolkata-Khulna, Kolkata-Jessore and Silchar-Karimganj-Sylhet routes.
- The Intergovernmental Agreement on the Asian Highway Network.
- The SAARC Regional Multimodal Transport Strategy Study.
- BILTS for connectivity within and between South Asia and Southeast Asia.
- Bangladesh-Myanmar Bilateral Agreement of 2007 for a link road i.e. Bangladesh-Myanmar Friendship Road.
- Bilateral Agreement for Motor Vehicle passenger Traffic with India related to Dhaka-Kolkata-Dhaka and Dhaka-Agartala-Dhaka route duly signed in 1999 and 2001 respectively.
- SOP for Movement of Cargo Vessel in Bangladesh-India-Nepal. It allows cargo vehicle from Nepal to enter 200 meters in Bangladesh at Banglabandha.
- Joint Communique by India and Bangladesh on 7 road routes, 5 rail routes and one inland water transport route were identified by this for further regional connectivity.

Rail Connectivity Agreements with Bangladesh: Major agreements related to rail connectivity are:

- Agreement on Khulna-Kolkata Railway Link. India and Bangladesh have shown keen to augment railway connectivity during Modi's visit to Dhaka on June 2015, particularly to revive the links that existed before the 1965 India-Pakistan war. Responding to the popular demand of opening a train service between Khulna and Kolkata, the two sides have agreed to initially operate this once in a week via the longer Gede-Darsana route.
- Agreement on Dhaka- Kolkata Railway Link inaugurated on 14 April 2008 runs thrice a week between the two countries.

- Agreement on Agartala - Akhaura Railway Link was signed between India's former Prime Minister Dr Manmohan Singh and Bangladesh Premier Sheikh Hasina during her visit to India in January 2010.
- Intergovernmental Agreement on the Trans-Asian Railway (TAR) Network.

Marine Water Connectivity Agreements with Bangladesh: Major agreements are:

- **Agreements with India**
 - Trade Agreement signed between India and Bangladesh of 1972 provides Indian transit across Bangladesh along two designated Inland Water Transport (IWT) Protocol routes.
 - The two countries also signed a coastal shipping agreement to facilitate cheaper and faster cargo movement between them during Modi's visit on June 2015. The new pact will allow Indian vessels to carry goods using Chittagong and Mongla ports; while Bangladeshi ships could now carry goods using the Indian ports like Haldia, Paradip and Vishakhapatnam.
 - Agreements with Myanmar. Bangladesh and Myanmar has signed an agreement on June 2008 to allow shipping companies of both the countries in transportation of sea borne cargo from the ports of both the countries.

Benefit of Regional Connectivity in South Asia

South Asia has a tremendous potential for economic integration through better connectivity but issues on national sovereignty, national security, political tensions, mistrust between countries, etc. have left the region barely connected.

Following are few benefits of better regional connectivity in South Asia:

- Trade Generation.
- Increased Market Size.
- Better Harmony.
- Political Cooperation.
- Employment Opportunities.
- Step Forward for Global Trade.
- Infrastructural Development.
- Accelerated Economic Growth.
- Poverty Reduction.
- Reduction of Economic Disparity within and across the Countries.

Non-Traditional Threats: South Asia Perspective

There are great differences between 20th and 21st century from international security point of view. 20th Century was a century of traditional wars between states. Besides two world wars, more than 250 wars occurred in 20th century. 21st century appeared with different type of security challenges-the Non-traditional Security threats.

The rise of a number of non-state actors, such as terrorist networks, drug traffickers, human traffickers, maritime piracy networks, and intra-state conflicts (e.g. civil wars) are emerging as new-age threats to the national security of states. The technological revolution in the 21st century has have aided the development of cyber-warfare and cyber-espionage, triggering the slow shift of the battlefield to cyberspace (Srikanth, 2014, P:1).Non-traditional security threats of South Asia can broadly be divided as follows (BISS, 2015):

Table 6: Types of Non-traditional Security: South Asia		
Security	Domestic/ Trans-national	Non-traditional Threat Examples in South Asia
Societal Security	Trans-national	Arms trafficking
	Trans-national	Drug trafficking
	Trans-national	Human trafficking (Child and Women)
	Both	Terrorism
	Domestic	Political violence
	Domestic	Gender violence
	Domestic	Repression by state apparatus
	Domestic	Death in custody
	Trans-national	Illegal migration
Economic Security	Both	HIV, etc.
	Domestic	Mass poverty
	Domestic	Food security
Environmental Security	Trans-national	Smuggling, etc.
	Trans-national	Climate change
	Trans-national	Natural disasters
	Trans-national	Arsenic crisis
	Trans-national	Deforestation, etc.
	Source: Compiled and reorganized by author.	

Manmade Threats to Societal Security: South Asia Perspective

Threats to societal security are generally the manmade and trans-national in nature. South Asia is experiencing almost all types of societal security threats. This research is oriented along three important societal security concerns namely, arms trafficking, drug trafficking and human trafficking which are elaborated in the subsequent paragraphs.

Arms Trafficking: Arms trafficking is of external or trans-national in nature. Though Bangladesh experiences less arms trafficking than what is happening in India or Pakistan, it is a major concern for Bangladesh for its increasing rate and overwhelming impact (BISS, 2015). Out of the 63 million SALW in circulation among non-state actors in South Asia, the majority is illegal (Humanitarian News and Analysis, 2006). Cambodia, Myanmar, and Thailand are major sources of illicit weapons for South Asian non-state actors. The widespread proliferation of small arms in Afghanistan and Pakistan began with the Russian invasion of Afghanistan in 1979. India supplied the separatist militant Liberation Tigers of Tamil Eelam in Sri Lanka with weapons from 1983 through 1987 (Humanitarian News and Analysis, 2006). The main causes of arms trafficking in South Asia could be as following (Banerjee and Muggah, 2002):

- Border disputes.
- Lack of effective border management systems.
- Poorly trained and under-resourced personnel in the law enforcing agencies.
- Lack of regional cooperation on the issue.
- Ready availability of arms.
- Administrative negligence in controls.
- Common use of SALW.
- Poverty.
- Under development.
- Drug abuse.
- Unhealthy political culture.

Drug Trafficking: Drugs trafficking is also an external or trans-national type of threat. Drug is indeed a major concern for Bangladesh. Bangladesh is considered as a potential transit route for Yaba to the other part of the region too. South Asia is surrounded by world's largest zones of illicit opium production and trafficking, the Golden Crescent (Afghanistan, Pakistan, and Iran) in the west and Southeast Asia's Golden Triangle (Myanmar, Laos and Cambodia) in the east. Afghanistan alone produces almost 90 percent of the world's illicit opium. Beyond Afghanistan's immediate border regions, a significant portion of South Asia's heroin is trafficked through areas in which Maoist separatists are active in India. The major causes of drug production and trafficking in South are as following (Finley, et al, 2014):

- Inefficient border management.
- Insufficient capacity at border points, seaports, and airports, in terms of improved narcotics-detection gear and techniques, as well as surveillance systems and scanners.
- Deficiency of effective methods for collecting and sharing information on drug traffickers.
- Absence of inter-departmental cooperation at the national level,
- Inadequate coordination at the regional and international levels with regard to border security, law enforcement cooperation, and intelligence sharing.
- Poor framework for mutual legal assistance and extradition.
- Lack of economic opportunities for the drug producers.
- Poverty.
- Under development.

Human Trafficking: South Asia is experiencing the increasing exploitation of women and children trafficking. Child Trafficking is reported in nearly all countries in South Asia. Bangladesh, India and Nepal have more data than the other countries in the region, while only Bhutan and Maldives have more recent information on trafficking (UNICEF, 2009. P:08). Many trafficked persons, especially women and girls, may be unaware of their status as victims of crime or unwilling to report crimes against them to authorities they do not know and do not trust (UNWOMEN, 2013). Following are the social determinants of human trafficking (Perry and McEwing, 2013, P:143-145):

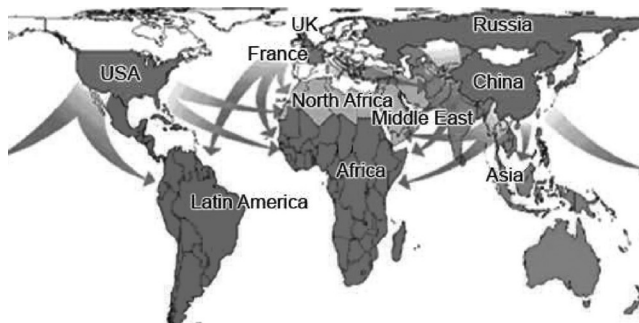
- Poverty.
- Gender (both male and female children, and women are vulnerable to trafficking).
- Lack of policy and law enforcement.
- Illiteracy and low levels of education.
- Ignorance on trafficking (especially among women migrating for jobs).
- Conflicts.
- Various regional cultures (e.g. placing a lower value on women in families, society, and policy).
- Demand for cheap/free labor.
- Open borders, relaxed enforcement, lack of document requirements, and corruption of border patrol agents.

Effect of Regional Physical Connectivity on Manmade Non-Traditional Security Threats in South Asia

Effect of Regional Connectivity on Arms Trafficking in South Asia

The Small Arms Survey, an independent research project based in Switzerland, published in its 2003 report that at least 1,134 companies in 98 countries worldwide are involved in some aspect of the production of small arms and ammunition. The largest exporters of small arms by value are the European Union and the United States. In 2010, the exporters' list was led by the USA and followed by Italy, Germany, Brazil, Austria, Switzerland, Israel, Russia, South Korea, Belgium, China, Turkey, Spain and the Czech Republic (SAS, 2003).

Figure 3: Arms Trade: From Richer Countries to the Poorer.



Source: Citizenship Education, CSPE.tv <<http://www.cspe.tv/id97.html> >.

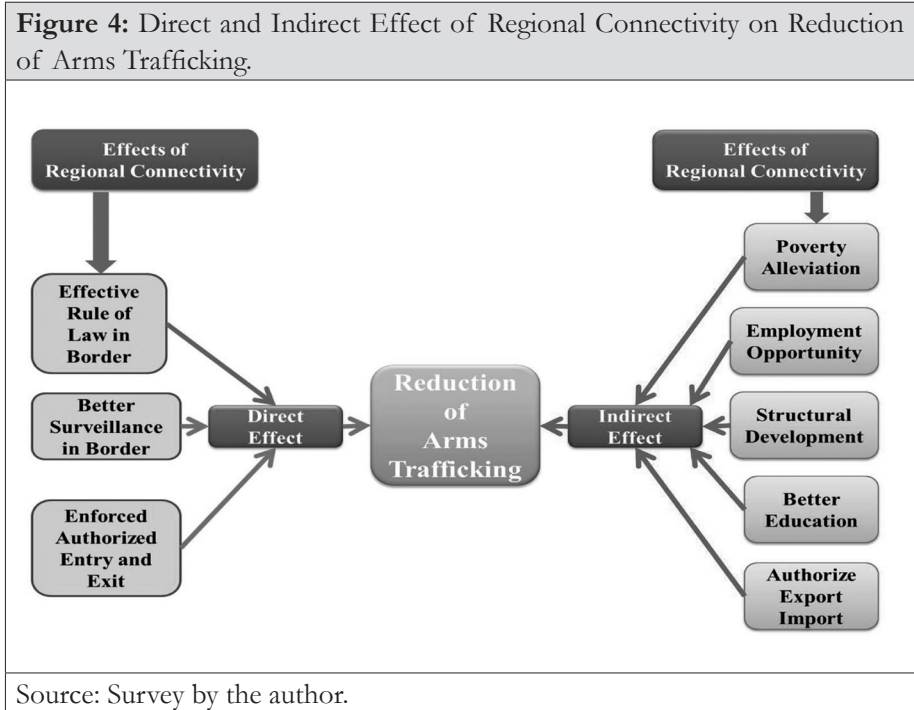
The empirical data also shows that most weapons are sold to armed groups of poorer countries. This means that while richer countries benefit from the jobs and money made in the arms trade, people in poorer countries are victims and sufferer (Citizenship Education, 2015: p 1). Therefore, it can be presumed that, as under-development makes a nation natural victim of illegal arms trafficking, economic development may reduce such vulnerability.

On a survey among military officers, civil professionals and university students, on what effect better regional connectivity may have over illegal arms trafficking in South Asia, 85%-95% of the respondents opined that it would reduce involvement of people in such illegal act.

Answering to another question on what positive outcomes of regional connectivity may directly or indirectly reduce arms trafficking in the region, responses of the survey were very common and may be divided into two heads for better understanding as following:

Direct Effects on Arms Trafficking: Better regional connectivity would result in effective rule of law, better surveillance, ensured authorized entry and exit, etc. in the border which may directly affect the frequency of arms trafficking by keeping it under control.

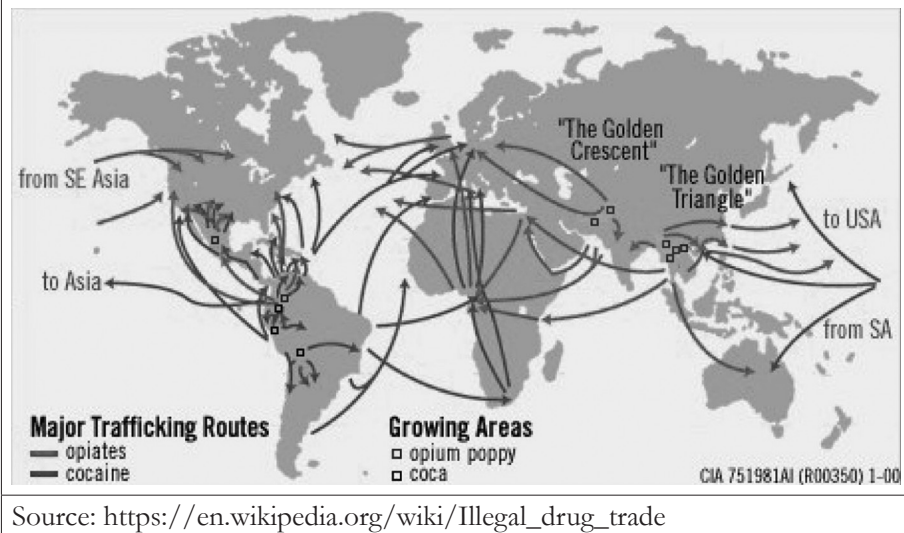
Indirect Effects on Arms Trafficking: The economic growth as a result of regional connectivity would indirectly reduce the arms trafficking. Most of the respondents opined that this reduction would be materialized through poverty alleviation, employment opportunity, structural development, better education, authorize import-export, etc.



Effect of Regional Connectivity on Drugs Trafficking in South Asia

Drug trafficking - the global illicit trade involving the cultivation, manufacture, distribution and sale of substances which are subject to drug prohibition laws is estimated to be a \$32 billion industry (UNODC,2015). Crammed between the ‘Golden Triangle’ and ‘Golden Crescent,’ the major global producers of psychotropic drugs, the South Asian region is the principal transit route for psychotropic drugs (Monoharan, 2003, p:1).

Figure 5: Major Drug Trafficking Routes and Cramp of South Asia between “The Golden Crescent” and “the Golden Triangle”.



The drug affected and trafficker groups on ground are generally poor people of Bangladesh. The Dhaka Tribune reports on 12 September 2013 that, about one in three of surveyed drug users in Bangladesh are illiterate and about six or seven out of ten has different levels of formal education. Although most drug users have some form of occupation, many have modest to poor income. Studies indicate that majority of the surveyed drug users have monthly income between Tk1,000 to Tk4,000. Different studies also indicate that 5% to 18% of the drug users earn less than Tk50 per day (Zaidi, 2013, p:1). Therefore, poverty, under development and poor education remain the key causes regarding drug abuse and illegal drug trade in Bangladesh.

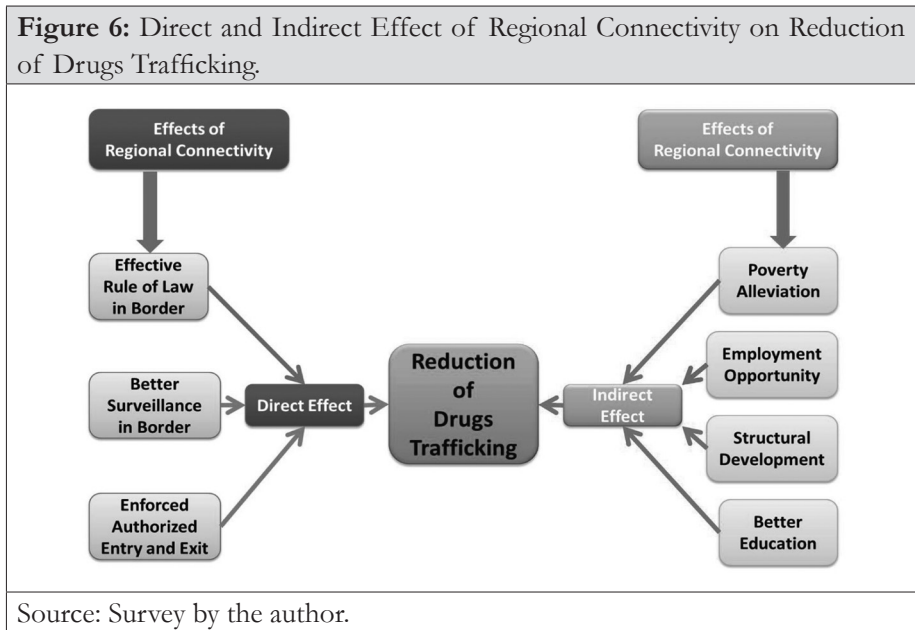
On a survey among military officers, civil professionals and university students, on what effect better regional connectivity may have over illegal drug trafficking in South Asia, 85%-90% of the respondents opined that it would greatly or moderately reduce involvement of people in such illegal act.

Answering to another question on what positive outcome of regional connectivity may directly or indirectly reduce drugs trafficking in the region, received responses of the survey may be divided into two heads for better understanding as following:

Direct Effects on Drugs Trafficking: Greater regional connectivity would present effective rule of law, better surveillance, ensured authorized entry and exit,

etc. in the border which may directly reduce the frequency of drugs trafficking by keeping it under check.

Indirect Effects on Drugs Trafficking: The economic growth as an outcome of regional connectivity would indirectly reduce the drugs trafficking. Most of the respondents opined that this reduction would be materialized through poverty alleviation, employment opportunity, structural development, better education, etc.



Effect of Regional Connectivity on Human Trafficking in South Asia

In recent years, the human trafficking has attracted growing international attention. It is, to a large extent, a symptom of relative and absolute poverty. It is also a consequence of gender inequality and lack of respect for children’s rights (SIDC, 2003, p:7). The main countries of origin in South Asia are Bangladesh and Nepal, while India and Pakistan are destination countries. Trafficking inside India is also extensive. Girls and young women from poor rural areas are sold into prostitution and marriage in the cities. Some boys are sold to Pakistan, where they are forced to work on building sites and in agriculture. Boys have also been sold to the Middle East as camel jockeys (SIDC, 2003, p:12). From the data available in South Asia, it appears that the worst forms of trafficking relate to the illegal movement of women and children for the purposes of exploitation in sectors

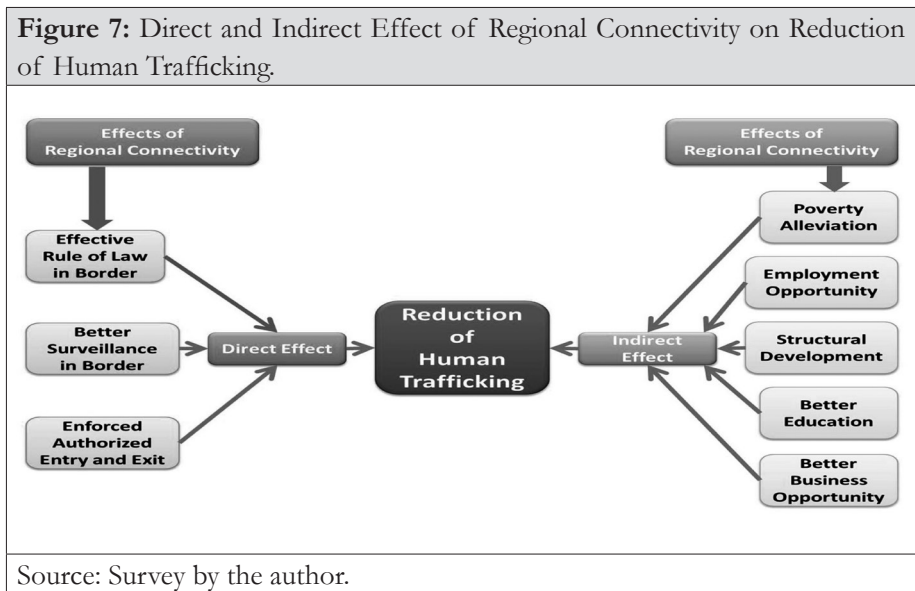
such as commercial sex work, and child labor of all forms (ADB, 2003, p:18).The people become the victims of human traffickers mainly due to poverty and high rate of youth unemployment (SIDC, 2003, p:16,17).

On a survey on what effect better regional connectivity may have over human trafficking in South Asia, 90%-93% of the respondents opined that it would greatly or moderately reduce involvement of people in such illegal act.

Answering to next question on what positive outcome of regional connectivity may directly or indirectly reduce human trafficking in the region, received responses of the survey may be divided into two heads for better understanding as following:

Direct Effects on Human Trafficking: Enhanced regional connectivity would result in effective rule of law, better surveillance, ensured authorized entry and exit, etc. in the border which may directly reduce the occurrence of human trafficking by keeping it under strict observation.

Indirect Effects on Human Trafficking: The economic boost as a product of regional connectivity would indirectly reduce the human trafficking. Most of the respondents opined that this reduction would be materialized through poverty alleviation, employment opportunity, structural development, better education, better business opportunity, better social life, etc.



Recommendations

Following are recommended:

- Government of Bangladesh should be proactive in pursuing better regional or sub-regional connectivity for economic development.
- Government of Bangladesh should invest for infrastructural development in the ports, road, rail and air ways facilities in order to facilitate connectivity initiatives.
- Government of Bangladesh should take the benefits of physical connectivity at sub-regional or regional level to develop the underdeveloped areas in order to curb the generation and growth of nontraditional security threats.
- Bangladesh being the connecting country between South Asia and South-East Asia, connectivity with Myanmar should be exploited to the best in order to develop the under-developed area around the border, and thereby curbing the illegal arms, drug and human trafficking.

Conclusion

South Asia is one of the least integrated regions of the world despite the recent initiatives taken by Bangladesh Prime Minister Sheikh Hasina and Indian counterpart Narendra Modi in connecting the countries at sub regional level. Historically this region used to be a single entity, called Bharatbarsha, which was divided by the British colonial power on the basis of religion. Since then the mutual distrust had been the key factor of dis-connected South Asia.

Economic disparity exists at sub regional and domestic level in South Asia due to lack of integration in the region. Indian north-eastern states are unique examples. Due to lack of physical connectivity in terms of road or rail or water networks, the remote areas of the region remained underdeveloped and gave birth to many illegal trades and insurgencies in South Asia.

21st Century is overwhelmed by Nontraditional security threats, unlike 20th century being a century of state to state clashes. While traditional security is mostly concerned with the states territorial integrity and sovereignty, nontraditional security threats are mostly related to human security. Apart from the natural disasters, South Asia is overwhelmed by many transnational and domestic societal non-traditional security threats like, illegal arms trafficking drug trafficking, human trafficking, insurgency, terrorist activities, etc.

Poverty is one of the root causes of illegal arms, drug or human trafficking in the world in general and in the South Asia in particular. The under development, lack of free and good education are the other important causes which stimulates the growth of such illegal acts. Poor people are vulnerable to be both the affected and the carriers of these illegal trafficking. Inadequate management system in the border directly helps such illegal acts to expand.

Regional connectivity is one of the most effective tools of rapid economic and social development of the connected countries in general and connected remote areas in particular. Thus regional connectivity can reduce the growth of transnational and domestic non-tradition security threats in South Asia, particularly arms, drug and human trafficking. Better law and order, surveillance and enforced authorized entry and exit of people and good in the border, etc are the inevitable outcome of regional connectivity that would directly reduce the drugs trafficking in the region. Therefore, recent initiatives of Bangladesh and India in promoting the regional physical connectivity to be continued and quickly implemented in order to achieve better regional trade generation, regional harmony, employment opportunities, infrastructural development, accelerated economic growth, poverty reduction, etc and thereby reducing the non-traditional security threats making it a South Asia of peace, prosperity and harmony.

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Lieutenant Colonel Syed Jamil Ahsan, afwc, psc was commissioned in Armoured Corps on 16 June 1995 and joined 4 Horse. He commanded an armoured regiment and squadrons in Bangladesh, and an mechanized company at UN Peace Keeping Mission. He was Staff Officer at Forces Headquarters at United Nations Mission in Liberia, at National Defence College, Doctrine Division of Army Training and Doctrine Command, and at an Infantry Brigade Headquarters. He was instructor at Armoured Corps Centre and School, and at Bangladesh Military Academy. Besides mandatory and other courses at home, he was trained in Armoured Forces Engineering Institute, Beijing, China and at Armoured Corps School at Fort Knox, Kentucky, USA. He is a graduate of Defence Services Command and Staff College, Mirpur and National Defence College, Bangladesh. He has number of publications in his credit in the professional journals and dailies. Presently, he is General Staff Officer Grade-1 (Training) at National Defence College, Bangladesh.

EVOLVING REGIONAL SECURITY LANDSCAPE OF THE ASIA- PACIFIC

**Lieutenant General Chowdhury Hasan Sarwardy, BB,
SBP, BSP, ndc, psc, PhD**

(A keynote paper presented by Commandant NDC, Bangladesh, Lieutenant General Chowdhury Hasan Sarwardy, BB, SBP, BSP, ndc, psc, PhD during the 21st ASEAN Regional Forum Heads of Defence Universities/Colleges/Institutes Meeting 2017 organized by ASEAN Regional Forum (ARF) at Sofitel Philippine Plaza Manila, Manila, Philippines on 17-21 September 2017)

General

The Asia-Pacific region, typically covering much of East Asia, South Asia, Southeast Asia, and Oceania, includes a number of nations and a huge population with mosaics of ethnicity, language, culture, traditions and colourful histories. In recent times the region has undergone significant changes in terms of regional security structure, political and economic cooperation & development. These growing economic and political pre-eminence coupled with complex dynamics of international relations and regional politico-economic intricacies have definitely caused certain security concerns in the region. The potential security landscape sprouting in the region should be viewed with this backdrop.

The Evolving Regional Security Order

The security order in the Asia-pacific is in a flux. The emergence of new regional cum global actors with increasing economic and political influences has reshaped the regional security landscape of the region to a great extent. Traditionally, the USA has long maintained permanence in the region and also pronounced every intention of maintaining its leading role with its 'rebalancing' or 'pivot' foreign policy to Asia. On the other hand, China is a vital economic partner to many in the region and the countries like Russia, Japan, India, Australia and South Korea have also maintained effective economic and military relationship with many. In this evolving scenario, how to maintain a pragmatic balance between the thriving countries has become a rational concern. Hence, the regional countries caught in this paradoxical ball game surely have to play smart. The last thing is expected

however, is the development of a cold-war like scenario or confrontational politics between these key actors or others, which, definitely would be extremely detrimental to all in the region.

The Korean Peninsula: Critical North–South Dynamics

There is no denying the fact that Korean Peninsula is a significant hotspot in the region. The relations between South and North Korea have often swung like pendulum from tentative cooperation to near-conflict situation. The threats of pre-emptive conventional and nuclear attacks has always clouded the security landscape of the region. Particularly the nuclear issue is a great concern for all. Moreover, the probable proliferation of nuclear arsenal and long range missile technology is also a point of worry. The perceived tug of war between the great powers and their strategic alliances with North and South Korea remain as the cornerstone in this regard.

Maritime Security: Trade and Energy Flow and Boundary Delimitation

Over the years, the region has transformed into a centre of gravity for global trade and energy flow. The strategic location of the Indian and Pacific oceans along with the Bay of Bengal and the Malacca, Sunda and Lombok straits- the great pathways for shipping of essential trade and energy has underscored the energy security as a critical kingpin in the security conundrum. Hence, energy security has become a key feature in the security landscape of the region. At the same time, the rise of non-military threats such as illegal arm smuggling and piracy in the maritime domain have further complicated the maritime scenario. Furthermore, the dispute over maritime boundary delimitation and on ownership of vital islands or sea areas will essentially endure as the bone of contentions among the littorals. The growing competitions to exert influence over disputed areas and the concurrent rapid growth of naval capacity building by the concerned countries will have significant security implications in the region.

Non-Traditional Security Threats: The Climate Change

In non-traditional security parlance, the climate change issue coupled with natural calamities are particularly becoming worrisome, particularly for the developing countries like Bangladesh. The unwarranted sea-level rise may pose serious threat in the availability of food, water, health and shelter. The subsequent loss of livelihood, assets and displacement may lead to economic deprivation and lower quality of life for the affected group of people. Although, resilient people of countries like Bangladesh, are constantly trying to adapt and cope with the changing climate scenario, but it is not the permanent solution. Particularly, in light of the fact that the Indian Ocean is now storing 70% of heat stored by global oceans in the previous decade, need a serious look into this issue.

Refugee Crisis

More than '400-thousand' refugees from Myanmar, had scrambled across the Bangladesh border very recently to escape alleged extrajudicial killings, torcher, rape and arson attacks. The latest influx of displaced people took the total number of refugee in Bangladesh heading towards about one million. In fact, Bangladesh is struggling to provide humanitarian assistance to these refugees, most of whom are women and children. In this backdrop, Honourable Prime Minister of Bangladesh Sheikh Hasina, reiterate that the Bangladeshi government would do the best to continue to render humanitarian support to these refugees, but that Myanmar needed to "take steps to take their nationals back to their own homeland".

It is also to be noted here that the sense of deprivation and marginalisation often breed radicalism. Seemingly, the huge number of refugees particularly hosted in Bangladesh, remain vulnerable to indoctrination and recruitment by radical groups, which was also duly indicated by the Advisory Commission led by Mr Kofi Annan. This will not only affect national security of Bangladesh or Myanmar but surely would have serious implications on enduring peace in the region. Necessary regional and international efforts are urgently essential to solve this humanitarian crisis immediately and albeit permanently.

Terrorism: Bangladesh Experience

There is no denying the fact that, the rise of terrorism has evolved as the greatest threats to democracy, economic development and pose perilous challenges to national, regional and international peace. This international phenomena is also equally affecting regional country like Bangladesh.

Bangladesh however, is not and never was a breeding ground for terrorist, rather according to many, it is a spill-over effect of the middle-east crisis, Afghan war, Iraq War and other extra regional factors. In recent years, Bangladesh experienced number of sporadic terrorist activities in public places. Especially, the much talked about 1st July 2016 terrorist attack in a Dhaka restaurant, was a heinous blow against humanity and social harmony of Bangladesh.

Counter Terrorism: Bangladesh Perspective

The government of Bangladesh, under the able leadership of Honourable Prime Minister Sheikh Hasina, is following a “zero tolerance” policy against terrorism. Bangladesh pursues a value driven foreign policy as articulated by the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman, who proved the outlook of “friendship to all and malice to none”. This unique maxim also inter-alia promotes peace, democracy, communal harmony, human rights, good governance and social justice to combat violent extremism and fundamentalism.

Internationally, Bangladesh is party to all the universal anti-terrorism instruments. The Government of Bangladesh supports the implementation of the UN Security Council Resolutions 2170 and 2178; in prevention of entry, transit, recruitment, organizing, transporting, financing and equipping of foreign terrorist fighters activities.

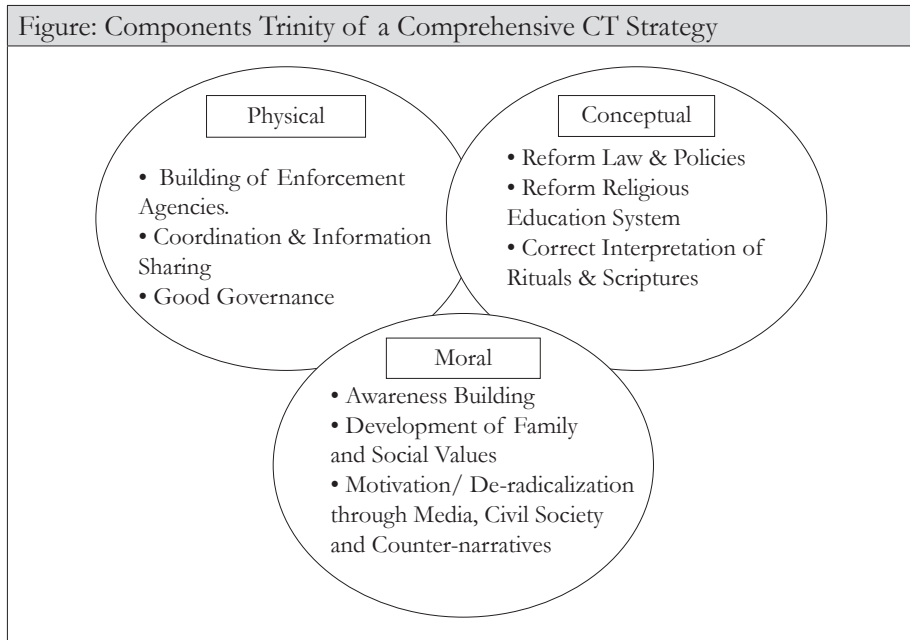
At the national level, Bangladesh has developed a robust legal, regulatory and institutional regime to combat terrorism. The Government has promulgated the Anti-Terrorism Act - 2009 (further amended in 2012 and 2013), and Anti-Terrorism Rules – 2013. Alongside, the Government has also promulgated Money Laundering Prevention Act - 2012, which includes among others, terrorism and terrorist financing.

In domestic realm, the Government of Bangladesh has already banned several terrorists’ outfits and groups. Many of the perpetrators of bombing incidents

including their kingpins were tried and convicted. The Government is also working on further capacity building of the relevant law enforcement agencies to effectively combat transnational terrorism, organized crimes, and violent extremism.

Counter Terrorism: Way Forward

Bangladesh recognizes the necessity of a holistic approach involving all the national and regional stakeholders to eradicate terrorism from the region. Thus, an all-inclusive and a comprehensive approach to counter-terrorism and radicalization is required to meet the challenges posed by contemporary extremist and terrorist groups. This would demand de-radicalization programmes, involving the active participation of educational institutions, law enforcement authorities, the media and the civil society. A comprehensive counter-terrorism (CT) strategy may essentially encompass conceptual, physical and the moral components as follows:



Looking Ahead: Crystal Gazing

Securing cyber space will pose serious security challenges in future. The recent 101 million dollar money transfer scam from Bangladesh Bank to the Philippines and Sri Lanka has showed us the rogue nature of the cyber-attacks even during peace time. Side by side looming competitions on controlling outer space is surely going to occupy the future security parlance. The Fourth Industrial Revolution builds on the Digital Revolution marked by phenomenal technological breakthroughs in robotics, artificial intelligence (AI), nano-technology, quantum computing, biotechnology, etc will have great potential to continue to extraordinarily expand the people to people connectivity & lifestyle changes. On the other hand these would also create new-fangled security concerns. We need to be very smart in mastering and managing the Fourth Industrial Revolution, which will be exceedingly challenging.

Author

Lieutenant General Chowdhury Hasan Sarwardy, BB, SBP, BSP, ndc, psc, PhD is the Commandant of National Defence College, Bangladesh. He was commissioned in the Corps of Infantry on 15 June 1980. In his glorious military career, he has fine mixed of command, staff and instructional appointment. He commanded Infantry Battalion, 1st Bangladesh Battalion (which trains the cadets of Bangladesh Military Academy), Rifles Battalion, Rifles Sector, Infantry Brigade, Bangladesh Ansar and Village Defence Party, Special Security Forces, Logistics Area, Infantry Division and Army Training and Doctrine Command. As staff he served as General Staff Officer, Grade-1 in Formation and Army Headquarters, Director Operations in Border Guard Bangladesh and Director Military Intelligence in Army Headquarters. As instructor he conducted training in Switzerland, United States and Nepal on United Nations affairs. He was the Founding Member and Chief Instructor of both Non Commissioned Officers' Academy and Bangladesh Institute of Peace Support Operations Training. He also served in Mozambique as United Nations Military Observer and Chief of Operations of Bangladesh Contingent in Sierra Leone. He was the Vice Chancellor of Bangladesh University of Professionals.

The General is a graduate of Defence Services Command and Staff College and National Defence College, Bangladesh. He also obtained LLB degree and Master's degrees in Defense Studies, Security Studies, Political Science and Business Administration. He has successfully completed PhD degree from Bangladesh University of Professionals.

General Hasan received gallantry award 'Bir Bikrom' for displaying unfathomable courage in counter insurgency operations. His contribution in Chittagong Hill Tracts Peace Accord on December 2, 1997 is worth mentioning. He led the rescue operations of Tazreen Garments, Savar on December 2012 and Rana Plaza, Savar on April 2013. For these rescue operations he received the coveted 'Senabahini Padak', which is the highest non-operational award in Bangladesh Army. He was also the architect of two Guinness World Record making events of Bangladesh; 'Largest Human Flag on 16 December 2013' and "Most People Singing National Anthem Simultaneously" on 26 March 2014. On this field he received the coveted 'Bishisto Seba Padak', which is also another non-operational award in Bangladesh Army.

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