

ISSN: 1683-8475

NDC JOURNAL



VOLUME 12

NUMBER 1

JUNE 2013

**A Professional Journal of National Defence College
Bangladesh**

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

Surat Al - 'Alaq (The Clot) XCVI



A Professional Journal of National Defence College

Volume 12 | Number 1 | June 2013

National Defence College
Bangladesh

EDITORIAL BOARD

Chief Patron

Lieutenant General Mollah Fazle Akbar, ndc, psc

Editor-in-Chief

Brigadier General Gazi Md Solaiman, nswc, afwc, psc, G

Editor

Colonel Muhammad Shahnoor Rahman, afwc, psc

Associate Editors

Captain Syed Misbahuddin Ahmed,(c), afwc, psc, BN
Lieutenant Colonel Md Shahriar Rashid, psc

Assistant Editors

Senior Assistant Secretary Mohammad Nazmul Hasan
Civilian Staff Officer-3 Md Nazrul Islam

DISCLAIMER

The analysis, opinions and conclusions expressed or implied in this Journal are those of the authors and do not necessarily represent the views of the NDC, Bangladesh Armed Forces or any other agencies of Bangladesh Government. Statements of fact or opinion appearing in NDC Journal are solely those of the authors and do not imply endorsement by the editors or publisher.

INITIAL SUBMISSION

Initial Submission of manuscripts and editorial correspondence should be sent to the National Defence College, Mirpur Cantonment, Dhaka-1216, Bangladesh. Telephone: 88 02 9003087, Fax: 88 02 8034715, E mail : ndcbangladesh@gmail.com. Authors should consult the Notes for Contributions at the back of the Journal before submitting their final draft. The editors cannot accept responsibility for any damage to or loss of manuscripts.

ISSN: 1683-8475

Subscription Rate (Single Copy)

Individuals : Tk 300 / USD 10 (including postage)
Institutions : Tk 375 / USD 15 (including postage)

All rights reserved. No part of this publication may be reproduced, stored in retrieval system, or transmitted in any form, or by any means, electrical, photocopying, recording, or otherwise, without the prior permission of the publisher.

Published by the National Defence College, Bangladesh

Design & Printed by : Graphic Source Limited

5, B.C.C Road, Nawabpur, 2nd Floor, Dhaka-1203, Bangladesh
Phone: 880-2-9514119, 7125057, E mail: graphicsource23@gmail.com

CONTENTS

	Page
College Governing Body	iv
Vision and Mission Statement of the College	vi
Foreword by the Commandant	vi
Editorial	vii
Faculty and Staff	viii
List of Individual Research Papers: 2012	ix
Abstracts	xvi
Political Economy of Tourism in Chittagong Hill Districts <i>By - Brigadier General A K M Shafiul Mowla, ndc, psc</i>	1
Importance of Intermodal Transportations and Communication Infrastructure in Developing Present Hinterland Connectivity with Ports of Bangladesh <i>By - Commodore Yahya Syed, (C), ndc, afwc, psc, BN</i>	27
Effectiveness of Legal and Institutional Framework for Juvenile Justice in Bangladesh: A Critical Analysis <i>By - Additional Secretary Md Anwarul Islam Sikder, ndc</i>	43
Trends of Multi Polarity: Analysis, Implications for Regional and Global Peace <i>By - Brigadier General Gaudence Salim Milanzi, ndc</i>	63
Extent and Magnitude of Urban Poverty: Challenges and Way Forward <i>By - Group Captain Mohammad Mostafizur Rahman, ndc, psc, GD(P)</i>	85
Nigeria's National Security: Challenges and Prospects for the Armed Forces <i>By - Colonel Ben-Bella Ahmed Raji, ndc</i>	105
Climate Change and National Response: Bangladesh Perspective <i>By - Group Captain Javed Tanveer Khan, afwc, psc, GD(P)</i>	123
Nigeria's Maritime Resources Protection: Integrated Approach for the Armed Forces <i>By - Captain (NN) Williams Onovuhe Kayoda, ndc</i>	143
Long Term Energy Security for Bangladesh: Feasibility of Nuclear Power <i>By - Lieutenant Colonel Abu Mohammad Sarwar Farid, afwc, psc</i>	161

COLLEGE GOVERNING BODY

PRESIDENT

Sheikh Hasina
Hon'ble Prime Minister
People's Republic of Bangladesh

SENIOR VICE PRESIDENT

Major General **Tarique Ahmed Siddique**, rcds, psc (retd)

VICE PRESIDENT

General **Iqbal Karim Bhuiyan**, psc; Chief of Army Staff
Vice Admiral **M Farid Habib**, (ND), ndc, psc; Chief of Naval Staff
Air Marshal **Muhammad Enamul Bari**, ndc, psc; Chief of Air Staff

MEMBERS

Lieutenant General Mollah Fazle Akbar, ndc, psc
Commandant, National Defence College

Mr. Fazle Kabir, ndc,
Secretary, Ministry of Finance

Lieutenant General Abu Belal Muhammad Shafiul, Huq, ndc, psc
Principal Staff Officer, Armed Forces Division

Khondokar Md Asaduzzaman,
Secretary, Ministry of Defence

Mr. Abdus Sobhan Sikder
Senior Secretary, Ministry of Public Administration

Md Shahidul Haque
Secretary, Ministry of Foreign Affairs

Major General Sheikh Md. Mamun Khaled, psc
Vice Chancellor, Bangladesh University of Professionals

Dr. Kamal Abdul Naser Chowdhury
Secretary, Ministry of Education

Major General Md Mahfuzur Rahman
ndc, afwc, psc
Commandant, Defence Services Command & Staff College

Professor Dr. A A M S Arefin Siddique
Vice Chancellor, Dhaka University

Professor Dr. Anwar Hussain
Vice Chancellor, Jahangir Nagar University

Professor Dr. Harun-or-Rashid
Vice Chancellor, National University

MEMBER SECRETARY

Brigadier General Md Latiful Haider, ndc, psc;
College Secretary, National Defence College
Captain Bashir Uddin Ahmed, (G), psc, BN; Colonel General Staff,
Defence Services Command & Staff College

VISION AND MISSION STATEMENTS OF THE COLLEGE

VISION

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

MISSION

To educate and train selected senior Armed Forces and Civil Services officers at operational and strategic level of national security and development.

To focus on long term national security and development issues and suggest appropriate national response.

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 relation in Bangladesh.

To strengthen Military to Military cooperation in the region and beyond.



FOREWORD

National Defence College is on its track since 1999 with a vision: “to develop as the national centre of distinction on security studies- meeting the challenges of the 21st century”. Since then 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. Now 15 years track record recognizes this premier institution at home and abroad profoundly.

National Defence College has always been emphasizing on conducting research in contemporary issues on defence and national security. 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 of any country. The college journal is a mirror image of the research works that are carried out at the college. I am pleased to note that the first part of 12th issue of the NDC Journal contains the selected “Individual Research Paper ” of the Course Members of both National Defence Course - 2012 and Armed Forces War Course - 2012. The Editorial Board has accommodated assorted subjects and stepped up the excellence. It is my firm believe that the readers will find the articles worth reading and academically thought-provoking.

I congratulate all the members who have contributed to this journal. I thank the Editorial Board for editing and publishing the journal timely. This issue of the journal is yet another landmark in the path of advancement of National Defence College, Bangladesh.

MOLLAH FAZLE AKBAR
Lieutenant General
Commandant

EDITORIAL

NDC Journal (Volume 12) 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 are selected from individual research papers that the members of the Course had submitted as part of the course curriculum. The Course Members, during nearly a yearlong stay in the NDC spent a lot of time doing research on security and development related issues. The College believes that a senior officer from military and civil service should have a good understanding of the major economic, political and social issues facing the nation and be able to recommend measures to face the challenges.

National Defence College has been very regular in bringing out its 'NDC Journal' every year on time. This speaks of highly laborious effort and genuine commitment on the part of both the editorial staffs and writers. While research papers are usually of 10000 -15000 words, the abridged versions are of 4000 -6000 words. The abridgement is executed in a manner that the inner significance and depth of the contents do not lose their objectives and preciseness.

Sixty three members of the National Defence Course-2012 and twenty four members of Armed Forces War Course-2012, as integral part of their course requirement, prepared Individual Research Papers (IRP) on topics pertinent to national security and warfare strategy. Out of all IRPs in total 9 (nine) have been adjudged for publication in the current issue in abridged form. The articles reflect complex and intricate multidimensional issue emanated from the long diversified experiences and the curriculum based deliberations and discourse during their trainings on various topics concerning comprehensive national security.

This volume includes papers of different categories concerning national security. These draw attention to Political Economy of Tourism in Chittagong Hill Districts, Importance of Intermodal Transportations and Communication Infrastructure in Developing Present Hinterland Connectivity with Ports of Bangladesh, Effectiveness of Legal and Institutional Framework for Juvenile Justice in Bangladesh: A Critical Analysis, Trends of Multi Polarity: Analysis, Implications for Regional and Global Peace, Extent and Magnitude of Urban Poverty: Challenges and Way Forward, Nigeria's National Security: Challenges and Prospects for the Armed Forces, Climate Change and National Response: Bangladesh Perspective, Nigeria's Maritime Resources Protection: Integrated Approach for the Armed Forces, and Long Term Energy Security for Bangladesh: Feasibility of Nuclear Power. 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 Mollah Fazle Akbar, ndc, psc, 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.

GAZI MD SOLAIMAN
Brigadier General
Senior Directing Staff (Army)

LIST OF FACULTY AND STAFF

COMMANDANT

Lieutenant General Mollah Fazle Akbar, ndc, psc

NDC FACULTY

Brigadier General Gazi Md Solaiman, nswc, afwc, psc, G, SDS (Army-1)
Brigadier General Mesbah-Ul Alam Chowdhury, ndc, afwc, psc, SDS (Army-2)
Commodore Muhammad Anwarul Islam, ndu, afwc, psc, SDS (Navy)
Air Commodore M Sanaul Huq, ndc, psc, SDS (Air)
Joint Secretary A F M Nurus Safa Chowdhury, ndc, SDS (Civil)
Director General Saquib Ali, ndc, SDS (Foreign Affairs)

AFWC FACULTY

Brigadier General Muhammad Shams-Ul Huda, afwc, psc, CI
Colonel F M Zahid Hussain, afwc, psc, DS (Army-1)
Colonel Abu Sayed Mohammad Ali, afwc, psc, DS (Army-2)
Lt Col Md Faizur Rahman, afwc, psc, DS (Army-3)
Captain Syed Misbahuddin Ahmed,(C), afwc, psc, BN, DS (Navy)
Group Captain Javed Tanveer Khan, afwc, psc, GD(P), DS(Air)

STAFF

Brigadier General Md Latiful Haider, ndc, psc, College Secretary
Colonel Muhammad Shahnoor Rahman, afwc, psc, Director, Research & Academic
Lieutenant Colonel Shahriar Rashid, psc, Senior Research Fellow-1
Lieutenant Colonel Md Muniruzzaman, psc, Senior Research Fellow-2
Lieutenant Colonel Abdul Motaleb Sazzad Mahmud, afwc, psc, GSO-1 (Trg)
Lieutenant Colonel Hasan Shahriar, psc, GSO-1 (Admin)
Major SK Golam Mohiuddin, Staff Officer
Major Md Shahidul Alam, Staff Officer
Major Md Mizanur Rahman Sikder, psc, GSO-2 (P&C)
Major Khan Mohammad Fazle Mukit, QM
Squadron Leader M Farhad Hossain Khan, psc, GSO-2 (SD)
Major Wasiuddin Ahmed, Ord, GSO-2 (Admin)
Major Mohammad Masudur Rahman Khan, GSO-2 (Network Admin)
Major Shahed Ahmed Chowdhury, psc, GSO-2 (Coord)
Major Mohammad Ali Akkas, MTO
Major Md Mukim Uddin, Inf, GSO-2(Coord), AFWC Wing
Lieutenant Commander Mahbuba Afroze, (L), BN, GSO-2 (TS)
Captain Md Alamgir Hossain, GSO-2 (Accounts)
Senior Assistant Secretary Mohammad Nazmul Hasan, Research Coord
Mr Md Nazrul Islam, CSO-3 (Library)
Flight Lieutenant Saifa Zaman Bubli, GSO-3 AFWC

**LIST OF INDIVIDUAL RESEARCH PAPERS
NATIONAL DEFENCE COURSE - 2012**

1. ASEAN Regional Forum – Progress or Digression from ASEAN Charter
Lieutenant Colonel Hussein bin Dato Paduka Haji Mohamad, ndc
2. Impact of China’s Security Situation on the Korean Peninsula
Colonel Li Jinsen, ndc
3. Egyptian Security Strategic Interests in the Region of the Nile Basin in light of International Changes
Brigadier General Yassen Saber Mohammad Attya, ndc
4. Turkey’s Role in the Middle East: Strategy of Cooperation for the National Security of Egypt and the Arab world
Brigadier General Nasser Kamaleldin Fathalla Saleh, ndc
5. Indo-Bangladesh Land Border: A Boundary without Enclaves
Brigadier Alok Singh Kler, ndc
6. Piracy in Indian Ocean Region and Possible Role for the Regional Navies to Counter the Menace
Commodore Mukul Asthana, ndc
7. The Iranian Military Capabilities and their Impact on the Security of the Arabian Gulf
Colonel Ahmad Mesleh Mohammad Al-zoubi, ndc
8. Al Qaeda and its Regional Allies: Challenges to Security and Stability in Southeast Asia
Brigadier General Dato’ Md Tajri bin Alwi, ndc
9. Ro Hin Gya’s Predicament: Implication for Bangladesh – Myanmar Relations
Colonel Sein Tun Hla, ndc
10. Disarmament, Demobilization and Reintegration of Ex-Militants in the Niger Delta Region: An Analysis of the Implementation Strategy of the Amnesty Programme
Colonel Ibrahim Manu Yusuf, ndc
11. Decline in Education Standards in Nigeria: Implications on National Security
Colonel SO Olabanji, ndc

12. Nigeria's National Security: Challenges and Prospects for the Armed Forces
Colonel BA Raji, ndc
13. Global Peace Support Operations : Imperative for a New Strategic Vision with Special Attention on Nigeria
Captain (NN) OE Adoga, ndc
14. Minimizing Sea Blindness of Policy Makers for overall Development of Nigeria: The Way Forward
Captain (NN) EA Israel, ndc
15. Modern Management Techniques in Nigerian Armed Forces: An Assessment
Captain (NN) AO Adaji, ndc
16. Nigeria's Maritime Resources Protection: Strategies for the Armed Forces
Captain (NN) WO Kayoda, ndc
17. Arab Spring: Lessons Learned for Developing Nations with Special Emphasis on North Africa
Captain (NN) OM Odey, ndc
18. The Economics of Peacekeeping Operations: The Nigerian Experience
Group Captain JK Baba, ndc
19. Human resource Development in the Nigeria Armed Forces: An Appraisal of the current NAF Training
Group Captain TA Awoyoola, ndc
20. Banking Sector Reforms and Economic Development in Nigeria
Group Captain AB Bagare, ndc
21. Religious Extremism and National Security in Nigeria: The Boko Haram Case Study
Group Captain IS Kaita, ndc
22. Privatization and National Development in Nigeria: Challenges and Prospects
Group Captain FG Oparah, ndc
23. Security Challenges for Pakistan in 21st Century- Impacts in the South Asian Region
Brigadier Saeed Zafar Dar, ndc

24. Iranian Quest for Nuclear Power and the West
Brigadier General (Pilot) Nasser Saleh Bughenaim, psc
25. The fall of LTTE – Implications for Regional and International Security
Air Commodore P. D. K. T. Jayasinghe, ndc
26. Trends of Multi Polarity: Analysis, Implications for Regional and Global Peace: Recommendations
Brigadier General GS Milanzi, ndc
27. Piracy in the Arabian Sea and Gulf of Aden - Implications in Global Trade and Sea Routes of Communication
Captain (Navy) Galib Bin Dakhilullah Wasal Al Guthami, ndc
28. Rain Water Harvesting for Better Water Management in Bangladesh
Brigadier General Md Moazzem Hossain, ndc, psc
29. Political Economy of Tourism in Chittagong Hill Districts
Brigadier General A K M Shaful Mowla, ndc, psc
30. Green House Effect and its Impact on the Socio-Economic Activities in Bangladesh
Brigadier General Md Golam Mowla Bhuiyan, ndc, psc
31. Transit to India: Effect on the Economy and Security of Bangladesh
Brigadier General A K M Sadat Hossain Chowdhury, ndc, psc G
32. Extension of Compulsory Primary Education up to Grade VIII – Challenges and Way Forward
Brigadier General Md Shah Alam Chowdhury, ndc, afwc, psc
33. Informal Border Trade – Impact on Bangladesh-India Relations
Brigadier General Md Mehdi Hassan, ndc, afwc, psc
34. China-Myanmar Relations: Implication for Bangladesh
Brigadier General Tameem Ahmed Chowdhury, ndc, psc
35. Unifying Madrasa Education under National Curriculum with Emphasis to Vocational Training: Challenges and Prospects
Brigadier General Md Firoz Rahim, ndc, psc, G
36. India's Strategic Interest in the 21st century: Implications for Bangladesh
Brigadier General Md Abdur Razzaque, ndc, psc

37. Economic Cooperation for Poverty Reduction in South Asia - Challenges and Opportunities
Brigadier General A K M Akhtaruzzaman, ndc, psc
38. Earthquake in Bangladesh: Need for a Comprehensive Plan
Brigadier General Kazi Sharif Kaikobad, ndc, psc, G
39. Human Security in South Asia: Meeting the Challenges
Brigadier General Md Obaidul Haque, ndc, afwc, psc
40. Non-Traditional Security Issues in Bangladesh with Particular Reference to Health
Brigadier General Mohammad Yusuf, ndc, afwc, psc
41. Global Recession: Challenges for Bangladesh and the way ahead
Brigadier General Abul Kashem Md Ibrahim, ndc, afwc, psc
42. Bangladeshi Women in Socio- economic Development : Analysis and Strategy for Future
Brigadier General Md Mahbulul Haque, ndc, afwc, psc
43. Impact of Good Governance on National Security of Bangladesh
Brigadier General Md Siddiquil Alam Sikder, ndc, psc
44. Trans- Border Trafficking in South Asia – Implications for Bangladesh
Brigadier General Mizanur Rahman Khan, ndc, afwc, psc
45. Community Health Service – A New Horizon for Bangladesh
Brigadier General A K M Mustafa Kamal Pasha, ndc
46. Waterways: An Instrument of Comprehensive National Security
Commodore Mohammad Akhtar Habib, (ND), ndc, ncc, psc, BN
47. Importance of Intermodal Transportations and Communication Infrastructure in Developing Present Hinterland Connectivity with Ports of Bangladesh
Commodore Yahya Syed, (C), ndc, afwc, psc, BN
48. Managing the Edible Oil Market for Consumer Benefit in Bangladesh
Captain Mohammad Abdur Razzak, (S), ndc, psc, BN
49. Integrating the Street Dwellers in the Development Process of Bangladesh: Challenges and Prospects
Group Captain Md Salamat Ullah, Engg, ndc
50. Extent and Magnitude of Urban Poverty : Challenges and Way Ahead for Social/Economic Development
Group Captain Mohammad Mostafizur Rahman, ndc, psc, GD (P)

51. Total Quality Management (TQM) in Bangladesh: An Imperative for Growing Industries
Group Captain Ashraf Uddin Faroque, Engg, ndc
52. Effectiveness of Legal Framework for Juvenile Justice in Bangladesh
Additional Secretary Md Anwarul Islam Sikder, ndc
53. Bangladesh – Russia Economic Relations : Trends and Opportunities
Joint Secretary Mohammad Abdul Quadir, ndc
54. Engendering Civil Service in Bangladesh
Joint Secretary Begum Zikrur Reza Khanam, ndc
55. Population Control in Bangladesh: Challenges & Prospects for Socio-Economic Development
Joint Secretary Md Zaydul Haque Molla, ndc
56. Potentiality of Bangladeshi Commodities in the Japanese Market – Problems and Prospects
Joint Secretary Abul Mansur Md Faizullah, ndc
57. New Challenges to Public Governance in Bangladesh
Joint Secretary Gazi Mohammad Julhash, ndc
58. E-Governance in Bangladesh: Challenges and Prospects
Joint Secretary Md Rezaul Karim, ndc
59. Employment Generation in Bangladesh –Role of ICT
Joint Secretary Aminul Bar Chowdhury, ndc
60. Role of CAG in Ensuring Financial Discipline
Joint Secretary N. M. Jahangir Hossain, ndc
61. Participatory Action Research for Human Development of the Scavengers in Bangladesh
Joint Secretary Begum Salma Nasreen, ndc
62. Police – Public Relations: Confidence Building for Law- enforcing Agencies in Bangladesh
Deputy Inspector General Md Mesbahunnabi, ndc
63. Branding Bangladesh: Ideas and Challenges
Director General Md. Shameem Ahsan, ndc

LIST OF INDIVIDUAL RESEARCH PAPERS
ARMED FORCES WAR COURSE - 2012

1. Prospect of Maritime Resource Exploration in Bangladesh Maritime Zone
Lieutenant Colonel Md Afzal Hossain, afwc, psc, Engrs
2. Eradicating Child Labour: Options for Bangladesh
Lieutenant Colonel Kabir Ahmed, afwc, psc, Inf
3. Management and Skill Development for Unemployed Population
Lieutenant Colonel Md Faizur Rahman, afwc, psc, Inf
4. Prospects and Challenges of PPP by Bangladesh Armed Forces
Lieutenant Colonel Md Ahsanul Kabir, afwc, psc, Engrs
5. Migration due to Climate Change: Implications
Lieutenant Colonel Ejaz Hakim Afriecq, afwc, psc, Arty
6. Energy Security of Bangladesh: Effects and Remedies
Lieutenant Colonel Abu Mohammad Sarwar Farid, afwc, psc, AC
7. Capital Market of Bangladesh – Causes of failure in exploiting its Potential for Industrialization and Probable Way-out
Lieutenant Colonel Iqbal Ahmed, afwc, psc, Sigs
8. FDI inflow in Bangladesh: Challenges and Way Ahead
Lieutenant Colonel Md Tajul Islam Thakur, afwc, psc, G, Arty
9. Non Traditional Security with focus to Health, Education and Internal Security
Lieutenant Colonel Mohammad Hafizur Rahman, afwc, psc
10. Technology Transfer: Whether a Gateway to Economic Development of Bangladesh
Lieutenant Colonel Md Maksudul Haque, afwc, psc, Ord
11. Economic Development and National Security: Bangladesh Perspective
Lieutenant Colonel Muhammad Wasim-ul Haq, afwc, psc, Inf
12. Bangladesh-India Land Border: Issues and Management
Lieutenant Colonel Md Mahbub Ul Alam, afwc, psc, Inf

13. Arab Spring in the Middle East: Implications
Lieutenant Colonel Md Nurul Anwar, afwc, psc, G, Arty
14. Future Security Challenges in South Asia: Preparedness of Bangladesh
Lieutenant Colonel Mamun-Ur-Rashid, afwc, psc, Inf
15. Expatriate Bangladeshi Workers and Capacity Building for Skilled Manpower: Challenges for Bangladesh
Lieutenant Colonel J M Emdadul Islam, afwc, psc, Inf
16. Prospects and Challenges of introducing Solar Energy System in Bangladesh
Lieutenant Colonel Md Naheed Asgar, afwc, psc, ASC
17. Bangladesh India Common Rivers Water Sharing Issue: Problem and Prospect
Captain Ashraful Hoq Chowdhury, (G), afwc, psc, BN
18. Construction of Deep Sea Port: Prospects and Challenges
Commander M Joynal Abedin, (ND), afwc, psc, BN
19. Prospects and Challenges of Ship Building Industries in Bangladesh
Commander A K M A Azim, (S), Afwc, psc, BN
20. Non-Formal Education in Bangladesh: Implications
Commander M Mostafizur Rahman, (TAS), afwc, psc, BN
21. Climate Change and National Response: Bangladesh Perspective
Group Captain Javed Tanveer Khan, afwc, psc, GD(P)
22. Transnational Security Threat: Relevance to Bangladesh
Wing Commander Md Readad Hossain, afwc, psc, ADWC
23. Building up a Modern Task Oriented Defence Force in Bangladesh: Options and Implications
Wing Commander Md Ahsanur Rahman, afwc, psc, GD (P)
24. Minimizing dependency on RMG and Diversification of Export
Wing Commander Md Siddiqur Rahman, afwc, psc, Log

ABSTRACT

POLITICAL ECONOMY OF TOURISM IN CHITTAGONG HILL DISTRICTS

Brigadier General A K M Shaful Mowla, ndc, psc

The Chittagong Hill Districts termed as 'Land of Promise', considering its picturesque scenic natural beauty and vast resources both in agricultural and mineral resources. This part of Bangladesh experienced protracted insurgency between the government and Parbattya Chattagram Jono Sanghati Samiti, which terminated by signing of Peace Accord in 1997. Signing of an accord should be viewed to end violence and ethnic tension, but begins with the aim of conflict management to establish peace and harmony. Sustainable peace can be ensured by establishing a conducive and durable environment where every tribe, nationality and individuals can live peacefully with equitable rights and have access to social justice, resources and opportunities of the state. In these perspective, the economic and industrial development efforts taken for the CHT area undertaken by the GoB on a massive scale. Spectacular development has been achieved in such diverse field as road-building, telecom, health, agriculture, fishery, cottage industry, education, tourism and employment of tribal people. As a result there have been significant achievement in socio-economic development. Economic development in any form will pave the way of political solution of any issue and prevailing misconception. Govt recently decided to hand over all the departments to HDC as mentioned in peace agreement. Govt also clarified her position on Indigenous issue and possible all steps have been taken to resolve land issue. This process need to be nurtured and consistently sustained by the democratic national policy and tribals alike with tolerance, patience and care. Present trend of development process need to be accelerated with all possible recognized and acceptable means. CHT has sufficient attractions and facilities to develop tourism not only as one of the best tourist zones of Bangladesh but also of whole of the South Asia. If developed properly tourism can increase National GDP growth upto 5% annually. Besides, poverty alleviation and employment opportunity tourism will have direct impact on political economy of the region. This study is empirical and analytical in nature. The study tries to analyze prevailing socio-economic condition as well as political situation of the area. Also analysis made on the development impact and possible future development strategy in a acceptable manner for sustainable peace. Possibility to promote tourism in this region is analyzed from various angle and shown how it effects on political economy of the region. At the end some suggestions are made for the promotion of tourism.

IMPORTANCE OF INTERMODAL TRANSPORTATIONS AND COMMUNICATION INFRASTRUCTURE IN DEVELOPING PRESENT HINTERLAND CONNECTIVITY WITH PORTS OF BANGLADESH

Commodore Yahya Syed, (C), ndc, afwc, psc, BN

With consistence 5% plus GDP growth for last two decades, Bangladesh has emerged as one of the most viable and growth oriented economy of Asia. At same time, globalization and trade liberalization paralleled by the revolution in information and communications technologies are continually advancing and significantly altering existing markets and triggering a race for the future. To pick up the pace in the development marathon, Bangladesh needs to improve the type and quality of transport and logistics services and infrastructure. The massive growth in containerization which introduced the modern concept of Multimodal Transport has shifted the cargo delivery system from “port-to-port” to “door-to-door”. The fundamental objective of intermodalism is not only to optimize a single mode of transportation but also to integrate the modes into an optimal, sustainable and ethical system. Such a system should promote efficiency, safety, mobility, economic growth and protection of the natural environment. The biggest impediments to intermodalism are bottlenecks on the corridors from ports to hinterland. Due to lack of infrastructure capacity, such as rail slots, congestion in roads and draught restriction in waterways, seamless handling of containers is still a great challenge for Bangladesh.

This study hopes to complement this ambition by pointing to the way forward towards developing multimodal transport in the country to contribute towards the greater objective of creating a world-class logistics industry in Bangladesh. It is formulated to provide a foundation upon which nationwide seamless and integrated system can be established. Their collective thrust lead to the suggestion that the various transport modes are integrated with the supply chain towards creating a more efficient supply chain and inter-transport links in the country. The recommendations put forth in this paper can help to address the presently disjointed linkages amongst the transport modes in the country, leading to a national policy on multimodal transport development to remove obstacles and inefficiencies towards ensuring an efficient and rapid transportation of container in the country.

EFFECTIVENESS OF LEGAL AND INSTITUTIONAL FRAMEWORK FOR JUVENILE JUSTICE IN BANGLADESH: A CRITICAL ANALYSIS

Additional Secretary Md Anwarul Islam Sikder, ndc

In Bangladesh, the level of implementation and enforcement of legislations particularly related to juvenile justice is far away from expectation. Attempt has been made to conduct a research to find out the weaknesses and shortcomings

of these legislations and also the implementation mechanism. Collecting data mainly from secondary sources such as national and international legislations, conventions and partly taking feedback from relevant FGD and KII the issue was examined and analysed. From the study it is found that the legislations are not suitable and updated for an effective Juvenile Justice System. The machinery to enforce these legislations and to provide optimum service to the juveniles is not appropriate. Hence it is recommended that along with other laws the Children Act 1974, the most important law relating to juvenile justice should be updated keeping conformity with the international standard. Juvenile courts in all districts and sufficient well equipped certified institutions should be established. However, it is equally important to provide necessary resources for activities related to child welfare, adoption of diversion and non custodial measures which will reduce the frequency of children's coming contact with the law. In the long run, it is required to develop non-criminogenic attitude and behavior of children by engaging themselves in socially useful activities, providing them a non-polluted congenial environment and adopting a humanistic orientation towards society and life.

TRENDS OF MULTIPOLARITY: IMPLICATIONS FOR REGIONAL AND GLOBAL PEACE

Brigadier General Gaudence Milanzi ndc, psc

The current debates on the global trends of multipolar system have been dominated by discussions on what appears to be a shift of economic power from the West to the East. Most significant in the current trend is the rise of China and India, the two large economies with a combined population of 2.3 billion and unprecedented GDP growth averaged 9.1% and 6.1% respectively for over a decade. It is said if China maintains this growth rate, it will surpass USA in overall economic output in about two decades. The USA is still the mightiest in global military power and force projection capabilities and will continue to play a prominent part in shaping the world geopolitical scenario but what is also seen at present is its inability to influence the global political landscape decisively like in the past. New players in the international scene, the countries which in the past were in the periphery of global politics and considered as mere spectators, are now trying to make themselves noticeable through economic and security cooperation.

The UN continues to be grappling with the challenges of management of international conflicts, its internal administrative and security reforms and the search for the ways to foster coordination with regional bodies which are increasingly becoming more autonomous. This paper has recommended for a proper assessment on how to deal with the new asymmetrical threats or threats without boundaries as the UN calls them which are now emerging and appear

to threaten global peace and security, to find a lasting solution on the current stalemate of the Security Council reforms and to closely monitor and remain seized on the growing rival race of trade route in the Indian Ocean and also the South China Sea which, if not closely watched, could become Asia's major military flashpoint. The survival of the UN depends very much on how it will trade in a fine line so as to become neither irrelevant to the security imperatives of the big powers nor become their mere rubberstamp.

EXTENT AND MAGNITUDE OF URBAN POVERTY: CHALLENGES AND WAY FORWARD

Group Captain Mohammad Mostafizur Rahman, ndc, psc, GD (P)

The report aims to explore the extent and magnitude of urban poverty. It is based on both secondary sources and primary data. Primary data were collected from selected areas of Dhaka city. Dhaka has experienced a higher rate of urban growth in recent decades and transformed into a megacity. But correspondingly the infrastructure development has not taken place to meet the needs of the residents. It is revealed that a significant portion of city dwellers live in the slums and squatters. And the influx of the people to the city has been due to migration on various grounds namely economic crisis and river erosion. With regard to the magnitude of poverty, it is revealed that the income of poor has increased but they are unable to have any savings due to increment of the expenditure of overall livelihood therefore making them vulnerable in a situation of crisis. Illiteracy accounts for one of the main problems of the lives of slum dwellers. There are considerable proportions of dropouts from the school and the reason of discontinuation of study stems mainly from poverty and early marriage. There are various impacts of urban poverty on the society such as housing and employment problem, lack of educational facility, increase of child labour, criminal activities, marital problem, and increase of sexual crime and problems of access to urban facilities. Consequently, there are challenges in addressing urban poverty that can be enumerated as creation of employment, controlling criminal and anti social activities, providing access to urban facilities, access to education, access to healthcare, and scarcity of resources etc that need to be addressed in order to alleviate problems of urban poverty and to make the city more livable one for all.

NIGERIA'S NATIONAL SECURITY: CHALLENGES AND PROSPECTS FOR THE ARMED FORCES

Colonel Ben Bela Ahmed Raji, ndc, FSS MSS psc+ Bsc, PGD

This research project titled 'Nigeria's National Security: Challenges and Prospects for the Armed Forces' was necessitated by the concern for the preparedness of the Armed Forces to face the challenges posed by the new dimensions of threats

particularly those emanating from within the state which have direct impact on Nigeria's national security. The study examined national security threats, identified challenges of the threats to the military and proffered strategies to mitigate them in order to enhance national security. The study, which covered the period between 1990 and 2011, gathered data through primary and secondary methods and employed descriptive method of analysis. The major findings of the study included the lack of an elaborate national security policy, poor judicial system, manpower shortage, poorly trained and ill equipped Nigeria Police, poor intelligence, lack of modern technology and the military's inadequate capability in counter terrorism and irregular warfare operations. Finally, the study recommended the review of the national security policy, implementation of the recommendations of the reports of inquiries, transformation of the Nigeria Police and the judiciary, effective social security network for the citizenry and strengthening border security. The Border Guard Bangladesh was suggested as a brilliant model which could be studied and adopted. It was also recommended that the military was to enhance capacity in counter terrorism/counter-insurgency operations and non-kinetic capabilities in Irregular Warfare. The strategy adopted by the Sri-Lanka Armed Forces in the defeat of the Liberation Tigers of Tamil Eelam was suggested as an area for further study and possible adoption by the military in dealing with terrorism in the country. In addition, the military was to intensify measures on intelligence gathering, build capacity on information warfare and seek the Nigerian Government's approval for manpower increase.

CLIMATE CHANGE AND NATIONAL RESPONSE: BANGLADESH PERSPECTIVE

Group Captain Javed Tanveer Khan, afwc, psc, GD (P)

Climate change is perceived as the most critical of all environmental challenges ever faced by humanity. It is not just an environmental issue but also an issue that largely undermines economic and social dimensions of sustainable development. Bangladesh is said to be particularly vulnerable to the predicted impacts of climate change over the coming decades. Climate change will exacerbate impacts such as droughts, floods and extreme weather events, which may contribute to food shortages, infrastructure damage and degradation of natural resources upon which livelihoods are based. The concern over climate change warrants special attention for a country like Bangladesh because her economy relies heavily on natural resources such as agriculture, water, fisheries, which makes her especially vulnerable to climate change. Moreover, due to her unique geographical location coupled with widespread poverty, weak infrastructure, high population density, and distinctive development challenges, the overall consequence can be quite

severe. This multifaceted problem needs multi actor involvement to address it both at the local and national level. At the most basic level, there is a need for increased awareness of the general public regarding climate change and its severe effects. At the national level, it is essential to ensure integration of climate change risks into various development policies. More so, it is of vital importance to implement appropriate adaptation measures, for which the Government should take the lead role to ensure sustained engagement of stakeholders- national, regional and international organizations, private sectors and civil societies.

NIGERIA'S MARITIME RESOURCES PROTECTION: INTEGRATED APPROACH FOR THE ARMED FORCES

Captain(NN) Williams Onovuhe Kayoda, ndc, MSS, psc, MRIN, M.Sc

The resources and possibilities offered by the ocean at the service of mankind as a huge maritime estate for exploration, exploitation, transportation amongst others are enormous. The world populations rely greatly on the vast and abundant resources of the sea as vital means of sustenance and livelihood. The environment is endowed with huge deposit of living and non-living resources such as aquatic marine resources, oil and gas and minerals amongst others. The quest by the littoral states to derive optimum harvest and also guide against illegal exploration and exploitation, threats and vulnerabilities informed the enactment of legal and regulatory framework for appropriate defence and governance.

Nigeria maritime environment is rich in oil and gas, minerals and aquatic resources which contribute as major source of revenue to the nation. Nigeria earns over 90 percent of her foreign exchange annually from oil alone. However, these resources are vulnerable to threats such as illegal bunkering/crude oil theft, smuggling, poaching and piracy, amongst others. These challenges expedite the assignment of responsibility to the Armed Forces and other maritime stakeholders for the protection of the maritime resources.

The study was undertaken to primarily proffer an integrated approach strategy for effective maritime resources protection to enhance economic well being of Nigeria. It examined the capability of the Armed Forces and other stakeholders in maritime resources protection in Nigeria. The parameters used for the assessment include the adequacies of structures, instruments of inter-agency engagement/ cooperation and platforms for surveillance, monitoring and enforcement.

The study adopted the survey methodology in the course of the research. It established that the Armed Forces and other supporting agencies were adequately organised to carry out their roles. However, the key identified challenges common to all the agencies are inadequate platforms, limited inter- agency cooperation, inadequate funding, lack of common Maritime Domain Awareness capabilities infrastructure, lack of

joint maritime security framework and limited political will. The study revealed that there are rising threats profile, unabated illegal activities and unattended security gaps. Therefore, the assessment of the current security capabilities approach and delivery was adjudged low to effectively mitigate the menace.

The findings of the research generated the need to properly articulate and evolve a holistic, robust integrated and workable approach strategy proffered for the AFN to improve efficiency. Appropriate strategies to mitigate the identified lapses and enhance the capacity building were proffered and recommended for considerations to enhance the protection of Nigeria's maritime resources.

LONG TERM ENERGY SECURITY FOR BANGLADESH – FEASIBILITY OF NUCLEAR POWER

Lieutenant Colonel Abu Mohammad Sarwar Farid, afwc, psc

Energy is and will remain one of the major global concerns of the 21st century and Bangladesh is no exception. With global energy demand expected to grow strongly in the coming years, burning questions are now being raised over the future of energy supplies, the economic competitiveness of different energy sources and the associated environmental impacts. Energy consumption in Bangladesh is very low compared to other nations. Only one third people are under power supply coverage. Bangladesh aspires to be a middle income country through economic emancipation. But the power sector is hardly capable of meeting its energy requirement with existing infrastructure. At present our gas sector provides most of our commercial energy needs. The state of existing gas reserve is not very encouraging. There is other indigenous source like coal. But exploration and exploitation of coal is environmentally challenging. Moreover, existing recoverable coal may not fulfill the energy requirement of next twenty years. At this juncture, to attain her energy security, Bangladesh opted for nuclear energy. Nuclear energy has many positives while it has few negatives too. Bangladesh is not capable of establishing and operating a nuclear plant at its own now. She has already signed a bi-lateral agreement with Russia for construction of the first Nuclear Power Plant in Bangladesh. There is a necessity for threadbare analysis of the merits and demerits of nuclear energy in the context of Bangladesh with lessons derived from the world. The research will identify and analyse all pros and cons of nuclear power in Bangladesh and recommend objective suggestions, if necessary, to support Bangladesh's aspirations to go nuclear and usher into a new world of development.

POLITICAL ECONOMY OF TOURISM IN CHITTAGONG HILL DISTRICTS

Brigadier General A K M Shafiul Mowla, ndc, psc

INTRODUCTION

Chittagong Hill Tracts had witnessed a prolonged disorder for more than two decades. Historic Peace Accord of Chittagong Hill Tracts (CHT) was signed between Parliamentary Committee on CHT Affairs and Parbatya Chattagram Jana Sanghati Samiti (PCJSS) on December 2, 1997 kindling hopes of peace and stability in the region (Kabir, 2003:1). The peace accord has not turned to be a guarantee of lasting peace but it is the springboard to turn unstable situation into stable conducive environment for development of the region. The CHT constitutes one-tenth of the size of the country with lots of potential resources having only one and half a million population.

CHT is a “Land of Promise”, having enormous and rich forest resources and a huge reserve of potential unexplored mineral resources (Abedin, 2003). CHT is a unique display of scenic beauty having a wide opportunity of promoting tourism. Promoting tourism in the Chittagong Hill Districts will pay socio-economic return to the country. It will contribute to create enough job, business opportunities and product marketing, which will further reduce the political dissatisfaction among the local people. Joint endeavor is required with Security Forces (SF), Local population and Civil Administration to address these issues for creating conducive environment and context to develop a “Tourism Industry”.

Tourism is the world’s largest and fastest growing industry (Cooper C and Wahab S, 2004: 04). It has the potential to contribute significantly to the economic development of the country. If we talk about peace and sustainable development then we can surely say that tourism promotes dialogue between Peoples and States and it helps them recognize the importance of valuing and respecting their differences. Tourism sector in Bangladesh contributed 2.3 per cent of total share of GDP in 2011. He has forecasted it’s annual growth rate from 1.5 per cent in 2006 to 6.10 per cent by 2020. To do that state level patronization is the prime to explore the tourism potentials.

CHITTAGONG HILL TRACT: AN OVERVIEW

Geography and Demography

Chittagong Hill Tracts which is comprised of three southern hilly districts of Bangladesh namely Rangamati, Khagrachari and Bandarban. It has a total area of 13,295 sq km, which is almost one-tenth of the total area of Bangladesh (www.bbs.gov.bd, accessed 27 April 2012). It is the most diversified region in Bangladesh in respect of ethnicity and culture. Out of several ethnic groups, the Chakmas and Marma are the largest in respect of population. All the groups are having own dialect, dress and rituals. As per the statistics of 2011, the population of CHT is approximately 15 lacs. Tribal population is 7,58,580 (50.5%) and non-tribal population is 7,43,691 (49.5%) [www.mochta.gov.bd, accessed 26 April 2012]. Literacy rate of Chakma tribe is 72% as against 28% of the Bangalees. The average literacy rate of other tribes is only 12% approximately.

Socio-Political Scenario

2.2.1 The two-decade long insurgency came to an end with the signing of the “CHT Accord, 1997” between the GoB and Parbatya Chattagram Jana Sanghati Samiti (PCJSS) on December 02, 1997. There are visible changes across the entire region in terms of development works and huge tourists visited to the places of natural interests over the years. The presence of military under the banner ‘In Aid to Civil Power’ has been shrinking. Till now 238 Security Forces (SF) camps have already been closed (Acharya, 2011 : 64).

Activities of Regional Political Parties. The main tribal political parties of CHT are Jana Sanghati Samity (JSS), JSS (Reformist) and United People’s Democratic Front (UPDF), while the leading Bangalee political parties are Somo Adhikar Andolon (SAA) and Parbattya Bangalee Chattra Parishad (PBCP). All these parties have different ideological stand-points over peace accord, leadership and other core issues of CHT. Internal political divide, leadership feud and illegal toll collection for meeting organizational expenses - all these aspects create instability in the political culture. However, despite their differences all the tribal political parties have common stance on some issues like land disputes, removal of Bangalee settlers, withdrawal of Army from CHT and indigenous issue.

Activities of the Tribal Population. Common people are peace loving. When the accord was signed they were enthusiastic about the peace. The tribal people are not happy about the division of JSS and UPDF. The hill people do not want another armed struggle which both JSS and UPDF are talking about. They would feel happy seeing the quick implementation of the peace accord and restoration of normal life throughout CHT.

Signing of Peace Accord

The CHT Accord was formally signed on 02 Dec 1997 between Govt and PCJSS in Dhaka. This is an instrument using which the ‘Local Govt Council Act 1989’ was amended and five acts namely ‘Regional Council Act’ and three ‘Hill District Council Acts’ and ‘Land Dispute Settlement Act’ have been enacted and ratified by the National Parliament during 1998-2001 (www.mohta.gov.bd, accessed on 24 May 2011). Currently CHTRC, HDC and CHT Land Commission, are functioning based on these ratified Acts.

Implementation of CHT Peace Accord

In the post peace accord scenario GoB has attached highest priority for the sustained socio-politico and economic uplift of the region. These are (Acharya, 2011: 58-68):

- a. A full-fledged Ministry named ‘Ministry of Chittagong Hill Tracts Affairs’ (MoCHTA) has been established in 1998.
- b. A 25-member Regional Council (CHTRC) and 5-member interim Hill District Councils (HDC) each headed by a tribal person has been formed.
- c. So far 21 out of 32 subjects have been handed over to the Hill District Councils.
- d. A Task Force for the rehabilitation of repatriated refugees and identification and rehabilitation of IDPs has completed rehabilitation of 12,223 tribal refugee families.
- e. ‘Peace Accord Implementation Process Monitoring Committee’ has been formed headed by the Deputy Leader of the Parliament of Bangladesh.
- f. A ‘Parliamentary Standing Committee’ has been formed.
- g. A Land Commission has been formed headed by a retired Justice as the chairman of the commission.
- h. A total of 715 surrendered *Shanti Bahini* members have been recruited in the Police Force.
- j. Since the signing of the accord a 238 camps out of 556 SF camps have been closed.

Statistics Depicting Comparative Situation- Before and After the Peace Accord Statistics showing a gradual trend of improving situation at CHT :

a. Members of SF Killed and Injured in Action (KIA) with *Shanti Bahini*.

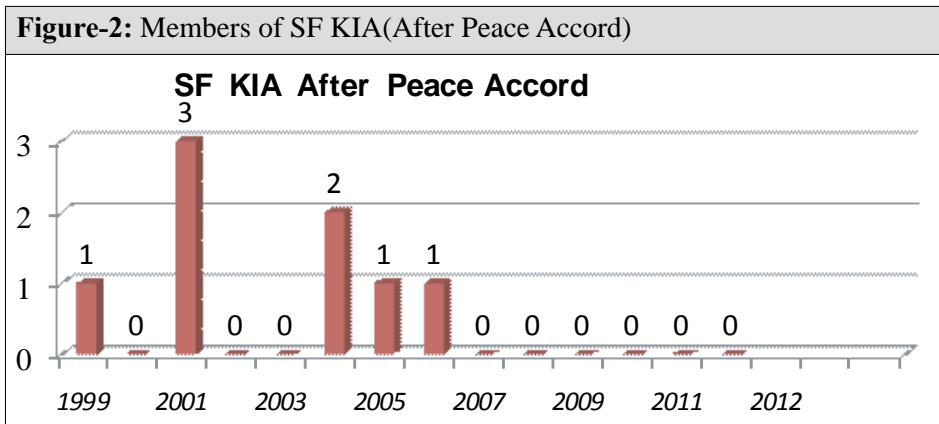
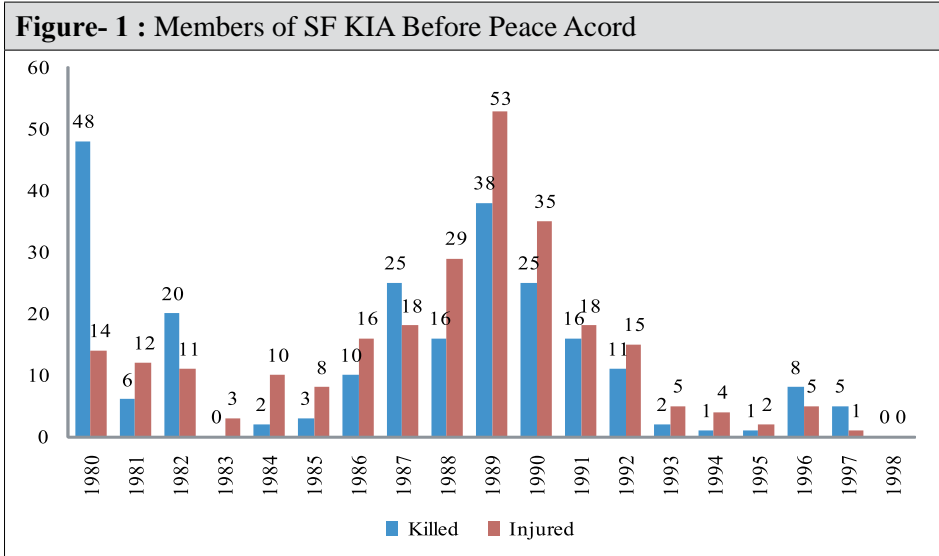
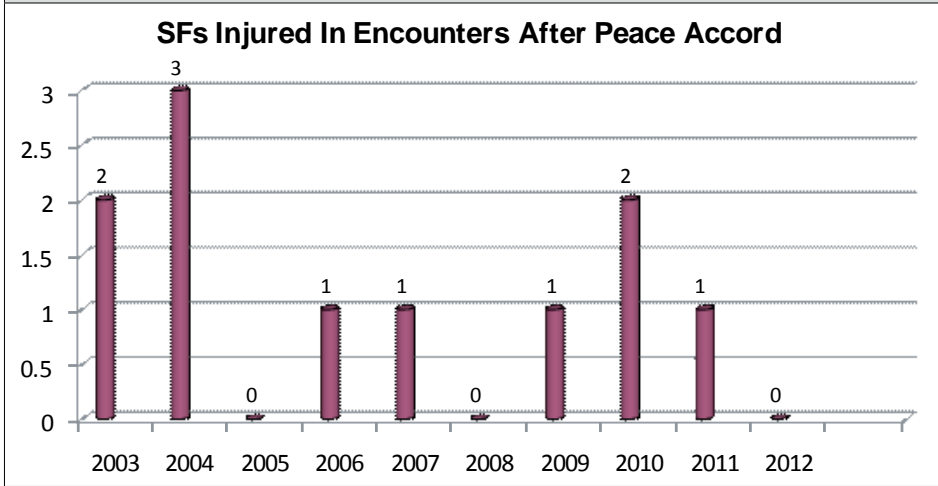


Figure-3: SF Injured in Encounters (After Peace Accord).



b. Civil Casualty Before and After Peace Accord

Figure-4: State of Civilian Killed Before Peace Accord

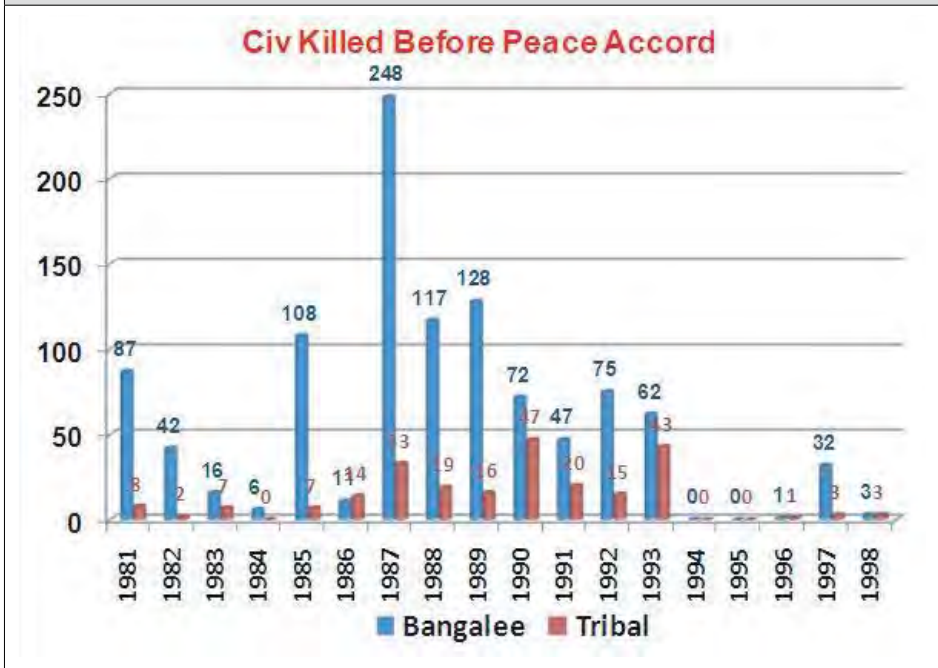
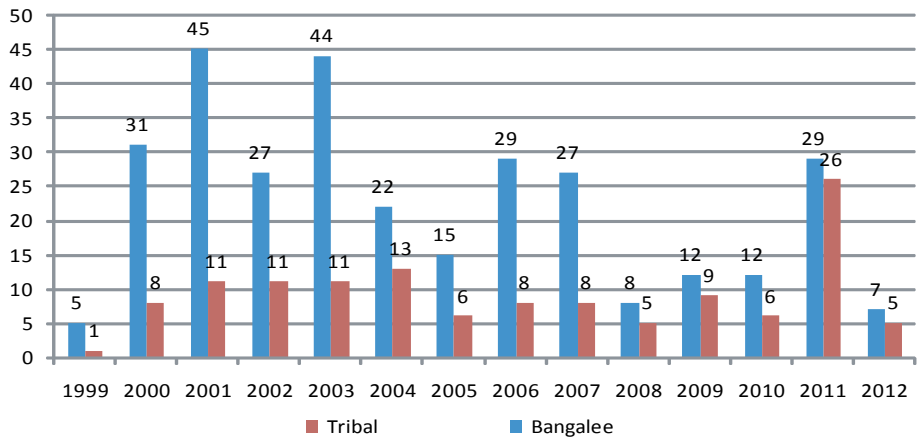


Figure-5 : State of Civ Killed After Peace Accord



Source: Author

Importance of the Accord

The Peace Accord has been appreciated at home and abroad that ended a bloody ethnic strife, which looked uncontrollable for decades. It has consolidated our national integrity, strengthened our sovereignty and enhanced our national interests (Quadrat, 1997: 4). It has added credit to the country's legacy and history of attempting and achieving conflict resolution through negotiations without international intervention. To reach the accord, JSS stepped aside from their demand for full regional autonomy, complete withdrawal of the Army and the Bengalee settlers (Ahmed, 2004).

Role of the Government in Socio-Political Development

After the signing of the Peace Accord, insurgency ended through disarmament and regular life was restored. The instrument introduced; the amendment of 'Local Govt Council Act 1989', establishment of MoCHTA, passing the bills related to CHTRC and HDCs in the Parliament, formation of Land Commission etc, are the major steps taken by the Govt (Acharya, 2011 : 23). 21 Departments/ institutions so far handed over to the HDCs. CHTRC Act and Land Dispute Settlement Act, have been ratified and promulgated by the National Parliament between 1998 and 2001. The prioritized post accord activities of GoB for the sustainable socio-politico and economic uplift of the region continued. Besides Govt and SF development activities, there are many development partners like-UNDP, NGOs and International Organizations etc (Chaterjee, 2012), undertaken huge development activities after signing the peace accord.

Land Commission and Complexity

Land is an intricate and complex issue in CHT. During the colonial and post-colonial period the land ownership issue was not properly addressed through the cadastral land survey and conventional land record system. Due to lack of updated map and non-existent of any demarcations on land, caused claims and counter-claims over the same arable land. However, Govt has undertaken several initiatives and measures to resolve this core issue. Recently on 30 July 2012, Govt decided in a meeting to bring total 13 amendments in ‘CHT Land Dispute Settlement Act’ as per the demand of tribal people. In which land commission is to act on the basis of local tradition and rules.

Indigenous Identity Issue

General. In the peace accord CHT was mentioned as ‘Tribal Inhabited Area’. This questioned the presence of the Bangalee in CHT, who now constitute half of the CHT population. In the 15th Constitutional Amendment reversion of the nationalism to ‘Bangalee’ yet again caused dissatisfaction amongst the same tribal leaders. In the same review the rights of the ‘tribal people and ethnic minorities’ have been protected incorporating a new Article 23(a), to flourish and develop the ethnic cultures, traditions and languages (Daily Star, 29 June 2011) which is yet to console the hill leaders. Distinguishing tribes of CHT as ‘Indigenous People’ (IP) has become a significant discussion theme only until 2008 after formulation of ‘UN Declaration on the Rights of the Indigenous People- September 2007’. An interpretation of the ILO Convention 169 and ‘UN Declaration on the Rights of IP-2007’ seems more pertinent to the colonial countries where the original inhabitants, aborigines or indigenous are being out ridden by the immigrants (Prothom Alo, 29 May 2011). The majority Bangalee cannot be discarded from the list of aborigines while recognizing the ethnics as indigenous in the constitution of Bangladesh which is irrational. Thereby, in contemporary perception, the use of word ‘Indigenous’ rather than ‘Tribal’ is not simply variation of noun, but it bears an implication which is unconstitutional and may become detrimental to State sovereignty.

Comments by Various Important Figures on Indigenous Issue. Hon’ble Law Minister Mr Shafiq Ahmed had clarified the issue on 8 Jun 2011, by saying that, *“There are no indigenous peoples in BD. Under the fundamental principles of state policy in the Constitution, measures will be taken for their recognition as ethnic minority or ethnic community or tribal people”*.

Bhomong Circle Chief Mr. Aung Shui Pru Chowdhury, told in an interview with 'Chennel i' on 12 April 2011, that "*Marmas are neither indigenous nor tribal people; they migrated to Bandarban region after the Burmese War*" (Acharya., 2011: 70-72).

Tribal – Bangalee Relationship

Even for decades of co-existence in the same region of the country, tribal-bangalee relationship is at times swayed on mutual trust and mistrust, but it is not as complicated as is portrayed and exploited. Despite differences over some issues like rights on the land, rights to vote, unequal quota system etc, both communities dwelled side by side for decades (Rahman, 2005: 121). Communal clashes those took place during 1980's and 90's were actually perpetrated by only a small portion of ill-motivated tribal and bangalee population. The entire tribal and bangalee population was not involved in those episodes. The importance of pluralism cannot be denied in a democracy especially in a society with distinct ethnic groups however they may be. The GoB appears to be evidently conscious of the importance in this question and shown sincerity in every steps.

Role of Security Forces (SF)

The military has been playing a leading role in CHT from the beginning of Counter Insurgency Operations (CIO) in 1976. To enhance the socio-economic development of CHT and strengthen the confidence of its people since placement in the CHT. To assist the hill people SF implements small scale community development projects in remote and inaccessible parts of CHT. Army Engineer Construction Battalions has constructed significant number of very useful roads in the remote areas of CHT. Total length of these roads is 510 km. After more than a decade of signing the Peace Accord, SF predominantly Bangladesh Army is presently operating under '*OP UTTARAN*' with a mission to "*Maintain stable security environment within area of responsibility*". Since signing the treaty, out of 556 SF camps, 238 have already been shut. Out of remaining 318 camps, 113 belongs to army, 111 to Border Guards of Bangladesh (BGB), 14 Armed Police, 59 Duty Post, 20 Ansar and one Range Reserve Force which shall be decreased in accordance with the progress of peace implementation.

Socio-Political Development and It's Impact

The way of life and the distinctive elements of tribal culture and heritage are carefully protected and preserved by special socio-economic measures. At the same time, democratic and participative political and economic steps continue

to help mainstream the tribal groups in national life by accommodating their legitimate aspirations and demands. The peaceful and participative solution is the only way that ensures mutual survival and development. The other way points to chaos and disorder, and economically underdeveloped society that relentlessly harassed by man-made calamities.

Bangladesh set her goal to become a middle income country by 2021. To achieve this goal CHT itself can contribute significantly with its natural resources. Proper utilizing of all its resources CHT alone can significantly contribute in National GDP. Tourism in Chittagong Hill Districts can add 1% in Annual GDP Growth (Morshed, 2006). For the overall economic development and benefit of all the citizen of Bangladesh Govt should utilize all its possibilities (including resources of CHT) to make the Vision-2021 into reality.

TOURISM IN CHITTAGONG HILL DISTRICTS

Tourism Prospects in Bangladesh

With the recent superb advertisement through Worlds Natural Seven Wonders selection process Bangladesh has acclaimed its unique natural resources globally. Bangladesh offers ample of tourist attractions especially in South-Eastern part. Major portion of the area was inaccessible to local population due to insurgency for few years, which has gradually improved to a normal status (Chaterjee, 2011). Since 1997, after signing peace accord this region is experiencing development in all facets of their life. In the last few years tourism in the hill region has been flourished in multi dimension. This growth in tourism has clearly marked its tremendous market in future (Rahman, 2012).

The exceptional growth of tourism over the last six decades is one of the most remarkable economic and social phenomena of the 21st century. It has become one of the largest and fastest growing economic sectors in the world (Chowdhury, 2010 : 3). Tourism sector in Bangladesh contributed 2.3 per cent of total share of GDP in 2011. She has forecasted it's annual growth rate from 1.5 per cent in 2006 to 5.7 per cent in 2007-2016 (Morshed, 2006: 3). Our foreign currency earning from tourism is only 1%. On the contrary Maldives earns 70% foreign currency from tourism and it contributes 20% to the GDP. Malaysian tourism industry contributed 17.5% to its National GDP. GOB identified tourism as a "Thrust Sector" in 1999. Developing country like Bangladesh, tourism can play an important role as a driving force of economic development.

Tourism Prospects in Chittagong Hill Districts

The Chittagong Hill Tract is divided into river valleys and their tributaries and composed with the ranges of hills, thick-planted forests, waterfalls and number of lakes. Besides, it preserves verities of tribes having own dialect, distinctive dress, rites and rituals. The fantastic natural scenic beauty, pristine foothill ecological environment and extremely fascinating lifestyle of the inhabitants are the perfect natural elements for facilitating tours and travels in the area (Morshed, 2006 : 29). Simply, every inch land of this region may turn into a world class tourism spot of Bangladesh. The tourism recourses of the area suggest that tourism could be the biggest economic product of the area. Chittagong Hill Districts has been relatively untouched by modern technology and development . Since 1997, after signing peace accord this region is experiencing development in all facets of their life. Thus, under the present situation by marketing its charms and attractions the tourism industry could be explored for earning foreign exchange. Tourism brings peace and cooperation among nations, groups and build bridges. Francesco Fragialli, WTO Secretary General said: “*Strengthening tourism links to promote cross cultural understanding*” (Cooper C and Wahab S, 2001: 10).

Thus Tourism can change the socio-economic pattern of the hill region. Development of all aspects of life, employment opportunity, marketing, growth of industry, cultural mix and economic potentials will force to bring political environment into a normal status (Rahman, 2012). Which will have a positive impact on socio-political environment of the region.

Tourism industries can be developed in this area with less effort and minimum investment. In this regard a case study of ‘*Hawaii*’ and ‘*Shimenthai of China*’ is referred for better understanding and compare with Chittagong Hill districts. Details of the case study discussed as under.

Case Study of Hawaii and Shimenthai

The *Island of Hawaii* and *Shimenthai of China*, is taken as case study since it has got the similarity with CHT and lessons can be drawn there from. *Island of Hawaii* was an independent Kingdom before annexation by the USA in 1893 AD. *Shimenthai of China* is a beautiful hilly area having lakes and rivers, which has the similarity to our hill districts. Chinese authority developed it for eco-tourism keeping its natural beauty undisturbed. Our Hill Districts can be developed like Shimenthai, keeping nature undisturbed and small scale investment to attract all types of tourists.

HAWAII. The Hawaiian Islands are located in the North Pacific Ocean. The islands were united under a single ruler Kamehameha I, in 1810. In January 1893, Queen Liliuokalani was overthrown and replaced by a Provisional Government. McKinley (Ex US President) annexed Hawaii illegally against the opinion of annexation on 7 July 1898 to the United States ([http://wikipedia.org/wiki/History of Hawaii, Formation of the Hawaiian_Kingdom](http://wikipedia.org/wiki/History_of_Hawaii,_Formation_of_the_Hawaiian_Kingdom) accessed 23 April 2012). After years of cultural and societal repression and along with other self-determination movements worldwide the 1960's is thought to have seen the rebirth of Hawaiian. US Congress passed a joint resolution called the "Apology Resolution". It was signed by President Bill Clinton on 23 November 1993. This resolution apologized to native Hawaiians on behalf of the people of the United States for the overthrow of the Kingdom of Hawaii on January 17, 1893 and the deprivation of the rights of Native Hawaiians to self-determination (www.wikipedia.org, History of Hawaii: accessed 23 April 2012). Since Statehood in 1959, tourism has been the largest industry, contributing 24.3% of the Gross State Product (GSP) in 1997. The gross output for the state in 2003 was US\$47 billion; per capita income for Hawaii residents was US\$ 30,441 (2003). Millions of tourists contribute to the Billion dollar business in Hawaii (<http://www.hawaiihistory.com>, 2012). At present they are contended and happiest state in USA having per capita \$ 63,746. Enormous business scope and tourism related support industry created huge employment opportunity and raised the overall economy of new State. Financial prosperity ensures native Hawaiian in better living status. All these had a direct influence on the Hawaiian Sovereignty demand and that played a vital role on the native Hawaiian to remain within the statehood of USA and gave up there their idea to form a Kingdom.

SHIMENTHAI (China)

Shimenthai is a province, which is about 400 Km away from Shanghai, geographical features of which has similarities with CHT. The area contains numerous attractive tourist spots and it is located beside a river, similar to Kaptai river of Bangladesh. It is also a eco-friendly tourist place at mountainous area like CHT (Hossain, 2012 : 4). The place attracts tourists due to its simplicity and quietness. The area is made for walking and climbing through specially made foot route and reaching up to a hill top and returning in the same way. The tourists would have additional pleasure of walking through the hills, water streams, stones, jungles etc, quiet attractive specially for those who like such adventurous travel and tracking.

Shimentai, being relatively a remote place, electricity of the tourist spot was supplied by solar power. The construction of the foot routes, local scenic spots,

local water dam, foot bridges etc, all were constructed without disturbing the nature using the local resources which is cost-effective and simple in construction (Hossain, 2012). Amusement facilities were also catered which runs without electricity. The place is liked by the tourists due to its simplicity and scenic beauty. Since the scenic beauty, remoteness, quietness and development has the similarity with Chittagong Hill Districts, so in CHT such spots can also be made utilizing small scale investment.

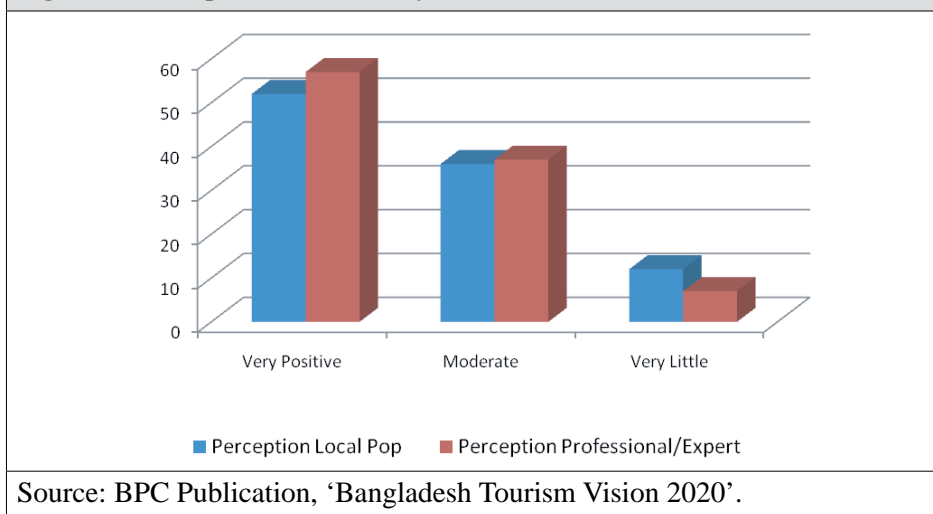
Lesson Learnt. It is learnt from the case study of Hawaii that, Tourism industry changed the livelihood of locals and improved economic condition. As a result, they are satisfied with the “Apology Resolution” and Statehood in USA. Eventually native Hawaiian shifted away from the demand of old traditional Hawaiian Kingdom. Native Hawaiian ethnic culture and issue of identity has got similarity with the tribals of CHT. It is therefore, Hawaii is referred to analyze and draw the lesson while resolving the CHT issue. Shimentai is a remote eco-tourist place similar to Chittagong Hill Districts, where eco-tourism developed using local resources with small scale investments at various attractive places (Hossain, 2011). If facilities developed in a planned way, it would not only promote the tourism of Bangladesh but would also contribute to improve political environment and economy of the region.

Economic Effects of Tourism

General. The fantastic natural scenic beauty, pristine foothill ecological environment and extremely fascinating lifestyle of the Chittagong Hill District’s inhabitants are the perfect natural elements for facilitating tours and travels in the area. Thus, promoting tourism in CHT will pay socio-economic return to the country. In the recent years the flow of tourists towards this region especially in Hill District of Bandarban, has opened a new horizon among general people and concerned agencies. This will help in poverty alleviation, creating job opportunity and bring change in socio-economic status of the region.

Perception and Expectation of Community. Existing tourism activities in CHT has been flourished naturally with minimum effort and has become an additional source of income for the local community (Rahman, 2012). Expert and officials recognizes enormous potentials of earning huge local and foreign currency in tourism sector if Hill Districts are explored properly. Tourism in Bandarban District booming like Cox’s Bazar and local (Bandarban) authority including tribal’s are deeply engaged in promoting tourism at their level (Chaterjee, 2012).

Figure-6 : Perception of Community towards the Economic Benefits of Tourism

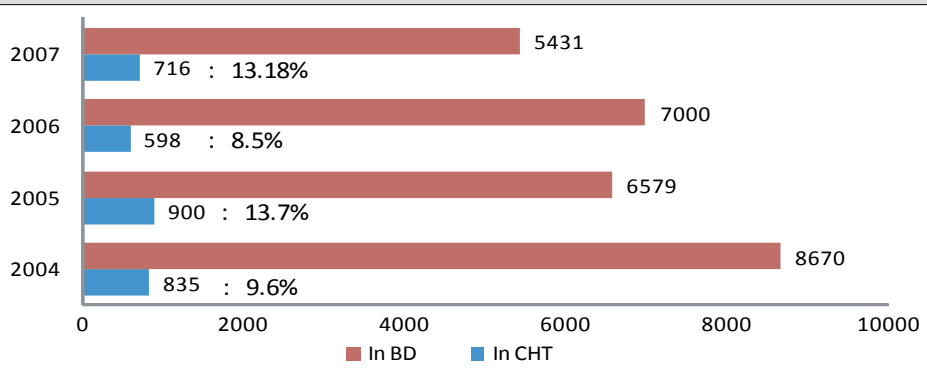


Source: BPC Publication, ‘Bangladesh Tourism Vision 2020’.

Forecast of Likely Earning of Foreign Currency in Year 2020. This research could theoretically calculate the likely earning of foreign currency in year 2020 by following analysis:

- a. **Forecast of Inbound Tourist Arrival in Bangladesh.** Bangladesh forecasts at least 500,000 inbound visitors’ arrivals by 2020 (Morshed, 2006: 3). It is fairly realistic to forecast that total arrivals to Bangladesh may exceed 1.30 million in 2020, provided that the favorable market situation prevails.
- b. **Likely Arrival of Inbound Tourists in CHT.** The comparison of data of foreign visitors arrival in govt hotels/ motels and guest houses in CHT (Rangamati, Bandarban, Khagrachari) and that of entire Bangladesh is shown on the chart below:.

Figure-7 : Foreign Guests Arrivals in Govt Accommodations in CHT



Source: Tourism Statistics of Bangladesh (www.bpc.gov.bd, accessed 17 May 2012)

It gives us the idea that more than 13% of total foreign visitors in Bangladesh visit CHT. Recently this percentage raised upto 40% in CHT and Chittagong area. This can further supported by the result of survey conducted in land and air port by BPC. It finds that 74.13% of the total visitors expected to visit capital and 15.15% of them has expressed their interest to visit CHT.

- c. Forecast of Earning from Local Tourists in Year 2020.** The following table provides us the data of local guest arrival in govt hotel and motels in CHT in last 4 years:

Table 1 : Local Guests Arrivals in Govt Accommodation in CHT				
Year	2004	2005	2006	2007
No of Tourists	8124	12505	14743	15746

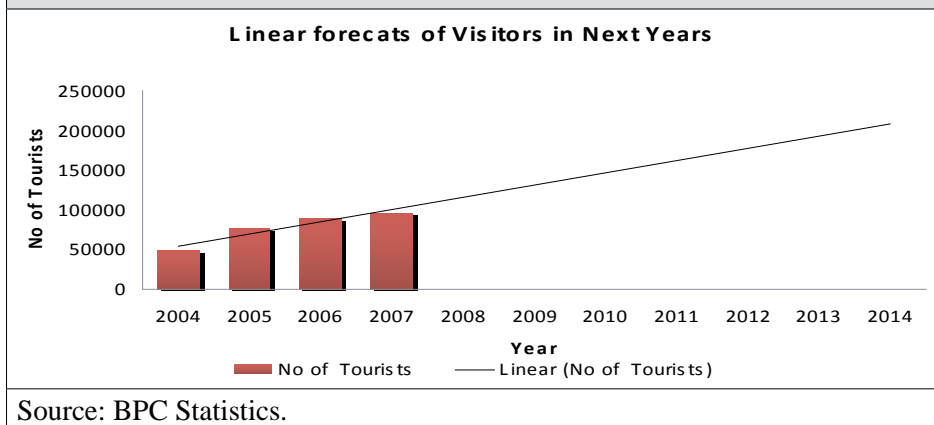
Source: Tourism Statistics of Bangladesh

Again the survey result by BPC finds that 54.23 % visitors stays in private paid accommodation while 16.42 % stays in public sector accommodation and 29.35% visitors do not stay overnight in CHT. So, the approximate total local visitors in CHT for last 4 years stands as shown in the next table:

Table 2 : Total Visitors in CHT in last 4 years	
Year	No of Tourists
2004	49476
2005	76157
2006	89784
2007	95893

Source: Tourism Statistic of Bangladesh

Figure- 8 : Forecast of Total Visitors in CHT in 2020



Source: BPC Statistics.

With the graphical analysis of this increasing trend of local tourists in CHT, the estimated forecast of total visitors in CHT in 2020 is approximately 250,000 annually. If we consider the daily expenditure for a local tourist is tk 1000, then the estimated earning will be tk 250 million annually.

- d. Investment Potential and Income Return.** After analyzing the above charts and data it is evident that BPC’s estimate on future tourists arrival at CHT and projected income is a reality and viable. BPC’s publication ‘Vision 2020’ forecasted that, by the year 2020 the expected foreign visitor in Hill Districts will be approx 0.135 millions and likely foreign currency earning will be around US\$ 25 million. Besides, analyzing the total local visitors in CHT it is estimated the total visitors in CHT in 2020 is approximately 250,000 annually from which the minimum earning will be tk 250 million annually. At least 20,000 people will be directly employed and another 30-40 thousand people will be employed indirectly (Morshed, 2006).

Prospects of Employment Opportunity (Estimation of Ministry of CHT Affairs). Promoting tourism in CHT will provide a wide range of different employment opportunities for the local population. Especially it will create opportunities for many small entrepreneurs. According to the estimation of MoCHTA, total unemployed population in CHT is around 0.2 million. It is predicted that tourism will reduce around 40% of the unemployment of the area. At least 20,000 people will be directly employed and another 30- 40 thousand people will be employed indirectly.

Infrastructure Development Prospects. Promoting tourism in CHT will ultimately improve the condition of present infrastructures. These are communications, transport, accommodation, recreational facilities etc.

Improvement of Livelihood. According to the perception of tourism experts and professionals, promotion of tourism in CHT will definitely improve the livelihood of the local community through contributing in following areas:

- a. **Alleviation of Poverty.** Tourism industry will increase job opportunity including women. It will also result in increased business opportunity and economic activities which will ultimately contribute in poverty alleviation in the area largely (Rahman, 2012).
- b. **Recreation and Social Cohesion.** Since Bangladesh does not have adequate recreational facilities, CHT can be turned into an important place which will really take the people near the nature. It will also help to reduce social unrest, change quality of life, reduce misunderstanding, preserve nature and culture and above all appreciate God gifted nature (Chaterjee, 2012).
- c. **Environmental Considerations.** Well-planned tourism in CHT can contribute the preservation of local environment. Tourism will help to reduce negative impact of deforestation.
- d. **Education, Agriculture, Livestock and General Business.** Tourism in CHT has strong multiplier effect to the rural livelihood of the community. The survey findings (Table below) indicate that 31% respondents (tourism experts and professionals) perceived the benefit of tourism for education sector. Likewise, 57% respondents perceived the benefits for agriculture sector, 31% for livestock and 78% for other general business (According to the survey carried out by the researcher).

Table 3 : Multiplier effect of Tourism in Other Sectors		
Perception	Number	Percentage
Education sector	22	31
Agriculture sector	41	57
Livestock	31	43
General business	56	78
Source: Tourism Statistics of Bangladesh.		

Political Effects of Tourism

General. Chittagong Hill Districts is one of the least explored tourism destinations as compared to its potential in Bangladesh and it has been recognized as one of the attractive location considering the interest of local inbound tourists visiting the area in recent years (Rahman, 2012). At present it is growing naturally with its eco-tourism potential and flourishing with strong prospect for the locals, which needs to be addressed and planned strategically to get full benefit (Charterjee, 2012). Chama Circle Chief, Barrister Devashish Roy also opined in favor of promoting tourism in CHT. In an exclusive interview with 'The Daily Star on 29 March 2011', Mr. Roy expressed that: *"Tourism, in order for it to be respectful of ecology and the CHT peoples' culture, spirituality and social norms, must be people owned, people-led and people oriented. The only type of tourism that may be acceptable to the local people is one which is low-capital oriented, locally owned and managed, or at least co-owned and co-managed by local people, respectful of the local ecology, architectural traditions and with proper waste management."* Exclusive interview was taken by Md Ali Sattar, Assistant Editor, The Daily Star on 29 March 2011.

Economic Effects on Politics. Opportunity of product marketing, employment generation, tourism based industry, cottage industry, handicrafts selling etc, will rise the economic condition of the society. The industry will alleviate poverty, develop the education, agriculture, livestock and general business opportunities etc. It is obvious that young generation having abundance business opportunity will not go back to uncertainty and insecure life (Rahman, 2012). Improved socio-economic conditions and local empowerment through CHTRC, HDC will transform the political environment in favors of the govt (Charterjee, 2012) as well as promote positive political culture.

Cultural Effects on the Society. Cultural practices makes the society more civilized, wise and improve the understanding. Tourism will promote local art and culture, which in turn will increase better understanding and defuse social misunderstanding (Cooper C, Wahab S, 2001 and Charterjee, 2012).

Greater Motivation and Social Cohesion. CHT can be turned into an important place which will really take the people near the nature. It will also help to improve social unrest, change quality of life, ensure love and respect for others, reduce misunderstanding, preserve nature and culture and above all, appreciate creation of the Almighty (Charterjee, 2012).

National Integration and Constitutional Unity. High Court Verdict on the Peace Accord in this regard acted as strong base against any demand of ‘Regional Autonomy’. Such verdict is understood by all corners. Donors and NGO’s will be discouraged in future to continue their propaganda against administration and HC verdict.

Tourism for Sustainable Peace in Chittagong Hill Districts

- a. The importance of developing local tourism facilities need not to be over emphasized. Chittagong Hill Districts is full of natural tourist attractions and as such may be developed further for promoting tourism in CHT and the sooner is the better. If tourism facilities of CHT can be developed in a planned way, it would also contribute in the overall development of the country.
- b. ‘Vision 2020’ forecasts 1.3 million tourists arrival in 2020. GDP target is to raise 5% from this industry by 2020 (Morshed, 2006). 5% GDP growth in tourism can only be achieved if tourism industry can be developed and utilize resources of Chittagong Hill districts.
- c. Should we resort to ‘Reactive’ or ‘Proactive Strategy’ ? Dilemma in countering PCJSS ‘Autonomy’ motive is leading to a more complex and unstable situation in the region. To arrest the situation and improve it to normalcy, GoB should act in a proactive manner. People and Constitution of Bangladesh shall not allow any demand for autonomy or protracted land for ethnic minority people. Where 10% land is occupied by only 1% population of Bangladesh.
- d. ‘TOURISM Enriches’ is the theme of WTO. Tourism enriches individuals, society, nations; it stimulates economic activity for the locals; also enhances communications and understanding between locals and nationals (Cooper C and Wahab S, 2001: 13). It will pave the way of politico-economic development vis-à-vis social stability of hill region. Security situation is not conducive in CHT. It is therefore, Tourism in hill districts to be developed under separate plan with a strategic vision. A pragmatic and realistic easy to implement, tourism project plan is foremost important after necessary feasibility study.

RECOMMENDATIONS

Based on the research findings, perception and opinion of the tourism professionals, experts and other stakeholders a short term and long term plan is recommended below which may promote tourism in Chittagong Hill Districts :

a. Short Term Plan. The stated short term plan aims to flourish domestic tourism in Hill Districts within 2-5 years and onward. However, the recommendations are as follows:

- (1) Dedicated survey to be conducted by BPC or other government agencies to identify and select suitable tourism products and eco-tourist spots in CHT. A pragmatic and realistic easy to implement, tourism project plan is foremost important after necessary feasibility study.
- (2) Facilities including economy accommodations, entertainment, catering and other support facilities are to be developed for all levels of income groups in the country.
- (3) Senior military officials may be added with inter-ministerial co-ordination and implementation committee's member to address the security threat.
- (4) Keeping in view the land complexity Govt should devise a land policy related to tourism business to promote this industry. For Foreign Direct Invest (FDI) GoB may issue khas land on the lease agreement basis. For the local investors they can be allotted with Khas land or they may go for joint venture with the locals.
- (5) Local tribals should be given priority in tourism business. They are preferably be integrated in joint venture tourism projects.
- (6) Govt should declare CHT as a special tourist's zone and formulate tourism related policy in CHT that should include land affairs also.

b. Long Term Plan. The long term plan aims to flourish inbound as well as domestic tourism as per the potential of the area within 10-15 years and onward. However, the recommendations are as follows:

- (1) Government may allocate adequate fund required to promote tourism in Chittagong Hill Districts. Public Private Partnership (PPP) Projects in this regards is suitable to promote tourism.
- (2) Domestic private entrepreneurs may be patronized and foreign investors may be encouraged to invest in tourism sector in CHT by facilitating capital investment at concessional interest rate, tax holidays, payment of taxes at rebated rates and allotment of land at reduced price etc.

- (3) Infrastructure facilities that comprise communications (including aviation and road facilities), accommodation, recreation and entertainment facilities, information network, etc to be improved up to international standard gradually.
- (4) Advertisement to be continued through popular TV channels, important newspapers and popular holding magazines, Posters, etc in local and target countries in different languages. Foreign travel writers and media personnel may be invited to project the tourist potentials of CHT.
- (5) Exclusive tourist zone may be established with adequate modern tourism and recreational facilities.

CONCLUSION

The problem of CHT is primarily a legacy of colonial rule. Which is coupled with interest of misguided stakeholders and lack of continuity in policy makers. These underscore and recognize that the development and integrating endeavors of the state contributed to the heightening of the sense of identity and aspirations of a section of the ethnic groups. It is important to note that the endeavors of the GoB to ensure their rightful share for the tribal people in a democratic and developing society are directed towards all ethnic minorities. The insurgency of CHT, has confronted economically impoverished and underdeveloped Bangladesh with a problem that is not its own making. Moreover it also threatened to impede the pace of its total socio-economic development, a must for the emancipation of all Bangladeshis from poverty and backwardness. The GoB have tried sincerely and energetically to solve the problem: the effort have lead to a peaceful solution '*The CHT Peace Accord-1997*'. In the post accord era, development was intensified by the UNDP, NGOs, CHTRC and HDC. Recent decision of GoB on Land issue and handing over all subjects to HDC also a giant step towards socio-political empowerment and fulfillment of the tribal demand according to the peace agreement. Govt also clarified her firm position on Indigenous issue in home and abroad, which is logical and spared no room for further discussion.

In this largely favorable atmosphere, the GoB need to further strengthen the process of peaceful development of the people of the Hill Districts and the region overall, by taking other timely steps. Existing socio-economic development needs further acceleration and expansion in the possible and promising sector. Chittagong Hill Districts in Bangladesh, is a unique place of scenic beauty having a wide opportunity of promoting tourism. After signing the peace accord it is found that tourist flow has been increased drastically. Wide scale

tourism in Chittagong Hill Districts will have remarkable economic and political development prospects in the region. Tourism industry will increase job and business opportunity which will contribute in poverty alleviation in the area. The economic and social developments in the area will ultimately improve the overall livelihood of the local population which will help to fulfill the criteria of the peace accord 1997 and shall resolve the issues for insurgency and instability in Chittagong Hill Districts.

The steps GoB have taken to solve the problem in CHT reflects the larger social awareness. Diversity and managing it in a style which allows peaceful solution in a non-confrontational manner is an important component of further future development. But perhaps recent history in South Asia require that we formulate the development policy more carefully so that we can identify where particularistic steps asserting parochial concerns have to give away to larger conceptions where they be rooted in democratic norms of what in legal terms is called 'the general principles of civilized societies'. The present democratic peace exercise and development process needs to be further strengthened. No stone should be left unturned, no time lost in fulfilling this important national mission, Govt, the tribals and Bangalees in CHT need to move with all sincerity and utmost care to expand development process and reinforce political economy of the area in particular and Bangladesh as a whole. It is a vital matter which need to be appreciated not only by the scholars but also by the leaders of the nation and the media.

BIBLIOGRAPHY

Books

1. Abedin, Mohmmad Zainal., 2003, *The Chittagong Hill Tracts : A Victim of Indian Intervention*, Eastern Publications, London.
2. Acharya, Joyanta, ed., 2011, *International CHT Comission: Unveiling the Truth*, Bangladesh Enterprise for Development and Security Studies, Dhaka.
3. Ali, Muhammad Zulfiquer, 2000. *Parbatty Chattagramer Upojatiyo Sharanarathi*, Kazi Ferdausi Nazula, Anninda Prokashan, Dhaka.
4. Amin, Mohammad., 2000. *Parbattay Chattogram Bishayok Aine*, Chittagong Hill District Council, Bandarban.
5. Bangladesh Bureau of Statistics, *Statistical Pocket Book of Bangladesh 2010*, Government of People's Republic of Bangladesh, Planning Division, Ministry of Planning, February 2010, Dhaka.

6. Chakma, Saradindu Shekhar., 2009. *Ethnic Cleansing in Chittagong Hill Tracts*. Ankur Prakashani, Dhaka.
7. *Constitution of the People's Republic of Bangladesh*. (Dhaka: Government of the People's Republic of Bangladesh, Ministry of Law, Justice and Parliamentary Affairs, 1072) 1996)
8. Cooper, C and Wahab, S.ed., 2001, *Tourism in Age of Globalization*. Routledge, London.
9. Cooper, C and Wahab, S.ed., 2001, *Tourism and Political Boundaries*, Routledge, London.
10. Das, Samir Kumar.,2005, *Peace Process and Peace Accords*, South Asian Peace Studies Vol 2. SAGE Publications, New Delhi.
11. Dewan, Aditye Kumar., 2011, *Wolgong Mey & Willem van Schendel, The Chittagong Hill Tracts Living in a Borderland*, The University Press Ltd, Dhaka.
12. Forum for National Research and Development., 2011, *Addressing the Ethnic People of Chittagong Hill Tracts- An Insight*. Agroni Prokashani, Dhaka.
13. Gain Phillip.,2000, *The Chittagong Hill Tracts: Life and Nature at Risk*. Society for Environment and Human Development (SHED), Dhaka.
14. Hoq, Anisul.,2009, *Parbottya Chattagram Shomosha*, Annesha Prokashon, Dhaka.
15. Hutchinson, R H Sneyd.,1902, 1978, *Chittagong Hill Tracts* : Vivek Publishing Company, Delhi.
16. Hussain, Syed Anwar.,1999, *War and Peace in The Chittagong Hill Tracts Retrospect and Prospect*, Agamee Prakashani, Dhaka.
17. Ibrahim, Maj Gen Syed Muhammed BP.,2004, *Parbatya Chattagram Shanti Prokriya O Poribesh – Poristhiti Mullayan*. Moula Brothers, Dhaka.
18. Kabir, Shahriar., 1998, *Shanteer Pathe Oshantoo Prbattya Chattogram*, Anupam Prokashani, Dhaka.
19. Khan., Zafar Ahmed., 2004, *Rangamati Boichitrar Oaikatan*, District Administration, Rangamati.
20. Lenin, Nuh-Ul-Alam.,1999, *Parbaty Chattagram Shomukhe Santi Parabar*, Hakkani Publishers, Dhaka.
21. Mohsin, Amena.,2002, *The Politics of Nationalism - The Case of Chittagong Hill Tract, Bangladesh*, The University Press Ltd. Dhaka.
22. *Parbattya Zila Bishayak Ain*.,2008. Khagrachari Hill District Council.
23. Rahman, Atiqur.,2007, *Parbottya Thothyo Kosh. Vol 1 to 9*, Parbat Prokashoni, Sylhet.

Reports

1. Annual Report 2007- UNDP., *Bangladesh. Promotion of Development and Confidence Building in the CHT (BGD/02/006)*, CHTDF, IDB Bhaban, Dhaka.
2. A Report on *The Problems of The Chittagong Hill Tracts and Bangladesh Responses for the Solution*, Special Affairs Division, Prime Minister's Office, Government of Bangladesh, 1993.
3. *Customary Land Rights and Natural Resources Management of Indigenous People in Bangladesh*, Pilot Training Papers organized by MoCHTA and ADB on 7/8 December 2010, Bandarban.
4. *Multiculturising Secularism through Constitutional Recognition of Adibashis*, Monthly Publication of the Daily Star, Vol 4, Issue, 11, November 2010, Pp.14-19.
5. *Training on Indigenous and Tribal People: Rights and Development*, Organized by MoCHTA and ILO on 24/25 November 2010, Bandarban.
6. Baseline Study Report on CHT., 2011, UNDP, Dhaka.

Research Papers

1. *Bangladesh, The Interface of Customary and State Laws in the Chittagong Hill Tracts*. Sadeka Halim, Raja Devashish Roy, Susmita Chakma, Sudatta Bikash Tanchangya, Policies and Practices on Indigenous Peoples' Natural Resources Management in Asia.
2. Atiqur, Brig Gen Shah Rahman., 2011, *CHT Accord Issue and Challenges*, NDC, Mirpur.
3. Zahurul, Brig Gen Md Alam., 2004. *Post Conflict Situation and Prospect for Lasting Peace in CHT*, NDC, Mirpur .
4. Ranjan, Addl Secy Sukrity Chakma., 2009, *Problems and Prospects of CHT Regional Council as an Apex Coordinating and Supervising Body in the Region* NDC, Mirpur.
5. Roshde, Maj Gen Abu Rakonuddawla., 2006, *Strategic Management of Insurgency in CHT*, NDC, Mirpur.
6. Bikram, DIG Naba Kishore Tripura., *Tribal Insurgency in CHT, Background, Evolution and Consequence an Insider's View*.NDC, Mirpur.

Journals/Article

1. *Addressing the Ethnic People of Chittagong Hill Tracts: An Insight*, Forum for National Research and Development, Malibagh, Dhaka.
2. Chittagong Hill Tracts Development Facility (CHTDF), (2009), Socio

Economic Baseline Survey of Chittagong Hill Tracts, UNDP, Bangladesh.

3. One Decade, Souvenir of CHTRC, Rangamati, 2010.
4. Parbatya Chattagram Chukti Bastabayan Prosange (2 Dec 2010), Information and Publicity Department, Parbatya Chattagram Jana Samhati Samiti, Kalyanpur, Dhaka.
5. Programme to Promote ILO Convention No.169 (2009), *Indigenous & Tribal People's Rights in Practice*, International Labour Standards Department, ILO.
6. Ahmed, Iqbal. 2011, Statement given by the 1st Secretary, Bangladesh Permanent Mission at UN New York, 10th session of Permanent Forum on Indigenous Issues, 25 May 2011.
7. Samad, A Syed., 1998, Principle secretary, Prime Ministers Office, Presentation in International Conference Centre on, *Evolution of the Peace Process and the CHT Peace Accord*. Dhaka: 20-24 Jun.
8. Hossain, Md Shahadat., 2012, *Tourism in Chittagong Hill Tracts*, The Independent, Dhaka, 15 June.

Documents

1. CHT Manual 1900.
2. CHT Land Commission Act 17 July 2001.
3. CHT Peace Accord - 1997.
4. CHT Commission Letter to Hon'ble PM, GOB- Renewed Violence in the CHT and the Need for Implementation of the CHT Accord. April 24, 2011.
5. National Education Policy 2010 (Final), Ministry of Education, GOB,
6. National Parliament of Bangladesh. Cultural Institution Bill, 2009 of Small Ethnic Group, Ministry of Cultural and Religious Affairs, April, 2010.
7. Translated English version of the 'Accord between the National Committee on Chittagong Hill Tracts formed by the Government and the Parbatya Chattagram Jana Sanghati Samiti' signed at Dhaka on 02 December 1997.
8. United People's Democratic Front (UPDF): Goshona, Gothantatra (Constitution), Kormoshuchi, Dabinama (Demand) and Nitimala (Regulation).

Websites

1. <http://www.bpc.gov.bd>
2. <http://www.tourism.gov.bd>
3. <http://www.chtrc.gov.bd>
4. <http://www.bangladeshgov.org>
5. <http://www.mochta.gov.bd>

6. <http://www.chtcommission.org>
7. <http://www.hawaii.com>
8. <http://www.hawaiihistory>
9. <http://www.independant-bd.com>
10. <http://www.wikipedia.com>
11. http://www.albd.org/images/stories/showcase/Manufesto_of_AL/Election_al_manifesto_2008.pdf
12. www.un.org/millenniumgoals/
13. <http://www.pcjss.org>

Interview

1. Interview with Brig Gen (Retd) Mehbubur Rahman, psc Security Advisor UNDP, Rangamati on 08 May 2012.
2. Interview with Deputy Commissioner of Rangamati, Mr. Surendra Nath Chatarjee, Rangamati on 08 May 2010.
3. Interview with Lt Col (Retd) Parimal Bikas Chakma, Director Operation UNDP, Rangamati on 08 May 2012.
4. Interview with Mr. Mohsin Rana, Tourism entrepreneur and Secretary of Samoadhikar Andolon, Rangamati
5. Interview with Mr. Maksud, Editor Rangamati News and Member Secretary of Samoadhikar Andolon, Rangamati on 08 May 2012.
6. Interview with Mr. Jahangir Kamal, Businessman and General Secretary of Samoadhikar Andolon, Rangamati on 08 May 2012.
7. Discussion with Assistant Deputy Commissioner Mr. Aminul Islam (Land), Rangamati on 08 May, 2012.
8. Discussion with the European Union Delegation for Relation with South Asia during their visit to Region Headquarters, Bandarban, on February 16, 2010.
9. Interview with Mr Jyotirindra Bodhipriya Larma (Santu), Chairman, Mr Ushatan Talukder, Mr Md Shafiqur Rahman and Mr Nurul Alam, Members, CHTRC on 09 May 2012 at Regional Council Office, Rangamati.
10. Bhomong, King Mr. Aung Shi Pru Chowdhury. Channel i, telecasted Bhomong King's interview on April 2011.

Newspapers

1. Prothom Alo, 02 July 2012.
2. Prothom Alo, 03 July 2012.
3. Alam, Mahbulul (Editor), Larma Meets Prime Minister, Dhaka, The Daily Independent, 22 April 2002.

4. Anam, Mahfuz (Editor), What Price Complacency, Dhaka, The Daily Star, 10 December 1997.
5. Elahi, Khandakar Quadrat, Chittagong Hill Tracts Treaty, National Integrity and Sovereignty, Dhaka, The Daily Star, 27 December 1997.
6. Kabir, Nurul, Chittagong Hill Tracts Commission Finds Peace Accord a New Source of Conflict, Dhaka, The weekly Holiday, 19 January 2001.
7. Mortoza, Sylvia, The Chittagong Hill Tracts Peace Treaty Necessary, Dhaka, The Daily Bangladesh Today, 01 July 2003.
8. Roy, Pinaki, Chittagong Hill Tracts Peace Punctured by Rival Gunshots, Dhaka, The Daily Star, 18 May 2003.

Author

Brigadier General AKM Shafiqul Mowla, ndc, psc has been a course member of NDC 2012. He was born in January 1961 and commissioned in the Army Services Corps on 10 June 1983. Apart from his regimental appointments as Adjutant, Company Commander and Second in Command in field unit, he commanded two Supply & Transport Battalion and a Base Supply Depot. He also served as Intelligence Officer in Chittagong Hill Tracts (CHT). Brigadier General Mowla served as the Grade Two and grade One Staff Officer in the Military Intelligence Directorate in the Army Headquarters. He also served as Colonel General Staff in DGFI. He served on deputation to Department of Immigration & Passport, as Additional Project Director in MRP/MRV Project. He is a distinguished instructor and served twice as Instructor Grade two and once as Chief Instructor in the ASC School Centre & School. He was Commandant of ASC Centre & School prior to joining the course. Brigadier General Mowla attended 13 professional courses both at home and abroad. He is a graduate of DSCSC, Bangladesh and obtained his Master of Defence Studies from National University of Bangladesh. He also graduated from Asia Pacific Centre for Strategic Studies at Hawaii, USA. He obtained MBA degree from South-East University. He served as UN Headquarter Staff in 1993 at Mozambique (ONUMOZ) and as a Chief Movement Control Officer in UN mission Liberia (UNMIL) in 2005. He has visited many countries across the globe. He is married and blessed with a son and a daughter. His hobbies include reading and playing golf.

IMPORTANCE OF INTERMODAL TRANSPORTATIONS AND COMMUNICATION INFRASTRUCTURE IN DEVELOPING PRESENT HINTERLAND CONNECTIVITY WITH PORTS OF BANGLADESH

Commodore Yahya Syed, (C), ndc, afwc, psc, BN

INTRODUCTION

Bangladesh is a country of hope, prosperity and opportunity. Most of its area is relatively flat lying in the deltaic plain, covered with a network of rivers and roads forming a maze of interconnecting corridors. As an emerging nation, Bangladesh places special priority on economic and social development. Any well-planned, neatly laid-out, sustainable modern multi-modal transport system and communication infrastructure is as a key element for better connectivity with the hinterlands.

To manage the diverse and increasing needs of the movement of container cargo traffic efficiently, any shipping process needs to follow door-to-door connectivity. In Bangladesh, there are serious bottlenecks in the integrated chains for the import and export bound container cargo traffic that adversely affect the movement of container cargo traffic resulting in increase in the unit cost of transportation. Since, the containerized cargo traffic movement is obtained via integrated chain to keep the unit cost of transportation competitive, the country's maritime industry has to look, analyze and push for targeted policies to ease out and remove these bottlenecks. Specifically, there is clear requirement for rapid and unhindered hinterland connectivity, improvement in multimodal infrastructures and legislation in line with established world practices in multimodal transportation¹.

Objective of the Study

Containerized cargo provides easy handling, lesser unit cost of transportation, and a greater economy of scale in modern times over an ever increasing proportion of the world's manufactured goods. In most door-to-door transport chains, the costs of hinterland transport are higher than maritime transport costs and port costs combined. Hinterland connectivity is probably the most critical area to ensure a seamless flow of containers and to improve port productivity. It is an essential part of a world class logistics system that Bangladesh needs to

1. Coordination in Hinterland Transport Chain: A Major Challenge for the Seaport Community by Martijin VAN DER HORST and Peter DE LANGEN, Corresponding author: Erasmus University Rotterdam, Department of Port, Transport and Regional Economics, The Netherlands.

develop with a strategic focus. Bangladesh is subjected to the impacts arising from developments in the logistics industry and transportation sector.

The broad objectives of this study is to analyze port–hinterland connectivity. In detail the study seeks:

- a. To propose a systematic and user oriented intermodal transportation system is built in the country.
- b. To identify current and projected future corridor problems and needs, and various projects and strategies to address those needs.
- c. To explore ways of encourage consignees using both rail and river transport as these contributes less pollution and consume less fuel per ton transported and these are the safest means of transport for containers.

PORTS OF BANGLADESH AND THEIR CONTAINERIZATION

Prerequisites for Smooth Functioning of Ports Human civilization started its journey centered round ports². Adequate Port facilities and efficient management have a vital role to play towards achievement of economic growth in developing countries; this is more so in the case of Bangladesh. In order to develop port facilities connectivity between hinterland and port the inter-port connectivity is very important. Ports should invest in hinterland connectivity to be able to offer total transportation solutions to the clients. That connectivity to the hinterland by road, rail and waterways is the key to the success of a container terminal. Slow evacuation of cargo coupled with poor hinterland connectivity has undermined the efficacy of ports and it is imperative to develop a multi-modal system to enhance their competitiveness. An efficient multi-modal system, which uses the most efficient mode of transport from origin to destination, is a prerequisite for smooth functioning of any port³.

Chittagong Port. Bangladesh is a littoral state and ports provide a gateway for its sea-borne trade with outside world. As the meeting place of the east and west, Chittagong occupies the key position in the development of foreign trade. The Chittagong Port being the principal port of the country has been playing a

2. Coordination of Business Plans Major Ports in India, Volume 2, Indian Ports Association Coordination of business plans for major ports in India Consolidated port development plan; Prepared by Port of Rotterdam Authority, September 2007.

3. CPA Container Handling Facilities and Processes Chittagong Port Trade Facilitation Project, Bangladesh; Asian Development Bank, Bangladesh Ministry of Shipping and Chittagong Port Authority; Prepared By: TERA International Group Inc., 107 E. Holly Avenue, Suite 12, Sterling, VA 20164, U.S.A

vital role for the economic development of the country. During the year 2010-11 Chittagong port handled over 45 million metric tons of cargo including 1.5 million TEUs containers which constituted around 92% of total maritime trade of Bangladesh⁴. Chittagong Port is not only an opening to the economy of Bangladesh, but there is no second installation in Bangladesh equal to the Chittagong Port considering its strategic, economic and political importance thereby making it highly dynamic to keep pace with increasing commercial and economic activities of the country.

Mongla Port. Mongla Port is the second most important seaport in Bangladesh. It is situated 90 km from sea in the Passur River. Mongla is in the unique position to handle export and import traffics of the country as well as the transit trade and commerce of neighboring countries of Bangladesh as that of Nepal and Bhutan. But due to inadequate depth of water in the port area very few vessels call at the Mongla Port. Due to heavy sedimentation, the present river depth alongside the port jetty has come down to six meters from earlier 7.5 meters. Continuous dredging is required to keep the channel navigable. Mongla Port has neither installed adequate equipment, nor implemented the Electronic Data Interchange Facility (EDTF) in port operations and hence suffers from inordinate delays in areas like dock clearing and ship turnaround time⁵.

Containerization of the Port Containerization contributes to a higher efficiency in the development of multimodal transport operations. Container shipping has been the fastest growing sector of the maritime industries during last two decades⁶. In the year 1980, the average container ship size was 975 TEUs and the largest ship was 3057 TEUs. In the year 2011, the average size of a fully cellular container ship was 2 218 TEUs and the largest size was about 9600 TEUs and this is still increasing. The draft requirement at the port has also changed accordingly. Therefore, it is imperative for the Bangladeshi ports to improve on the parameters such as draft, average turnaround time, average pre-berthing time, etc in order to remain an attractive destination and transit point for the global container cargo traffic and to meet effectively and fulfill the demands of internal trade as well. By the study of container volume growth during the past twenty years, it has been predicted that the container volume will double on most major routes within the next ten years or less.

-
4. People's Republic of Bangladesh: Strategic Master Plan for Chittagong Port, ADB's Technical Assistance Report, Project Number: 45078 Policy and Advisory Technical Assistance (PATA) , December 2011.
 5. Mongla Port Area Development Project Final Report Feb 1996 by Japan Overseas Consultant Co Ltd in association with Fredric R. Harris INC. Bangladesh Consultant Ltd.
 6. Theo NOTTEBOOM ITMMA The Relation Between Seaports and the Intermodal hinterland in Light of Global Supply Chains, European Challenges; Discussion Paper No. 2008-10 March 2008. Joint Transport Research Centre of International Transport Forum.

SUPPLY CHAIN AND MULTIMODAL TRANSPORT SYSTEM

Supply Chain. A supply chain is a system of organizations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources, raw materials and components into a finished product that is delivered to the end customer⁷. The 21st century will see a renewed focus on intermodal freight transportation driven by the changing requirements of global supply chains⁸. Intermodal transportation, with the options of integrating multiple modes, provides a flexible response to the changing supply chain management requirements in global markets and distribution systems⁹. In Bangladesh some modes are over utilized, creating delays and hazards, while other modes are under utilized and have excess capacity. To improve overall efficiency of the transport system, each mode should be used for what it does best in an overall transport supply chain¹⁰. The Bangladeshi institutions, in general, have weak and outdated structures. Inadequate capacity and shortage of resources and trained manpower seriously undermine their ability to deliver good services that requires sound policy making as well as management.

Intermodalism. In one of its most widely accepted meanings, intermodal freight transportation refers to a multi-modal chain of container transportation services. This chain usually links the initial shipper to the final consignee of the container (so-called door-to-door service) and takes place over long distances¹¹. Transportation is often provided by several carriers. In a classical example of an inter-continental intermodal chain, loaded containers leave a shipper's facility by truck either directly to port or to a rail yard from where a train will deliver them to port¹². A ship will move the containers from this initial port to a port on the other continent, from where they will be delivered to the final destination by a single or a combination of "land" or "water" transportation means: truck, rail, coastal or river navigation.

7. Steenken and Stahlbock, 2004,

8. Intermodal Freight Transportation, by WILLIAM DEWITT, University of Maryland and JENNIFER CLINGER, Louis Berger Group, Inc. A1B05: Committee on Intermodal Freight Transport Chairman: Gerhardt Muller, U.S. Merchant Marine Academy.

9. Ibis

10. Policy Brief on "Transport and Infrastructure" CPD task force report, National Policy Forum Dhaka: 20-22 August, 2001 Organized by: Centre for Policy Dialogue, *Prothom Alo, The Daily Star*.

11. Teodor Gabriel Crainic and Kap Hwan Kim Intermodal Transportation Montr'eal, December 9, 2005

12. Intermodal Freight Transportation, by William Dewitt, University of Maryland and JENNIFER CLINGER, Louis Berger Group, Inc. A1B05: Committee on Intermodal Freight Transport Chairman: Gerhardt Muller, U.S. Merchant Marine Academy.

Advantages of Multimodal Transport¹³

Competitive advantage from an efficiently integrated transportation network may ultimately lead to wider reach of markets, higher production, lower cost and improved quality of goods to the benefit of customers¹⁴. Some key advantage of multimodal transport are as follows:

a. **Minimizes Time Loss.** Multimodal transport, which is planned and coordinated as a single operation, minimizes the loss of time and the risk of loss, pilferage and damage to cargo at trans-shipment points. The multimodal transport operator maintains his own communication links and coordinates interchange and onward carriage smoothly at trans-shipment points.

b. **Provides Faster Transit.** The faster transit of goods made possible under multimodal transport reduces the disadvantages of distance from markets and the tying-up of capital. In an era of Globalization the distance between origin or source materials and consumer is increasing thanks to the development of multimodal transport.

c. **Reduces Documentation.** The burden of issuing multiple documentation and other formalities connected with each segmented of the transport chain is reduced to a minimum.

d. **Saves Cost.** The savings in costs resulting from these advantages are usually reflected in the through freight rates charged by the multimodal transport operator and also in the cost of cargo insurance. As savings are passed onto the consumer demand is increased.

e. **Establishes One Agency Dealing.** The consignors has to deal with only the multimodal transport operator in all matters relating to the transportation of his goods, including the settlement of claims for loss of goods, or damage to them, or delay in delivery at destination.

IMPORTANCE OF UNHINDERED HINTERLAND CONNECTIVITY

Hinterland Connectivity The development and changes in port hinterlands have received a lot of attention since they represent substantial opportunities to improve the efficiency of global freight distribution. Port hinterland is one of the most important concepts in transport geography; literally, hinterland means the land behind a city or a port. A port's hinterland is the market reach area from which

13. Multimodal Transport Operations., 2002. UNESCAP Training Module

14. The Law of Intermodal Transportation: What it was, what it is and what it should be -A Report on Intermodal Transportation in USA by Paul Stephen Dempsey, Ph.D, J.D.

the port's customers are drawn from that is, the areas from which cargo originates, as well as the areas where cargo moving through the port is destined¹⁵ Some ports will have hinterlands that extend across many states, while other ports will have smaller hinterlands. Therefore, the connectivity of Ports with the hinterland is important not only to ensure smooth flow of traffic at the present level but also to meet the requirements of projected increase in traffic¹⁶.

Communication with Hinterland While ports have always been important nodes in the logistics system, globalization of production has sharpened the need for ports to be value adders, not value subtractors, in the supply chain, and has given ports a unique opportunity to become value-adding entities. A port is the interface between intercontinental transport and a place in the hinterland being considered for production, assembly, or final distribution¹⁷. Port capability and efficiency can greatly influence the decision for locating a distribution center, and often determine whether a local producer can compete globally or regionally with other producers. The challenge is for ports to relate to the needs of their customers and assist them in improving their competitive positions by providing low-cost, efficient port services. At present 70% cargoes of the Chittagong Port are hinterland bound. So far modal split of cargo is concerned, 10% by rail (containers), 50% by road (break bulk¹⁸) and 40% by river (bulk) are transported to hinterland. As long as full load container is concerned only 10% by rail, 2% by road and not a single container is transported through river route¹⁹.

ROADS AND CORRIDORS CONNECTING HINTERLAND

Roads. The Roads and Highways Department (RHD) and local government bodies are the two principal organizations responsible for the construction and maintenance of the road network in Bangladesh. In Bangladesh roads carry over 70 percent of national passenger traffic, providing the backbone of the transport sector in this country of 160 million people. Of multiple modes of existing transportation encompassing rail-water-roadways in Bangladesh, road transport by an order of magnitude in carriage of goods and passengers, has

15. Free Trade Zone and Port Hinterland Development, Report Submitted by ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC in 2005, No of Report ST/ESCAP/2377.

16. Report of a conference on "Ports of India", New Delhi, November 17, 2006.

17. Hinterland Connections of Seaports UNECE Conference September 17-18, 2008 Piraeus, Greece Introduction of the Session 'Challenges to the Development of Seaports in a Globalized World' By its Chairman C. Bert Kruk Lead Port Specialist ETWTR (Energy, Transport and Water Transport Group), the World Bank, Washington DC, USA.

18. Break-bulk cargo traffic is defined as all general cargo that is not containerized, for instance in loose, palletized, and bagged or in a pre-slung packing form.

19. Report and recommendation of the president to the board of Directors on a proposed loan and technical assistance grant to the people's republic of Bangladesh for the Chittagong port trade facilitation project; Asian Development Bank RRP: BAN 36105; November 2004.

apparently been playing the most dominant role. Taking cognizance of need of rapid socio-economic development, a good number of transport infrastructure building projects have been launched by Roads and Highways Department that are currently going underway of implementation. The axle load permitted on tracks in India was 20.3 to 22.9 tons as against 25 to 37.5 tons per axle carried by major freight carrying systems in the world such as the Australian system²⁰. In Bangladesh, only the 10% -11% of the export bound container traffic is transported by rail and the remaining part of the traffic is transported by road after un-stuffing the container at Chittagong and Mongla area. Therefore, it is critical and important to improve roads network and enhancement of axle load, so that the logistics cost can be brought down to international standards.

Dhaka Chittagong Corridor. A transport corridor is a set of routes between hub centre where maritime, fluvial, land and air transportation systems converge. Transport corridors will integrate economic activities over a territory or a region. Dhaka-Chittagong National Highway with a length of 248.3 km is considered to be the most important arterial road and lifeline of commerce in Bangladesh and carries port traffic to Dhaka and other places in the country. The improvement of this strategic corridor is envisaged to provide substantial economic and social benefits to the people through generation of employment, creation of improved facilities for trade and commerce.

Road Traffic Facilities. The road at present has two lane traffic facilities from Daudkandi to Chittagong section with certain stretches paved shoulders. The Government has decided to make an independent alignment of Dhaka-Chittagong Highway, a 4-lane divided carriageway capable of carrying container and other traffic from the port city of Chittagong to the hinterland with access control. It is envisaged that, the implementation of this project will reduce journey time from Dhaka to Chittagong by two/three hours²¹.

Ushering New-Southwest Corridor (Dhaka-Mongla). The Government of Bangladesh (GOB) will soon start implementing a plan to construct USD 3 billion Padma Bridge on River Padma which separates depressed southeast zones and Mongla Port from Dhaka. The bridge will be the longest bridge of the country. The proposed Bridge will be 5-6 Kilometer long, 25-meter wide with four-lane roadway and a railway track, gas pipeline and electricity power transmission line on it. Once this mega project is completed, travel among all the major divisions and cities between the two sides of the river will be easier and faster. According

20. BANGLADESH TRANSPORT POLICY NOTE *Unit Sustainable Development Department South Asia Region* April 2009 by Graham Smith under the guidance of Jean-Noel Guillossou, Sr. Transport Economist

21. Project Paper submitted by ADB to R&H division for Dhaka –Chittagong 4 lane project in 2006

to the feasibility study, it was projected that the traffic volume at the Padma Bridge will reach 21,300 vehicles per day soon after opening of the bridge and will reach 41,600 vehicles per day by 2025. This fixed link between centre and southwest parts of the country will improve accessibility, lower transport costs and delays, and reduce the economic isolation of the Southwest.

OPPORTUNITIES IN RAILWAY NETWORK

Railway Containers have become the most important component for rail and maritime intermodal transportation. Bangladesh Railway has entered into a new era in transportation of freight traffic in containers from Chittagong to Dhaka. Special type Flat Wagons required for container movement were initially arranged by converting some existing wagons. Subsequently 80 bogie container flats were procured from China and another 100 bogie container flats were procured from India. An Inland Container Depot has been opened at Dhaka with custom and port facilities for clearance of container traffic. Exclusive container train was introduced on 5th August, 1991. Since then, volume of container traffic gained momentum.

Dhaka-Chittagong Rail Corridor. The Dhaka-Chittagong rail corridor has a total length of 321 km. A container train takes around 8/9 hours to reach Dhaka from Chittagong and vice-versa. At present 121 km of this corridor is already double-tracked. Double tracking the Tongi-Bhairab Bazar section is taken under hand. Doubling of the Laksam-Chinkiaastana section and Akhaura-Laksam section will be taken when adequate financial aid will be received from donors²². Number of containers transported by BR between Chittagong Port and Dhaka ICD has been growing during recent years at an average rate of about 10%. BR now transports around 90,000 TEUs of containers annually, which is approximately ten percent of the total demand. The growth is being hampered due to limitations of line capacity, insufficient equipment, less number of locomotives and inadequate terminal facilities.

UNEXPLOITED INLAND WATERWAYS

Inland Water Transport (IWT). Bangladesh is a riverine country. Water Transport of Bangladesh lies at the apex of the Bay of Bengal and has rivers that come down from the surrounding countries and flow through it. The inland waterways play a vital role in the economic development of a country. Because of its geographical and topographical conditions, water transport has developed as the main mode of communication. A number of rivers and numerous channels

22. Railway sector investment programme report, project no. 32234, September 2006.

criss-cross the country so as to resemble the mesh of a net. Out of an overall 24,000 km-long network of rivers, canals, creeks and bodies of water occupying about 11% of the total area of the country. The length of navigable waterways is 8,372 km in the rainy season and 5,200 km in the dry season²³. Nearly all waterways are natural rivers, the navigability of which is affected by river morphology and hydraulics. A number of initiatives were launched to enhance the inland waterway mode of transport, which is estimated to carry approximately 35% of the country's annual freight volume²⁴. Inland ports handle about 40 percent of the nation's trade²⁵.

BIWTA and BIWTC. Inland waterways are estimated to carry approximately 14% of the country's annual passenger volume and 35% of its annual freight volume. Of the three surface modes, IWTC has the lowest share of the passenger transport task and the second-lowest share of the freight transport task (with rail taking the lowest share of the latter). The basic inland waterway transport system comprises a triangle of two seaports, Chittagong and Mongla, with the Dhaka-Narayanganj metropolitan area. Because of the physical properties of water conferring buoyancy and limited friction, water transportation is the most effective mode to move large quantities of cargo over long distances. Interconnections between barge services and ocean shipping, particularly on the Chittagong Dhaka route barge shipping offers a low cost solution to inland distribution where navigable waterways penetrate to interior markets²⁶.

Construction of ICD at Pangaon. CPA and BIWTA have jointly built an ICD on the bank of river Buriganga at Pangaon in Narayanganj to introduce waterway container transportation for the first time in the country. Total area of the Pangaon ICD is 44 acres and holding capacity will be 8000TEUs. The CPA has provided Tk 154 crore for the implementation of the project²⁷. When the ICD will be commissioned 60%-70% container will be transported by river route. If container transportation is carried through waterway, traffic congestion will also be minimized on the Dhaka-Chittagong corridor to a large extent.

-
23. People's Republic of Bangladesh Revival of Inland Water Transport: Options and Strategies May 29, 2007; A report (Report No. 38009) prepared by a team led by Jean-Noel Guillosoy World Bank, South Asia Sustainable Development, SASSD.
 24. Review of Maritime Transport 2011; *Report by the UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD) secretariat; Chapter 4.* UNITED NATIONS, New York and Geneva, 2011.
 25. Private sector to make mark in inland cargo handling. The Daily Star 22 December 2009. <http://www.thedailystar.net/newDesign/news-details.php?nid=118770> (Accessed on 24 May 2012)
 26. People's Republic of Bangladesh, Revival of Inland Water Transport: Options and Strategies Bangladesh Development Series Paper No. 20 the World Bank Office, Dhaka September 2007.
 27. People's Republic of Bangladesh Revival of Inland Water Transport: Options and Strategies May 2007 Sustainable Development Department South Asia Region. Report No. 38009.

Water transportation is cheaper, safer, and environment-friendly, and will thus continue to play a significant role in the economic life of Bangladesh in the future. Therefore MLOs must be encouraged to build suitable transport so that it can carry 80 to 100 TEUs of containers²⁸. Initial work on the container terminal is completed and an operator being appointed to run the terminal. A container terminal may be built in the River Turag in order to facilitate import-export of Savar, Ashulia and Gazipur EPZ areas.

FACTORS EFFECTING IN IMPROVEMENT OF INTERMODALISM

Customs Interferences The efficiency and effectiveness of Customs in processing trade goods has a significant influence on the international competitiveness and economic growth of the country and in the expansion of foreign trade in the global marketplace²⁹. Customs procedures, transport documentation and data exchange should be simplified and harmonized to achieve faster turnaround time for cargo processing. While Chittagong Customs House has done well in computerizing various processes over the years, there is still much room to improve operational effectiveness custom clearance process³⁰. The harmonization of Customs processes and procedures is essential to the objective of facilitating global trade. Customs clearance can be made easy by adopting the following measures:

- a. A wide area network needs to be established for bringing all stakeholders under one computerized system, including customs, port authority, customs agents, shippers, traders and banks
- b. Only high-risk cargo may be opened for customs examination
- c. Simplified customs procedure for transshipment between gateway port and dry port (ICD/CFS)
- d. LCL carrying containers allowed movement from one CFS to another CFS for final consolidation/stuffing.
- e. Customs messages exchange with ports, airports, ICDs/CFSs and banks.

28. *Ibid*

29. Challenges of Customs Automation in Bangladesh and Future Prospects by Dr. Khairuzzaman Mozumder First Secretary (Customs Policy), National Board of Revenue prepared for Asia-Pacific Trade Facilitation Forum 2009: Setting the Regional Agenda, 26 November 2009.

30. Contributions of Auxiliary Factors to Investment Climate in Bangladesh: A Study on Ports and Customs by AKM Matiur Rahman, Technical Advisor: Charles C. Villanueva, AJBE Special Issue, May 2011

- f. Facility of customs duty payment through more banks and via e-banking
- g. The NBR may employ adequate number of preventive officers in the dry port to transport container by road and waterways for facilitating Door to Door operation.

Despite some computerization, the documentation needed for customs clearance is lengthy and still C&F agent has to submit the hard copy. Even with the Pre-Shipment Inspection (PSI) system now in place, customs continues to check 5 to 10% of the shipments that have CRF (Clean Report of Findings) and up to cent percent of the packages in these consignments³¹. These measures taken by customs officials result in delay of releasing goods, in addition, such inspections generate mere prospect of elicit informal payments.

Bonded Transportation in Bangladesh. The bonded transportation of containerized cargo between Chittagong port and the Dhaka ICD is carried out by means of the use of Bangladesh Railway. However, containerized cargo is not permitted to be classed as bonded transportation if the destination of the cargo declared in the bill of lading and the Internal General Manifest is other than Dhaka or Dhaka ICD. The Shipping Agent draws a new IGM (Separate container list for bonded transportation) and submits it to the collectors of customs at Chittagong for its haulage.

Transport Policies of Bangladesh As multimodalism involves promoting cooperation and linkages amongst different transport modes, plenty of challenges and obstacles stand to get in the way. By establishing rules and modifying them as links and relationships across transport modes are built, participants in this network will be better quipped to preserve their individual business objectives. The introduction of multimodal laws and regulations will be the most crucial first step in developing “through-transport” linking the various transport modes in the country in a systematic and efficient manner. Taking consideration of these points the GoB has drafted an Integrated Multi Modal Transport Policy (IMMTP) in June 2008 which aims to build a secure, dependable and uninterrupted transport network, addressing problems related to road, rail, inland water transport, including access to ports and airports³². The IMMTP will help GoB in achieving a more rational and balanced investment across the different transport modes.

31. Bangladesh Strategy for Sustain growth. A report on Development of Port and Customs by Asian Development Bank. 2009.

32. Implementation of Multimodal Transport Rules, A Report prepared by the United Nation Conference on Trade and Development Secretariat in 2002.

The integrated transport policy is intended to extend choice in transport and secure mobility in a way that supports sustainable development.

RECOMMENDATIONS

The following is a set of broad policy recommendations that can hopefully form a sound platform upon which hinterland connectivity and multimodal transport system can be built. They are by no means exhaustive, but it is hoped that their introduction could inspire further debate on the subject of multimodal development and spur more detailed studies into the proposed areas:

- a. It is generally agreed that a well-articulated multimodal transport policy is needed for the development of transport sector, even when the private sector plays an increasing role in such development. Therefore the draft national policy on integrated multimodal transportation may be enacted as soon as possible.
- b. The integration of the individual modes into a seamless intermodal system may be incorporated into the national transportation policy.
- c. National corridors where traffic count reaches 12,000 PCUs preferably have at least four lanes road connectivity. Double line rail connectivity may be taken up for speedy implementation. Increased length of loops at sidings and larger space envelopes should be factored in while implementing new rail projects so as to harness increased volumes of cargo.
- d. In order to avoid elicit informal payments the NBR may take advance duty/tax from importer while opening the LC.
- e. The Inland Container Depots (ICD) may be established according to demand, at strategic locations, to enable multimodal door to door operation without stuffing and de-stuffing of containers at the ports. ICDs may be well-equipped with proper container handling equipments.
- f. The inland waterway system has been found to have lowest marginal cost for moving containers to hinterland; hence Pangaon container terminal may be brought into operation as soon as possible.

- g. To check overloading of trucks and buses, weight bridges may be placed into RHD roads. This will help prevent the damage of roads from heavy axle-loads and reduce the need for road maintenance.
- h. Country's inland water transport remains completely ignored. As a result the opportunities of spreading industries to different parts of the county remain unachieved. Therefore implement a continuous and sustainable river dredging plan and development and sustainable navigability plan of the Mongla Port.
- j. Inadequate energy supply and under developed transport networks connecting ports with the hinterland impose a major drag on growing economic performance. Building sustainable hinterland connectivity the government may take following measures on priority basis:
 - a) Increasing expenditures on maintenance of road and rail;
 - b) Establish a national highway authority;
 - c) Making Dhaka Chittagong rail corridor double track;
 - d) Introduce double stacked container train service;
 - e) Simplify Customs procedures and make the regulation users friendly;
 - f) Connect Mongla Port and Dhaka via rail line;
 - g) Employment of adequate number of Customs officials to the ports and ICDs;

CONCLUSION

Hinterland connectivity is probably the most critical area to ensure a seamless flow of containers and to improve port productivity³³. It is an essential part of a world class logistics system that Bangladesh needs to develop with a strategic focus. Inadequacy and technical incapacities of the road sector has been addressed by various means. For improving inland connectivity through waterways, inland waterway policy aims to increase the share of the total inland cargo. Dhaka-Chittagong 4 lane road and double track rail aim to remove capacity constraints

33. David Cole, Tony Furst, Sharon Daboin, Warren Hoemann, Dr. Michael Meyer, Richard Nordahl, Marygrace Parker, Leo Penne, Norman Stoner, Dr. Tianjia Tang Freight Mobility and Intermodal Connectivity in China; Technical Report Documentation, Sponsored by Office of International Programs, Office of Policy, Federal Highway Administration, U.S. Department of Transportation; American Association of State Highway and Transportation Officials National Cooperative Highway Research Program.

of hinterland connectivity. Simply building more and more roads is not the answer to increasing transport demand. Rail and inland water transport have been marginalized and now an integrated transport policy is needed to address the massive demand of the future and to combat congestion and pollution.

BIBLIOGRAPHY

Books

1. Farazi Binti Ferdous, Chittagong Sea Port and Inland Transport System of Bangladesh: An analysis of the role of efficient hinterland connectivity to facilitate international trade, Tokyo, 2011.
2. Theo Notteboom Itmma, The Relation Between Seaports and the Intermodal hinterland in Light of Global Supply Chains, European Challenges; University of Antwerp Press, 2008.

Documents, Reports and Journal Articles

1. The Law of Intermodal Transportation: What it was, what it is and what it should be -A Report on Intermodal Transportation in USA by Paul Stephen Dempsey, Ph.D, J.D
2. Nazery Khalid,. 2005. Developing multimodal transport in Malaysia: Improving links and integration across transport modes and the logistics chain, Kuala Lumpur.
3. Port Competition and Election in Contestable Hinterlands; the case of Austria by Peter W. de Langen; Erasmus University Rotterdam.
4. Assessing Intermodal Transportation Planning at State Departments of Transportation by Andrew R. Goetz, Joseph S. Szyliowicz, Timothy M. Vowles, and G. Stephen Taylor- National Center for Intermodal Transportation NCIT, 2004.
5. Report on Intermodal Transportation and Inventory Cost Model, Highway-to-Rail Intermodal; User's Manual; U.S. Department of Transportation, Federal Railroad Administration, March 2005.
6. Nazery Khalid, Armi Suzana Zamil & Farida Farid, Leveraging The Application of Information Technology to Gain Competitive Advantage In the Maritime Sector; Paper presented at Maritime Science & Technology Seminar (MARSTEC 2007) in Kuala Lumpur on 22 February 2007.

7. Implementation of Multimodal Transport Rules, A Report prepared by the United Nation Conference on Trade and Development Secretariat in 2002.
8. Policy Framework for the Development of Intermodal Interfaces as part of an Integrated Transport Network in Asia, UN ESCAP document no ST/ESCAP/2556, 2008.
9. People's Republic of Bangladesh Revival of Inland Water Transport: Options and Strategies May 29, 2007; A report (Report No. 38009) prepared by a team led by Jean-Noel Guillosoou World Bank, South Asia Sustainable Development, SASSD.
10. United Nations (2003), *Manual on Modernization of Inland Water Transport for Integration Within a Multimodal Transport System*, New York.
11. Jean-Paul Rodrigue and Theo Notteboom., 2005. Foreland-Based regionalization: Integrating Intermediate Hubs with Port Hinterlands, Antwerp

On line Newspaper Articles

14. <http://www.thedailystar.net/newDesign/news-details.php?nid=>
15. <http://www.thefinancialexpress-bd.com/more.php>. News
16. <http://www.theindependent.net/newsdetails.php>
17. <http://www.thenewnationbd.com/newsdetails.aspx?newsid=9175>

Author

Commodore Yahya Syed, (C), ndc, afwc, psc, BN, joined in the Bangladesh Navy as a cadet in 1981. After initial training in the Britannia Royal Naval College, Dartmouth, England, he was commissioned in 1983. He did his specialization course in Signal Communication from Karachi, Pakistan in 1993. He is a graduate of the Asia Pacific Center for Security Studies, Hawaii, USA. He completed his Command and Staff course from the College Interarmées de Défense, Paris, France, in 1997. The officer passed the Armed Forces War Course and got his Masters in War Studies from the National Defence College, Mirpur in 2005. He did his Masters of Business Administration (MBA) from the Preston University, Wyoming, USA. He commanded number of men of war and has performed various staff duties in the Naval Headquarters/Area Headquarters. He served as the Director Signal at the Naval Headquarters in 2009-10. He spent around two years as the Member Harbour and Marine of the Chittagong Port. He also served as the Chief Military Personnel Officer (CMPO) in UNAMID and UN Military Observer and Military Liaison Officer in the ONUCI in Ivory Coast. He is vastly travelled person who visited USA, Canada, Mexico, UK, France, Germany, Italy, Switzerland, Sweden, Norway, Finland, Denmark, China, Egypt, Turkey, Malaysia, Australia, Vietnam, Jordan, Singapore, Saudi Arabia etc. A Freeman of the city of Dhaka, his spare time is dedicated to family activities although he occasionally finds some space for a little golf and reading. Commodore Syed lives in Dhaka with his wife Fatima, a school Principal, and their daughter Zara and son Ritesh.

EFFECTIVENESS OF LEGAL AND INSTITUTIONAL FRAMEWORK FOR JUVENILE JUSTICE IN BANGLADESH: A CRITICAL ANALYSIS

Additional Secretary Md Anwarul Islam Sikder, ndc

INTRODUCTION

In Bangladesh, every day many children get caught up in adult formal justice systems. They are arrested and detained by police, tried by magistrate and sent to institutions, including prisons, under systems of justice which in many cases are set up for adults. It is indeed necessary for the children to have an environment where their rights are ensured when they come in contact with law or conflict with law. In Bangladesh the issue of Juvenile Justice (JJ) is not viewed and maintained with due attention and importance for many reasons. It is urged that, in Bangladesh, not only the international standards and guidelines are not followed while enforcing the JJ procedure, the prevailing domestic laws and rules are also not followed in all cases. It is also said that there is hardly any or insufficient players that are separated and motivated properly to deal with JJ. Such a perception and enforcement strategy therefore needs to be examined more closely.

The present study is focused on the effectiveness of the legal and institutional framework for Juvenile Justice System (JJS) in Bangladesh. The legal framework, the institutional setup and the level of enforcement of the relevant laws and regulations is the main focus of the study.

Significance of the Study

In Bangladesh, the estimated number of children of age 0-18 is approximately 61.3 million (UNICEF, 2010). Maximum efforts taken for the children remain limited to child's survival and development resulting comparatively less attention to child protection in general and JJS in particular.

Proper attention on whole of the JJ process is utmost important. Otherwise there remains a possibility of serious human rights violation and increasing vulnerability of children. Of all phases of JJ procedure, it is on arrest and immediately thereafter, while in police custody, that an accused juvenile is most likely to become the victim of torture and other forms of cruel treatment. Girls are especially vulnerable to sexual harassment and abuse on arrest and during interrogation.

The important law in JJS of Bangladesh is the Children Act 1974, which includes many punitive, preventive and at the same time innovative provisions. There are some provisions in the act that are inconformity and inadequate in context to some international instruments. But the important aspect is that the act has never been implemented properly since its promulgation.

Enforcement of the relevant laws and policies also deserve attention for an appropriate JJS. Approach and behavioural pattern of the law enforcing agencies are also pertinent to an effective JJS. “The police have wide discretionary powers to arrest children under a variety of laws. -- Girls who have been victims of abuse and exploitation are particularly vulnerable to detention on these grounds, and are often sent to jails due to lack of appropriate facilities” (WOAT, 2003)

It is needless to mention that, Bangladesh lacks a functioning JJS. The legislation covering JJ is inadequate, poorly enforced, and provides few alternatives to confinement for children in contact with the law. The principle of diversion is not yet recognized in legislation and legal practice. “A key limitation of the Bangladeshi system is that both child victims of crime, witnesses and children alleged of committing a crime are directed into the same system of child protection services. This means that children are often deprived of their liberty in the name of safe custody. Additionally, Government officials and justice system professionals, such as police, judiciary and probation officers have a lack of knowledge about juvenile justice and the rights of children who come into conflict with the law” (UNICEF, 2010)

On the other hand, although the Government of Bangladesh has ratified quite a good number of international conventions, protocols and declarations, yet some of the useful international instruments such as The UN Standard Minimum Rules for the Administration of Justice (Beijing Rules), The UN Guidelines for the Prevention of Juvenile Delinquency (Riyadh Guidelines), and the UN Rules for the Protection of Juvenile Deprived of their Liberty (Havana Rules) not been implemented properly.

Considering the urgency of devoting attention on the issue and present level of attainment regarding JJS in Bangladesh it is indeed necessary to put more emphasis on the issue of JJS. And again it is required to inquire into the facts and reasons of not fulfilling the requirements of effective JJS and also to explore the ways and means to address the issue.

EXISTING LEGAL AND INSTITUTIONAL FRAMEWORK FOR JUVENILE JUSTICE

National Legal Framework

The Constitution

The Constitution of the Peoples Republic of Bangladesh, although being one of the best Constitutions in the world, does not include any direct article regarding JJ. However few articles indirectly describe the issue of child's rights, safety and protection. Article 17 says that the state shall adopt effective measure for the purpose of extending free and compulsory education to all children. Article 28(4) empowered the state to make special provision in favour of women and children (Govt., 2011). Besides, some other articles indirectly facilitate the process of children welfare.

The Penal Code

In The Penal Code 1860, there are a number of sections which include penal measures for offence done to child and also done by the children.

Section 82: Nothing is an offence which is done by a child under nine years old.

Section 83: Nothing is an offence which is done by a child above nine years of age and under 12, who has not attained sufficient maturity of understanding to judge of the nature and consequences of his conduct on that occasion.

Section 89: Nothing which is done in good faith for the benefit of a person under 12 years of age, or of unsound mind, by or by consent, either express or implied, of the guardian or other person having lawful charge of that person, is an offence by reason of any harm which it may cause, or be intended by the doer to cause or be known by the doer to be likely to cause to that person: provided... (Govt., 1984).

The Code of Criminal Procedure 1898

The most important provision in the Code of Criminal Procedure 1898 (Cr. P.C) is the section 497 which provides that an accused under the age of sixteen years may be enlarged on bail even in the cases of non-bailable offences.

The 6th Five Year Plan (SFYP) 2011-2015

The SFYP carries the vision of protecting children from all forms of abuse, exploitation and violence. The Plan also proposed some actions for achieving

the strategic objectives in this regards, such as “Laws affecting children will be harmonized and enforced. Awareness amongst law enforcing officials and judicial officers and the development of a diversion scheme involving the courts , social workers and probation officers as an alternative to custodial sentences will be undertaken”(GED, 2011.

The Children Act 1974

The Children Act 1974 was enacted to consolidate and amend the law relating to the custody, protection and treatment of children and trial and punishment of youthful offenders. The act is one of the most important and beneficial one which includes lot of unique, innovative, diversified and tailored provisions to address the hydra-headed necessities of children. Some of the important features of the act are provision of separate trial arrangement for children, withdrawal of persons from court, special consideration during passing order by the court, restriction on disclosure of identity of child, establishment and management of certified institutes and remand homes, appointment of Chief Inspector and Probation Officers (PO), measures for care and protection of destitute and neglected children, penal measures for- cruelty to child, employing child for begging, giving intoxicating liquor to child, allowing child to be in brothel, restriction on punishment of child, measures for detention etc. On the other hand, in exercise of the powers conferred by section 77 of the act, the government has made the Children Rules 1976 to facilitate the proper implementation of the act.

The Probation of Offenders Act 1964

The act contains sections regarding Probation Officer (PO) and Probation Order. The provisions of the act are mainly to assist the first time offenders of particular offences issuing probation order for a certain period of time instead of imprisonment. For proper implementation of the act The Probation of Offenders Rules 1971 has been made. The act facilitates among others, the process of issuing Probation Order under the Children Act 1974.

The Nari O Shishu Nirjaton Domon Ain 2000

The *Nari O Shishu Nirjaton Domon Ain 2000* meaning the ‘Suppression of Violence Against Children and Women Act 2000’ rightly focused the offences occurred against the women and child. This is an important act as it includes some provisions with major punishment for offence committed against child. Among others the offences are impairment of eyesight or hearing capacity of children by inflammable, corrosive or poisonous substances, trafficking in child,

engaging children in prostitution, kidnapping of child, selling and buying of children, detain children for ransom, rape, sexual harassment, dissection of limbs of children etc.

The Children Policy 2011 and the Youth Policy 2003

The National Youth Policy 2003 firmly aimed at making an environment congenial to abstaining youths from offensive activities. In the Children Policy 2011, determination is expressed among others, to comply the provisions of the Children Act 1974 while addressing the issue of children in conflict with law, children in contact with law and children's right in judicial procedure. (Govt., 2011a).

The Bengal Vagrancy Act, 1943: A child, under this law, is anyone under the age of 14. Children who live on the streets with or without legitimate means of livelihood usually be picked up by the police under this law. Both boys and girls are vulnerable of being incarcerated on grounds of vagrancy. Young girls suspected of being involved in prostitution are sometimes picked up by the police and forwarded to the Magistrate's Courts, where they are declared vagrants and sent to one of the homes.

INTERNATIONAL LEGAL INSTRUMENTS

The UNCRC

The Government of Bangladesh has ratified without any reservation, the United Nations Convention on the Rights of Children (UNCRC) in 1991 and is trying to implement the articles through adopting various acts rules and programmes. The article 40 of the UNCRC describes as:

1. "State parties recognize the right of every child alleged as, accused of, or recognized as having infringed the penal law to be treated in a manner consistent with the promotion of the child's sense of dignity and worth, which reinforces the child's respect for the human rights and fundamental freedoms of others and which takes into account the child's age and the desirability of promoting the child's reintegration and the child's assuming a constructive role in the society.

2. To this end, and having regard to the relevant provisions of international instruments, states parties shall, in particular, ensure that (a) No child shall be alleged, be accused of, or recognized as having infringed the penal law by reason of acts or omissions that were not prohibited by national or international law at the time they were committed, (b) Every child alleged as or accused of having

infringed the penal law has at least the guarantee of (i) to be presumed innocent until proven guilty according to law, (ii) to be informed promptly and directly of the charges against him or her, (iii) to have the matter determined without delay by a competent, independent, and impartial authority or judicial body in a fair hearing according to law,----

Furthermore, article 37 deals specifically with the issue of administration of JJ:

“State Party shall ensure that; (b) no child shall be deprived of his or her liberty unlawfully or arbitrarily. The arrest, detention, or imprisonment of a child shall be in conformity with the law and shall be used only as a measure of last resort and for the shortest appropriate period of time. (UNICEF, 1990).

Other Instruments

There are some international instruments that govern and guide for JJ and also non custodial measures. Some of these are (i) United Nations Standard Minimum Rules for the Administration of Juvenile Justice or usually called The Beijing Rules 1985 which was adopted by General Assembly Resolution 40/33/985 of 29 November. (ii) United Nations Guidelines for the Prevention of Juvenile Delinquency called The Riyadh Guidelines 1990, adopted and proclaimed by General Assembly Resolution 45/112 of 14 December 1990, (iii) United Nations Rules for the Protection of Juveniles Deprived of their Liberty, called The Havana Rules 1990 and adopted by General Assembly Resolution 45/113 of 14 December 1990, (iv) United Nations Standard Minimum Rules for Non-custodial Measures called The Tokyo Rules 1990 and was adopted by General Assembly Resolution 45/110 of 14 December 1990 and (v) the United Nations Guidelines for Action on Children in the Criminal Justice System 1997 (UNICEF, 2005).

INSTITUTIONAL FRAMEWORK

Certified Institutions

The *Kishore Unnayan Kendra (KUK)* meaning juvenile development centre are established for rectification and development of juveniles' character, to rehabilitate and re-integration of juveniles in the society through case work, guidance, counseling, education, training and diversion measures. There are three KUKs in the country. The oldest one KUK at *Tangi of Gazipur* District established in 1978 with a capacity of 200 boys. The other KUK for boys is at *Poolerhat of Jessore* District, established in 1992 with a capacity of 150 seats.

The only KUK for girls is at *Konabari of Gazipur* District, established in 1997 and the capacity is 150 seats (DSW, 2012). Each KUK is attached by a Juvenile Courts. Further information on the KUKs is given in Table 1.

Table 1: Information on Kishor Unnayan Kendra (KUK)				
Sl	Particulars	Tangi, Gazipur	Pulerhat Jessore	Konabari, Gazipur
1	Year of establishment	1978	1992	1997
2	Area in acre	3.71	5.22	1.5
3	No. of approved seats	200	150	150
4	No. of inmates (April 2012)	247	119	51
5	No. of rehabilitate child since establishment (up to April 2012)	11703	3098	458
6	No. of sanctioned post	67	49	49
7	Present manpower	48	33	33
Source: Department of Social Welfare (2012)				

From the table 1, it is seen that the KUKs are suffering from shortage of employees. An attempt has been taken to establish the 4th KUK in the country at *Joypurhat* District at an initial cost of BDT 28 crores. The Department of Social Welfare (DSW) also placed proposal to establish 4 more KUKs in four Divisions and to increase the accommodation capacity of *Tangi, Konabari and Pulerhat* KUK up to 400, 300 and 300 respectively.

Juvenile Courts

Section 3 of the Children Act 1974 says “Notwithstanding anything contained in the Code, the Government may, by notification in the Official Gazette, establish one or more JCs for any area”. Until today three JCs have been established in *Tangi and Konabari* of *Gazipur* District and in *Jessore* District. The *Konabari* court is for girls and the rest two for the boys. In 1999 through a Gazette notification, the jurisdiction of the JCs has been defined. Three Divisions named *Dhaka, Chittagong and Sylhet* are brought under the jurisdiction of *Tongi* JC and other three Divisions i.e. *Barishal, Khulna and Rajshahi* are taken under the *Pulerhat (Jessore)* JC.

However, under section 5 of the Children Act 1974 it is restricted for any other court other than the courts established under section 3 or courts mentioned under section 4 to try or deal or dispose any proceeding under the Children Act 1974.

Probation Officer

POs act as per directions of the Children Act 1974 and the Probation of Offenders Act 1964. The administrative ministry for the POs is the Ministry of Social Welfare (MSW). There are 23 permanent sanction posts under revenue head and 22 temporary posts under year to year retention arrangement. Amongst them 5 posts in revenue head and 19 retention posts are vacant. Besides, 42 Social Welfare Officers in 42 districts are acting as a PO in addition to their own portfolios. Another 15 Social Welfare Officers in Divisional cities of Dhaka, Chittagong, Rajshahi and Khulna are also acting as PO in the respective divisional cities.

Ministry of Social Welfare (MoSW) sources say that an initiative has been taken to increase the number of sanction post up to 150 so that in each district, each KUK and other places PO may be posted permanently.

ANALYSIS AND FINDINGS ON LEGAL AND INSTITUTIONAL FRAMEWORK

The National Legal Framework

Inconsistencies and Limitations

Children are unable to protect themselves, safeguard their own interest and protest against evil action/doing. Considering the necessity of protection and development of the child, the Constitution of Bangladesh may have directive article(s) to preserve child rights and welfare.

The Children Act 1974 has been adopted in 1974 and has not been experienced any amendment or change in almost 38 years. Some of the sections of the act are close to being obsolete and some are not appropriate to the present days.

Starting with the Preamble of the Children Act 1974 it can be seen that the preamble itself is not suitable as it says, “Whereas it is expedient to consolidate and amend the law relating to the custody, protection and treatment of children and trial and punishment of youthful offenders ---”. As it is agreed and followed

by the national and international community on the issue that no child shall be sentenced to death, transportation or imprisonment or any other punishment. Even the Children Act 1974 section 51 says that “Notwithstanding anything to the contrary contained in any law, no child shall be sentenced to death, transportation or imprisonment... (Govt. 1974). Therefore the words ‘punishment of youthful offenders’ in Preamble should be dropped or changed.

Section 3 of the act describes the establishment of JC and authorized the government to establish one or more JC for any local area. The government established three JCs in the country by the authority given under this section. As discussed earlier, each JC has jurisdiction over three Administrative Divisions. Here ‘any local area’ *de facto* covered as many as three Administrative Divisions. The distance between the place of occurrence, KUKs and the place of trial is so large that it becomes difficult sometimes even impossible for the parties to attend the court proceedings. The provision of the act should be framed in such a way that each district should have at least one JC. The officials of DSW and NGO opined for JC in all the districts.

Sections 34 to 46 describe the penal provisions of offences in respect of children. Attention should be given on the magnitude of the penalty in these sections as in most of the sections the amount of fine ranges from taka one hundred to taka one thousand only. As for example, according to section 36 penalty for being drunk while in charge of child is taka one hundred which is quite insignificant to meet the purpose of penalizing the offender. Hence the amount of fine in these penal sections should be updated and increased.

According to the section 30, the government may appoint a Chief Inspector (CI) and such number of inspectors and Assistant Inspectors of Certified Institutes as it thinks fit to assist the Chief Inspector. To monitor and oversee the activities of CIs at least once in every six months as per section 29 of the act, the role of the Inspectors are certainly very important. But it is a fact that there has not been any appointed Inspector or the Chief Inspector for the CIs.

The Children Act 1974 does not contain any special provision limiting the use of physical force, restraints or hand cuffs in the arrest of a child, nor does it have any special provisions with respect to taking of statements or confessions from children. There is no provision, either in law or in practice for measures such as mandatory presence of a parent, PO, or lawyer that might protect children from abuse or intimidation. “Mechanisms to monitor and supervise police conduct are weak, and they are rarely held accountable for abuses” (UK 2003).

As per section 52, a child convicted and ordered him to be committed to a CI for detention for a period not more than ten years but not exceeding the age of eighteen years. The officials of the KUKs opined that the Children Act 1974 should include directive as to what would happen if an inmate of KUK attains the age of eighteen.

One of the limitations of the act, as mentioned by the UNICEF representative, is that the act does not take into consideration of ensuring minimum care and protection, diversion and alternative justice system of children at institutions who are in contact or conflict with the law.

The Bengal Vagrancy Act 1943 is concerned with the maintenance of public order rather than the protection of the best interests of the child. Further, for children, it ought to be totally inapplicable, since children who live on alms or who have no homes and are found to be roaming around are to be taken care of under the Children Act, 1974 (section 32). Therefore (a) the law should be applied only for adults (over 18), (b) a normal trial process should be evolved based on social inquiry reports so as to ascertain vagrancy status, (c) the Children Act 1974 should be applied for children who are lost, who have been found begging or who are in moral danger instead of applying the Bengal Vagrancy Act 1943.

INTERNATIONAL LEGAL INSTRUMENTS

Promoting Juvenile Welfare

The general principles of the Beijing Rules refer to comprehensive social policy in general and aim at promoting juvenile welfare to the greatest possible extent, which will minimize the necessity of intervention by the JJS.

The rule 1.2 contains that “Member states shall endeavour to develop conditions that will ensure for the juvenile a meaningful life in the community, which, during that period in life when he or she is the most susceptible to deviant behavior, will foster a process of personal development and education that is as free from crime and delinquency as possible” (UNICEF, 2005). Rule 1.3 emphasizes for sufficient attention to mobilize all possible resources for the purpose of promoting the well-being of the juvenile, with a view to reducing the need for intervention under the law.

The Beijing Rules expresses that the objective of training and treatment of juveniles placed in institution is to provide care, protection, education and vocational skills, and shall receive care, protection and all necessary assistance; social, educational, vocational, psychological, medical and physical that they may require because of their age, sex, personality and vulnerability.

However, in consistence to the rule 8 of the Beijing Rules and considering the probable adverse effect of the incidence of coming contact with law and conflict with law in future life of children, some legislations particularly, The Children Act 1974 and *The Nari O Shishu Nirjato Daman Ain 2000* provides adequately the provision of restriction on publishing the identification of the juvenile in media. There is also provision of camera trial under these laws not to publish or disclose the identity of victim or offender child.

The Diversion

Diversion is the channeling of certain cases away from the criminal justice system, usually on certain conditions (UN 2006). The Beijing Rules also provides that in case of non-serious offences, application of community-based diversion with consent of juvenile, parents or guardian at any point of decision making by the police, the prosecution, courts, tribunals, boards or councils may be organised. The process of diversion is probably not reflected in any law or policy in Bangladesh and hence not being practiced by the concerned authorities.

Preventive Measures

The Riyadh Guidelines mainly focuses on the developing non-criminogenic attitude and behavior of young persons by engaging themselves in law, socially useful activities and adopting a humanistic orientation towards society and outlook on life. The guidelines no. 1 and 3 reveal that a child centered orientation should be pursued and young persons should have an active role and partnership within society and should not be considered as mere objects of socialization or control (UNICEF, 2005).

The prevention measure is a long term full devoted effort. For a success, the comprehensive prevention plans should be instituted. It is needless to say that in Bangladesh a comprehensive programme is needed to take preventive measures through socialization and integration of them in the process.

Legal Framework and Enforcement

The guidelines 52- 59 of the Riyadh Guidelines describe that government should enact and enforce specific and appropriate law and rules to promote and protect the child and to prevent victimization, abuse exploitation of children. An important direction of the Guidelines reveals that the government should ensure that no child should be subjected to harsh or degrading correction or punishment measures at home or school. Representative from stakeholder like STC strongly demanded to establish the office of a Child Ombudsman in Bangladesh.

The government adopted a legal framework that may be considered somehow acceptable although not updated as required. But enforcement weakness has nullified the good intension of adopting a legal framework.

Detention

The CRC and the Beijing Rules state that the arrest and detention of a child must be in conformity with the law and should be used only as a last resort and for the shortest possible period of time. Likewise, the first Rule of the Havana Rules clearly described that the JJS should uphold the rights, safety and promotes the physical mental well-being of juveniles and also pointed that imprisonment should be used as a last resort. Rule 29 says, “In all detention facilities juveniles should be separated from adults, unless they are members of the same family”. (UNICEF, 2005).

The Beijing Rules also expresses that the law enforcing agencies should respect the legal status of the juvenile, promote the well-being of the juvenile and avoid harm to him. It also describes that the police personnel who frequently or exclusively deal with juvenile or are primarily engaged in the prevention of juvenile crime should be specially trained and motivated.

The present scenario of JJS in Bangladesh is far away from the provisions depicted in the paras above. One important issue is the separation of juveniles from the adult. Section 6 of Children Act 1974 also clearly pointed out that the juveniles and the adults cannot be tried jointly and placed in same accommodation. But the concern authority has, sometimes, nothing to do but to keep the juveniles with the adults in the same jail or remand home. In many police stations there is no arrangement to keep the juveniles separate from the adults. Opinions have received from the KII that during detention juveniles and adults should be kept separately in remand home, jail and other places.

Non-custodial Measures

The Tokyo Rules provides a set of basic principles to promote the use of non-custodial measures, as well as minimum safeguards for persons subject to alternatives to punishment. It is applicable to all persons subject to prosecution, trial, or the execution of a sentence at all stages of the administration of criminal justice.

Bangladesh has very limited facilities of non-custodial alternatives, limited uninterrupted congenial law and order situation, very immature governance style and some other limitations. The institutional alternatives are very few and the

informal alternatives are very weak and not trustworthy. Therefore it requires continuous review and analysis to implement this.

ANALYSIS AND FINDINGS ON INSTITUTIONAL FRAMEWORK

Juvenile Courts and KUKs

In the whole process of JJS all the parties concerned are so inter connected that absence or non-functioning of any party will jeopardize the process. The JC, as the most important component of JJS should set up and function properly throughout the country. Before 2007, the then magistrates, now called the executive magistrates used to preside over the courts as per sections 6-25, 190-192, 200-205 of Criminal Procedure Code 1898. In this study it is found that after shifting of magistracy from administrative service to judicial service the situation has not been improved so far.

In all 64 districts separate and full time designated JC is yet to introduced. All the affairs of juvenile delinquency and juvenile justice still lie on the shoulders of three JCs in the country. It is physically quite impossible to run a court whose jurisdiction extends up to even few hundred kilometers in several districts. For geographical location all the formalities related to filing, investigation and trial procedure cannot be done properly. The court parties i.e. the prosecution, the defense, the lawyers, the witnesses, POs and other stakeholders cannot move to the court from their residences. The KII from the DSW, STC opined for establishment of JC and KUK in all the districts. However, UNICEF representative suggested that shortage of KUK may be minimized by way of stopping the inflow of inmates in the KUK through adoption of diversion policies.

In the case of “State -Versus- Secretary, Ministry of Law, Justice & Parliamentary Affairs and others, 29 BLD 656” the Hon’ble High Court Division directed to establish child-specific courts in every district which will be dedicated to cases relating to children. As a result the then Chief Justice was pleased to issue a Circular on 23 December 2010 with a direction to all District and Sessions Judges and Metropolitan Sessions Judges to earmark one court at every level, to expeditiously hear and dispose of cases involving juvenile offenders. In para 17 of the same case it was also directed as, “The Government must provide sufficient number of places of safety, at least one in every district, so that such a place of safety is easily accessible from any part of the country.” But the verdict of the court is yet to materialized. An important proposal given by the representative of UNICEF is to consider assigning temporarily, the Village Courts to act as JC in rural area.

The officials of DSW claimed that the physical infrastructure and facilities of the *KUKs* like accommodation, sports, cultural, vocational training etc are not sufficient. There is provision for education up to primary level. As the inmates stay there up to eighteen years of their age as per provision of the Children Act they suggested that education facility up to secondary level should be started in the *KUKs*.

Police and Policing

Police are usually the first point of contact within the formal JJS for children coming into conflict with the law. The action taken by the arresting police officer and any other police officers involved has the potential to change the child's life in a positive direction, but this will depend on the attitudes, beliefs, skills and facilities of the officers handling the case. It is in these situations where police will need to have the necessary knowledge and skills to negotiate and mediate in order to ensure that the child's rights are upheld and that opportunities for diversion or non-custodial options are explored.

“Children are generally treated the same as adult, and there have been numerous reported cases of children being subjected to violence and abusive treatment by police. Girls are particularly vulnerable to physical and sexual abuse at the hands of police” (UNICEF, 2002). While talking to the officials of *KUK* and *STC*, they opined that the police have no clear idea on the provisions of Children Act 1974 and matters related to JJ. They argued for proper training for the police personnel for knowledge on JJ and attitudinal changes.

Being asked in separate groups, the boys and girls of the *KUKs* expressed that in some cases after arrest police kept them more than 24 hours before sending to the court. In case of boys police use the handcuff during arrest and taking them to court. In some cases police demanded money as conveyance and food cost during movement to *JCs* although it has been paid them by the *KUK* authorities. Under the Children Act 1974, police acts as prosecuting officer in *JC*. It is argued that the police usually cannot allocate sufficient time, are not acquainted with the relevant laws and rules, and importantly not sensitized to the child rights. Considering the vulnerability of juveniles, KII of UNICEF suggested formation of special trained prosecuting agencies consist of advocates, social workers to deal with JJ.

Based on the opinion of the inmates of *KUKs* and the views of the KIIs, it reveals that the service of police is insufficient in two aspects; the absence of adequate service and the lack of proper attitude towards child welfare. In the context of police and the juvenile, there are several key points that need to be addressed:

- a. The special police unit particularly for juvenile should be established.
- b. Awareness has to be created among police personnel of their role and responsibilities.
- c. Training needs to be provided to ensure that police are familiar with the national legislations & international standards.

Probation Officer and Lawyer

On the other hand the section 31 authorizes the government to appoint a PO in each district. The responsibility of the PO as mentioned in the Children Act 1974 and also in the Probation of Offenders Act 1964 is very important (Govt., 1967). But there are 22 designated POs working in 22 districts. Besides, 3 POs are presently working in three *KUKs*. Therefore, rest 42 districts have no designated PO. The Social Welfare Officers, entrusted with additional charge of PO is unable to make time to perform their additional responsibility as PO. During discussion KIIs from DSW and STC suggested appointment of sufficient PO, proper training and adequate budget, logistic facilities for smooth functioning of the POs.

The representatives of STC and legal experts opined that the children are vulnerable as they cannot protest against, protect themselves and are fond of imitation. On the other hand in absence of a sensitized strong network of POs and police officers, there is a need of legal experts to plead in the JC in favour of juveniles. This can be done by formation of an association like ‘Bangladesh National Child Lawyers Association (BNCLA)’ same as Bangladesh National Women Lawyers Association (BNWLA) or a pool of legal experts under the DSW.

Facilities for Juvenile Girls

The juvenile girls have additional difficulties in remand home, CIs and even in case of providing non-custodial options. Considering the fact it can be opined that facilities for a full range of community penalties should be available to girls which involve:

- a. Ensuring that no single girl is kept alone with a group of boys.
- b. Developing proper non-custodial centers for girls where these do not exist.
- c. Sensitizing personnel engaged in custody of the non-custodial arrangement.
- d. Targeting practical, educational and health needs.

In Bangladesh usually non custodial measures are not adopted as a means of alternative to jail, or CI. There is only one certified institution (*KUK*) for girl juveniles at *Konabari of Gazipur* District with accommodation capacity of 150. This study finds that, it is impossible to send all the girls in the *KUK* from all parts of the country.

Diversion Measures

For JJ diversion is one of the key elements of a sound system. It avoids the child getting a criminal records and being branded at an early age, it avoids children being stigmatized or contaminated through contact with criminal processes, it minimize the deprivation of their liberty and possible contact with more hardened offenders. Through diversion the child may learn valuable lessons from programmes, and acquire social responsibility through the performance of community service or by making amends to the victim, all of which can help to reduce re-offending. Therefore it is indeed necessary to arrange an institutional arrangement for diversion measures.

RECOMMENDATIONS

Considering the necessity, resource constraint and capability of state the recommendations derived based on previous discussion and analysis, are furnished in two groups: short term and long term.

Short term Recommendations

a. The Children Act 1974 may immediately be amended, making it updated and more effective to JJ, keeping conformity with international standard as far as possible on the following aspects:

- (i) To overcome the difficulties and inconveniences arising due to only three JCs throughout the country, provision should be made in section 3 of the Children Act 1974 to set up at least one JC in each district.
- (ii) With a view to make the penal measures appropriate and consistence to time the penal measures as included in section 34 to 46 of the Children Act 1974 should be reviewed and updated in accordance with the present value of money.
- (iii) To reduce the extent of vulnerability of boys and girls, instead of applying the Vagrancy Act 1943 the Children Act 1974 should be applied for children who are lost, who have been found begging or who are in moral danger.

- (iv) For smooth service rendering to the juveniles as mentioned in the Children Act 1974 and the Probation of Offenders Act 1964, sufficient number of PO should be appointed as per section 31 of the Children Act. On the other hand Chief Inspector and Inspectors should be appointed to monitor and oversee the activities of the Certified Institutes.
 - (v) Consideration of ensuring minimum care and protection, diversion (for the first time offender) and alternative justice system of children at institution who are in contact or conflict with law should be incorporated in the act.
 - (vi) New provision should be included to limit the use of physical force, restraint using of hand cuffs during arrest of a child. Besides, provision may be included in section 52 of the Children Act 1974 as what measures should be taken when the detainee in the CI attains at the age of eighteen years.
- b) The accommodation, education, cultural, sports, vocational, recreational and other associate facilities of the *KUK* should be improved up to a minimum level and make more child friendly.
- c) Specifically for girl juveniles more non-custodial centers may be set up. Wherever they are kept, they should be kept in groups as far as possible, kept away from boys, male police or any other male persons.
- d) The special police unit particularly for juvenile should be established. Awareness has to be created among police personnel of their role and responsibilities in dealing with children. Training needs to be provided to ensure that police are familiar with the national legislations, UNCRC, international standards.

Long term Recommendations

- (a) Efforts may be taken to develop non-criminogenic attitude and behavior of children by engaging them in socially useful activities and adopting a humanistic orientation towards society and outlook on life.
- (b) As per proposal of DSW, at least 4 more *KUKs* each one in Chittagong, Barishal, Sylhet and Rangpur Division should be established to reduce the difficulties arises due to distance amongst JC, *KUK* and the place of occurrence. Until establishment of the *KUKs*, special arrangement may be made temporary to use the Government Child Homes as *KUK*.

(c) To address the juvenile delinquency issue, emphasize should be given to mobilize all possible resources for the purpose of promoting the well-being of the juvenile, with a view to reducing the need for intervention under the law.

(d) The Government and NGOs may take joint effort to train and motivate the stakeholders like police, PO and *KUK* officials, to make alternative opportunities for reintegration and employment of juveniles and also to take care and motivate the inmates of the *KUKs*.

CONCLUSION

The juveniles of Bangladesh are deprived of proper protection of law and usually harassed in the criminal justice proceedings. The effort of keeping the juveniles out of the formal criminal justice system is also a part of JJS. It is needless to say that an effective legal and institutional framework is indeed necessary for the children who have already come in contact with law and also in conflict with the law. The Children Act 1974, the prime law in JJS should be amended and updated to cope up with the international standard as far as possible. Another important aspect is to create an appropriate institutional set up to enforce the laws, rules and policies properly.

For the betterment of the society there is no alternative but to devote all possible efforts for the well-being of the juveniles. It is hoped that, the policy makers, the academicians, the civil society and the executives will put their all efforts for an effective JJS in Bangladesh.

BIBLIOGRAPHY

1. Department of Social Welfare, Ministry of Social Welfare, Government of Bangladesh, Dhaka, 2012.
2. *Accelerating Growth & Reducing Poverty (Part 2)*, 6th Five Year Plan FY 2011-FY 2015, General Economic Division, Planning Commission, Government of Bangladesh, Dhaka, 2011
3. The Constitution of the Peoples Republic of Bangladesh, Legislative and Parliamentary Affairs Division, Ministry of Law, Justice and Parliamentary Affairs, Dhaka.
4. The National Children Policy 2011, Ministry of Women and Children Affairs, Government of Bangladesh, 2011.

5. The Penal Code (Act ZXV of 1860), Law and Parliamentary Affairs Division, Ministry of Law Government of the Peoples Republic of Bangladesh, Dhaka, 1984.
6. The Children Act 1974, Department of Social Services, Ministry of Social Welfare, Government of the Peoples Republic of Bangladesh, Dhaka, 1974.
7. The Probation of Offenders Act 1964, Ministry of Law and Parliamentary Affairs, Government of Pakistan, Karachi, 1967.
8. *Tracing the Missing Cord: A Study on the Children Act 1974*, Save the Children UK, 2003.
9. *Children's Rights in Juvenile Justice, General Comment No. 10*, Committee on the Rights of the Child, Forty-fourth Session, Geneva, 2007.
10. *Juvenile Justice: Cross-Cutting Issues*, United Nations Office on Drugs and Crime, Vienna International Centre, Vienna, Austria, 2006.
11. *Justice for Children in Bangladesh*, Key Statistics, UNICEF Bangladesh Office, Dhaka, 2010.
12. *International Instruments on Juvenile Justice and Non Custodial Measures*, UNICEF Bangladesh, Dhaka, 2005.
13. *First Call for Children*, United Nations Children's Fund, UNICEF House, New York, USA, 1990.
14. *Rights of Children in Bangladesh: Report on the Implementation of the CRC in Relation to Children in Conflict with the Law*, World Organisation Against Torture, 2003.

Author

Additional Secretary Md Anwarul Islam Sikder Born in 1959 in a respective muslim family of Comilla. He passed BSc Agriculture Economics (Hons') in 1981 and MSc Agriculture Economics in 1982 from Bangladesh Agriculture University Mymensing. He did Masters of Business Administration (MBA) from the University of Ljubljana, Slovenia in 1996. Mr. Sikder joined Bangladesh Civil Service as a Administrative Cadre in 1986. He performed various staff duties like Assistant Commissioner and Magistrate, Upazila Finance officer, Upazila Migistrate, Upazila Nirbahi officer, Aditional Deputy Commissioner, Senior Assistant Secretary, Deputy Chief, Project Director, Member (Joint Secretary) of RAJUK. He attended more than 30 courses in Bangladesh and 6 courses in abroad. He is widely travelled person. He visited Australia, Belgium, China, Germany, India, Italy, Japan, Malaysia, Netherlands, Philippines, Qatar, Singapore, Slovenia, South Korea, South Africa, Switzerland, Thailand, UK and USA. He involves various social works in his life. He is the founder of Pirojpur Public Library and the member of various organizations like Asiatic Society of Bangladesh, Bangla Academy, Dhaka officer's Club, Singapore Civil Service College Alumni, BCS Administrative Association, Bangladesh Scouts (ALT), Bangladesh Society for Training and Development, Bangladesh Human Development Centre etc. He has written seven books. He lives in Dhaka with his wife Ferdousi Begum and two sons Farhan Faiyas and Abrar Abiyaz.

TRENDS OF MULTIPOLARITY: IMPLICATIONS FOR REGIONAL AND GLOBAL PEACE

Brigadier General Gaudence Milanzi, ndc, psc

“...The earth is one but the world is not...” Our Common Future¹

INTRODUCTION

International system has long been defined by the number of poles in it and these are normally dependent on the distribution of power and influence of states in a region or internationally.² The trend of multi-polar has brought in a shift of power and new players into the international scene that are steadily forging closer cooperation and solving problems at regional and sub regional levels. This is a welcome phenomenon since most of these new players are the ones who in the past, during the bipolar and early stages of the multi-polar system were left outside of the geo-politics strategic agenda.

A number of regional integration arrangements are in place in many regions in the already porous multi-polar world. Although this is done in line with the UN charter, it is still important to understand the implications of this new phenomenon to the regional and global peace and its effects on the good image of the United Nations especially in light of the growing concern for what appears to be the re-emergence of cold war practices in the current international relations.

The UN seems to be struggling in fulfilling its main objectives of maintaining global peace and security. This is a problem which could have some implications not only to the already fragile global ‘hot peace’, but also to the very existence of the United Nations as a credible international organization for the maintenance of peace and security.

Multi polarity and Regional Integration: A Conceptual Analysis

The argument on multipolarity hinges on the concept of relative power. Relative power is the perceived amount of power an entity has in relation to another state. Applied to international relation, scholars see new powers emerging into the global scene and maintain that what is important is relative power as opposed to absolute power. States are primarily concerned with relative power that is how much power

1. The report of the World Commission on Environment and Development published in 1987 by Oxford University Press as an annex to the document A/42/428-Development and International Cooperation available at www.un-documents.net/weccd-oct.html.
2. Yang X, The Unipolar Challenge: Power, Culture and Authority and the Advent of War. *Politics and International Relations* (POIR) 2010 p 4. Accessed on www.peakyou.com/andrew_lessman-UnitedStates.

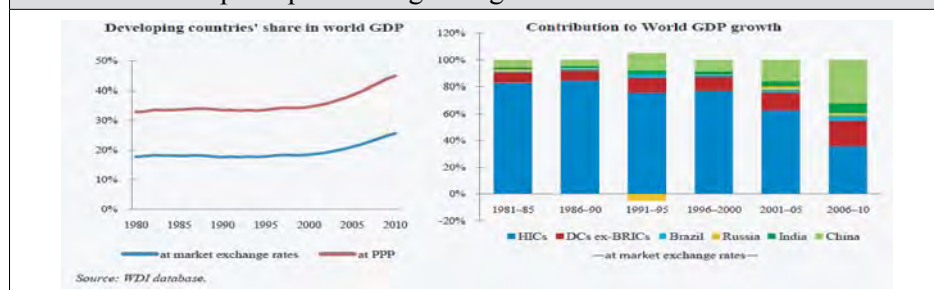
including soft power, a particular state has in relation to another.

This argument is justified by the fact that today, United States in military terms, continues to be the mightiest power in the world with overwhelming asymmetry over its rivals and may continue as such for a couple of decades more. But despite the predominant superiority in global military power and force projections capabilities, what is emerging in a discernable manner to analysts is that the USA is presently unable to influence the global political and strategic landscape decisively.³ The general feeling is that the US super power structure and massive capital wealth are insufficient to cope with a transformed new world.

The Power Shift Theory

Among the theories explaining the current trend of multipolarity is the power shift theory. Scholars maintain that, the economic and business environment is gradually moving to a new multipolar balance, where the old economic triad, USA, EU and Japan is no longer the main source of consumption, talents, capital, resources and ideas. The result of all this is an increasing economic interdependence, where the national and regional boundaries are becoming less and less important. **(Figure1)**

Figure 1: Developing countries are leading the rebound in an increasingly multi-polar pattern of global growth*



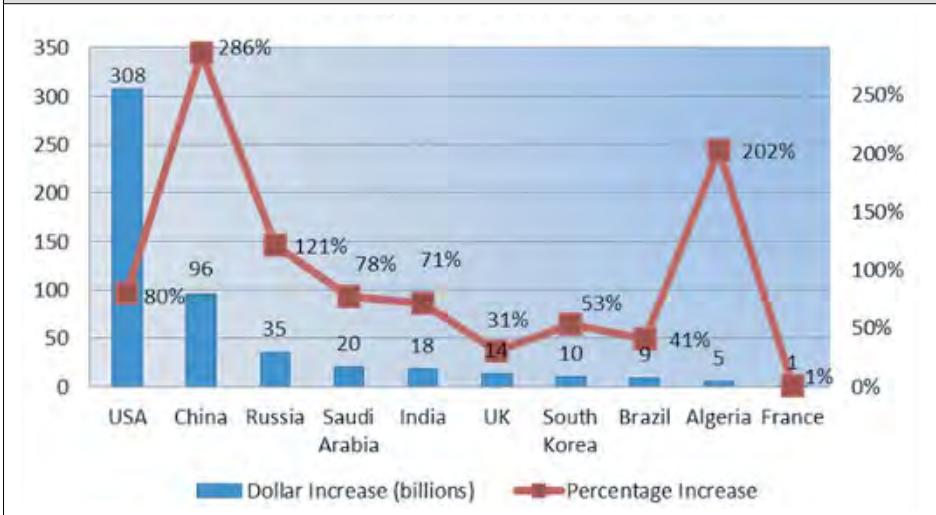
Source: World Development Indicators database

3. Kapila S, United States Global Strategic Dominance Diminished *South Asia Analysis Group* Paper No 4997 April 2012 accessed at www.SouthAsiaAnalysisOrganisation/default

The most popular explanation in the power shift theory is that of ‘CHINDIA’ i.e. China and India.⁴ Today, China and India’s rise in Asia is clearly hugely significant. Never before have such large economies with a combined population of 2.3 billion grown so fast so long: GDP growth in China averaged 9.1% and India 6.1% over the last decade.⁵ Its import and export volume grew from US\$ 20.6 billion worth in 1978 to US\$2.978 trillion worth in 2010.⁶ Napoleon Bonaparte (1769-1821) once said “China is a sleeping giant. ...Let her sleep for when she wakes, she will shake the world...”⁷ And it seems the world is now shaking.

The Chinese military expenditure has also increased dramatically in recent years. Recent research on top ten military spenders of the world revealed that China is the highest military spender after US (US\$ 687 billion). (Figure 2) .

Figure 2: Military Expenditure Increase 2000-2011, selected countries



Source: SIPRI Expenditure Database 2012.

4. In his book, ‘The Elephant, the Tiger and Cell phone: India, the Emerging 21st Century Power’ the celebrated author Shashi Tharoor discusses and demystifies the vast changes that have taken place in India to transform this once sleeping giant into an emerging world leader.
5. Mahhubani K, *The New Asian Hemisphere: The Irresistible Shift of Power to the East* New York Public Affairs, 2008.
6. China’s Peaceful Development, *State Council Information Office of the Peoples Republic of China* September 06, 2011.
7. See www.wideworldofquotes.com/quotes/napoleon-bonaparte-quotes.html.

Not all agree that America is declining with the rise of Asia. Some scholars argue that America's future decline has been greatly over-exaggerated. Still its wherewithal and national power is well ahead of any state on earth. They argue that even at the current rate of growth, it will take average Asian 77 years to reach an income of the average American.⁸ Fareed Zakaria in his book titled *The Post American World* says "it is not about America's 'elegant declining' but rather about the rise of everyone else." He elaborates: "...the greatest story of our time is the rise of the rest..."⁹ The word 'rest' there probably refers to India and 'the peaceful rise' of China¹⁰

However, Virmani, India's representative to the IMF sees the world moving towards a tri polar world with India and China joining the United States and disagrees with a question of income per capita as a main factor. According to him, it is not absolute growth that matters, but rather how the economies of nations compare with that of the United States economy and of other important players over time.¹¹

Regional Integration in a Multipolar World

The multipolar era has witnessed the emergence and strengthening of several trading blocks and economic groupings all over the world. Michael Schultz, Fredrick Sodabaurn and Joackim Ojendal say "There is no single universal criterion that defines regions. ... Geographical, historical, cultural and economic variables as well as pattern of conflict, security and other criteria, all create pattern of interaction and produce conceptions of region-ness..."¹²

Chandra Bhatta gives a constructivist definition of a region. He says a region is a set of countries in close geographical proximity with each other but also most important must share a certain commonality of (national) interest. Constructivists see regions not merely as geographical constructs.¹³

8. Mahbubani K, 'Why Asian Wins?' *Foreign Policy* 24 August 2009 Accessed on <http://www.mahbubani.net/articles%20by%20dean/why%20aisa%20wins.pdf>.

9. Fareed Zakaria *The Post -America World* Penguin-Viking New York, 2008.

10. See China's Peaceful Development, *State Council Information Office of the People's Republic of China* 06 September 2011. China's government released a policy document that laid out its vision for the country's future pledging peaceful rise and assuring other countries not to fear for this rise. Its white paper says China will not repeat the mistakes of other great powers who sought to dominate others. See also 'China's Threat' or a 'Peaceful Rise of China' *New York Times* available at www.nytimes.com/ref/college/coll-china-politics-007.html.

11. Virmani A, *Tri-Polar World: India, China, and the United States in the 21st Century*, Ashley J. Tellis Washington DC, Wednesday, 9 February 2011.

12. Schulz M (ed) *Regionalism in a Globalizing World: A Comparative Perspective on Forms, Actors and Process*, Zed Books, London 2001, p185.

13. Bhatta C, *Regional Integration and Peace in South Asia: An Analysis*. Accessed on www.peacestudiesjournal.org.uk/dl/Regionalintegration.PDF.

Regional arrangements differ in terms of their institutional design and this has the implication for what they can do or cannot do. Haacke and Williams see a link between on the one hand design and on the other hand the level of resources and capacity available.¹⁴

Regional Integration Initiatives: The Case of Southern Africa and South Asia Regions

Southern Africa and South Asia are among the regions that have established integrations in their respective regions. Although both regions have some kind of identical basic objective conditions which tend to emphasize the need for integrated intra regional as well as inter-regional planning, they also have some unique characteristics which, when clearly understood; assist to evaluate its readiness and potential for cooperation and integration.

SOUTHERN AFRICA

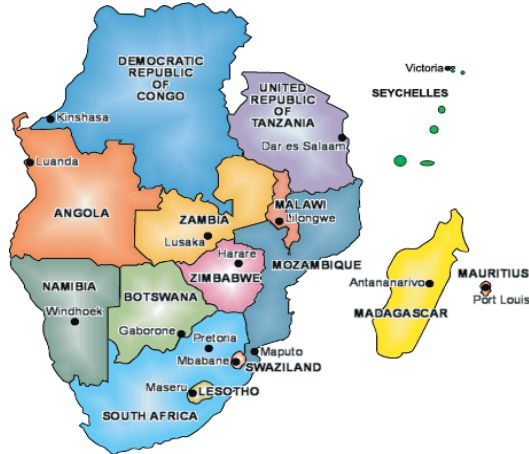
Defining the Region

The Southern Africa region is made up of 15 countries namely Angola, Botswana, DR Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe although geographically speaking, some of these countries are not located in southern part of Africa. Gavin Cawthra in his article titled *Southern Africa: Threats and Capability* describes these countries as disparate in many ways. They vary greatly in size, population and levels of economic growth and include some of the poorest countries in the world but also the richest in Africa.¹⁵ South Africa dominates the region. Its economy is the biggest than all other countries in the region combined.

14. Haacke J and Williams P, *Regional Arrangements and Security Challenges: A Comparative Analysis*, Crisis States Working Paper no 52, Regional and Global Axes of Conflict, Crisis States Research Centre and George Washington University, July 2009.

15. Cawthra G *Southern Africa: Threats and Capabilities Africa Program Working Paper Series International Peace Institute* November 2008 p1.

Figure 3: SADC Countries.



Source: www.sadc.org.int

SADC Integration Initiatives

The first formal step to integration was the formation of Southern Africa Development Coordination Conference (SADCC) in 1980. In 1992, SADCC was transformed into Southern Africa Development Community (SADC). A common feature of the current SADC membership is overlapping membership. Tanzania for example, because of its geographical location and its central role during the liberation struggles of the Southern African countries is a member of both the East African Community (EAC) and SADC while other member states also belong to Common Market for Eastern and Southern Africa (COMESA).

Figure 4: Overlapping Membership SADC, COMESA and EAC



Source: www.sadc.org.int

The principles of the SADC include solidarity, peace and security and peaceful settlement of disputes among others. The SADC region signed Free Trade Area (FTA) agreement in 2008 with a view to fostering integration through trade. In addition to FTA, further goals such as the achievement of a planned Common Market by 2015, a Monetary Union by 2016 and a single currency by 2018 remains incredibly ambitious by SADC with some economic and political commentators saying these plans may not be realistically obtainable in the near to medium term future.¹⁶

SADC Peace and Security Issues

Although SADC was founded on a foundation of facilitating and supporting economic growth in the region, it has increasingly taken on roles that enhance political and security cooperation within the region.¹⁷ Article 11 of the SADC Protocol on Defence and Security provides for relationship between the SADC, the African Union (AU) and the UN mechanism for conflict prevention, management and resolution. This paves the way for SADC to participate in peacekeeping operations on the African continent in the spirit of the AU and as a member of the world community in missions outside the continent.¹⁸

The region has had two high profile military interventions to maintain peace and security in the name of SADC both in 1998. These were Operation **Sovereign Legitimacy** in DR Congo (carried out by Zimbabwe, Namibia and Angola) and Operation **BOLEAS** (carried out by South Africa and Botswana).¹⁹ Some analysts described these interventions as legitimate but illegal as they contravened Article 53 of the UN Charter since UN approval wasn't sought and was granted only post-hoc.²⁰

-
16. Chetty Lee-Roy, Macroeconomic convergence within the SADC region, *Mail and Guardian Online Network* posted on June 15, 2012 accessed on www.thoughtleader.co.za/leeroychetty/2012/0615macroeconomic-convergence-withintheSADCregion.
 17. Hull C and Derblom M, 2009, Abandoning Frontline Trenches? Capabilities for Peace and Security in the SADC region, *FOI Swedish Defence Research Agency*, Stockholm, accessible on www.foi.se.
 18. Ngoma Naison SADC: Towards a Security Community? *African Security Review Vol 12, No 3, 2003* available at www.iss.co.za/za/pubs/asr/12no3/F2.html.
 19. Cawthra *ibid*.
 20. Cole K, *International Organisations and Peace Enforcement*, Cambridge University Press, 2007, Pp.116-193.

SOUTH ASIA

Defining the Region

The South Asia region is made up of 8 countries namely Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The castellation of the region is not a simple one. The countries are worlds apart on question of population, territory, military power, technological development, infrastructure and political influence.²¹ With its proximity with China, the region is at the heart of a vibrant world region.

Figure 5: SAARC Countries



Source: www.mapsofindia.com

South Asian states reflect a dynamic and persisting coexistence of discord and understanding, competition and convergence, conflict and collaboration in their mutual interactions although at times some deep rooted historical negative aspect appear to dominate. This seems to have an impact in their integration efforts.

21. Tomislav Delinc, SAARC-25 years of Regional Integration in South Asia, KAS International Report 02/2011 accessed on www.kas.de/saarc/en/publications/22415/

Regional Integration Initiatives

The region managed to establish South Asian Association for Regional Cooperation (SAARC) in the middle of 1980's in spite of reservations expressed about the ultimate successes because of a number of reasons. One scholar described the establishment of SAARC as the contemporary example of creative impulses thriving in the region along with the atmosphere of mutual apprehension and mistrust.²²

Past restrictive trade policies seem to have contributed to low trade activities in the SAARC region despite many agreements on papers. Barsha Khattry²³ puts the value of bilateral trade between the two leading economies in the region: India and Pakistan, as just US\$2.6 billion- an inconsequential amount when compared to the size of their economies. In general, there is a meagre quantum of trade within the region. .

SAARC and Security Issues

For a region that has experienced a period of intense conflicts and mistrust, it is surprising that promotion of peace and stability is not part of SAARC objectives. This is different from even the neighbors to the region i.e. the South East Asia whose association the ASEAN is based on economic and security pillars, both of which are clearly enshrined in its Charter.²⁴ As Arvind Gupta makes it clear, South Asia has numerous long standing conflicts left over from history, and therefore defence cooperation could have been an excellent way of Confidence Building Measures (CBM) and reducing tension.²⁵

One of the notable and remarkable success stories in relation to peace and security from the region is its contribution to peacekeeping operations. Led by Bangladesh, peacekeepers from the region, mainly the uniformed ones, form the back bone of UN boots on the ground in mission areas. At present with strength of 10,293 peacekeepers, the country is the highest peacekeepers contributing country in the world, while Pakistan and India is the second and third TCC respectively. ²⁶ (Figure 6)

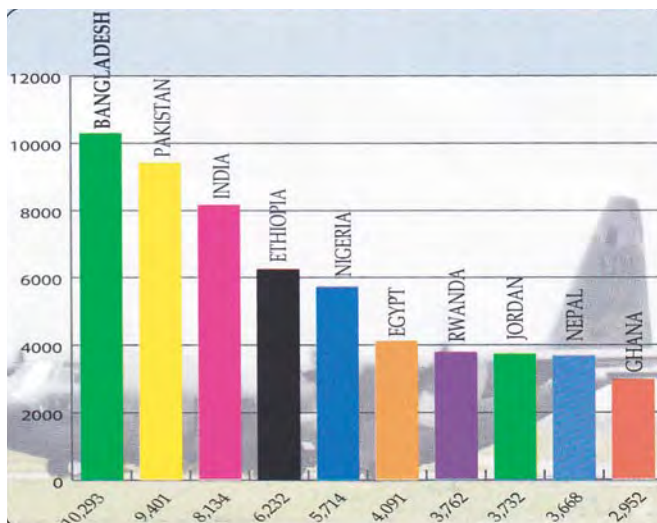
22. Khan Z (ed) op cit p1

23. Barsha Kattry is a former economic advisor, UNDP Bangladesh and now a regular columnist with the independent newspaper. See her article *Two Neighbours sixty years on-* Thursday August 23 August 2012, available at www.theindependentbd.com

24. Soare S, Security Architecture-Building and Regional Integration in Asia-Pacific accessed on www.garnet.sciencespobordeaux.fr/.../SOARE%20Simona.pdf

25. Gupta A, Will Cooperative Security Work in South Asia? *Institute for Defence Studies and Analysis* 13 November 2011, accessed on www.idsa.in/?q=idsacomment/willcooperativesecurityworkinsouthasia_agupta_131111

26. United Nations Website accessed on www.un.org/en/peacekeeping

Figure 6: Contributions to UN Operations (Up to 01 May 2012)

Source: Bangladesh Ministry of Foreign Affairs

SADC and SAARC: Same But Different

Although both SADC and SAARC were established in line with Chapter VIII of the UN Charter they differ on how they carry out their integration activities and this can be explained partly because of the differences in institutional designs, historical background, resources differences and more in the case of South Asia, because of deep rooted mistrust among some of the member states. The two regions have put on paper admirable set of treaties, protocols and arrangements to promote integration in their regions but in practice, they still appear to be far from realizing their goals.

Integration in both regions has been driven by two main factors: economics and conflicts. But while both regions have almost similar objectives in promotion of economic integration, the approach differed in the case of conflicts. Past conflicts mainly because of bitter liberation struggle, made SADC put up collective security strategy while SAARC on the contrary, because of past conflicts, decided to exclude defence cooperation from its Charter. What is clear here as some rightly observe, it seems the 'political tectonic plates' in the South Asia region have still not yet settled.²⁷

27. See Ambassador CM Shafi Sami presentation titled *Trans-boundary Waters: A diplomat's Perspective* presented at the World Water Week in Stockholm August 2011 available at www.siw.org.

Trends of Multi polarity: Implications for Peace

The world is changing and with it the increased demands for the UN to address peace and security issues. The UN provides a unique platform for international action, offering unparalleled legitimacy for global engagements owing to its universal membership and its inclusive decision-making process. In a multipolar era, when the role and position of the United States as the sole superpower is seen to be diminishing, the UN is expected to be an effective tool in preventing global conflicts. This part discusses some of new threats and challenges to global peace and its implications.

The UN and Collective Security

The 1945 UN Charter contains stronger provisions for decision making and collective military action than those of the weak League of Nations covenant. The role of the UN and collective security in general, has evolved given the rise of conflicts worldwide.

But while there seems to be much agreement on the need for collective multi lateral responses to security threats worldwide, there is however, less consensus on when and how to apply collective security. It is clear that Member States are generally reluctant to surrender sovereignty to a regime that encompasses binding rules and resist ceding decision making power on security issues to regional organizations.²⁸

Redefining the Concepts of Threats and Human Security

The multipolar world has made it necessary to redefine the concept of threats in order to cater for the new asymmetrical threats. These new threats demand new strategies in addressing them in addition to the traditional military approach. In its 2004 report titled: *A More Secure world: Our shared responsibility* the UN has outlined clusters of new security threats calling them threats without boundaries.²⁹

Recognizing the failure to respond to the most heinous crimes known to human kind, the expanded thinking that accompanies the new understanding of security is the Responsibility to Protect (R2P) which is people-centred. At its point of departure, it takes individuals and their communities rather than territory, states or governments.

28. Malebang G, National Security Policy: The Case of Botswana, Unpublished MM –P&DM Thesis, University of the Witwatersrand, Johannesburg, p. 113.

29. See Report of the Secretary – General’s High Level Panel on Threats, Challenges and Change available at www.un.org/secureworld/report2.pdf The report outlines seven clusters including Poverty, infectious diseases and environmental degradation, Conflict between and within states, Nuclear radiological chemical and biological weapons, Terrorism and Transnational organized crime.

In March 2011, the UN passed Resolution 1973 which approved enforcement of a no fly zone and authorized all necessary measures to protect civilian populated areas under threat or attack in Libya. However, whilst insisting that R2P tries to strike a balance between unilateral interference and indifference, Ramesh Thakur also cautions that the jury is still out on whether international military action in Libya has promoted consolidation or softening of R2P norm.³⁰

Peacekeeping as a Conflicts Management tool.

The end of cold war has changed the nature of conflicts with more intrastate conflicts rather than interstate ones and thus peacekeeping has become the main methods in resolving conflicts and maintaining peace and security. The top five contributors of finance for peacekeeping operations are the **United States (27.14%), Japan (12.53%), United Kingdom (8.15%) Germany (8.02%) and France (7.55%)**.³¹ On the other hand, the top five contributors of peacekeepers are Bangladesh, Pakistan, India, Ethiopia and Nigeria.³² As of June 2012, none of the developed countries were among even the first twenty TCCs.

However, this 'division of labour' between the financiers and peacekeepers contributors compounds the differences between the haves and the have nots, or even the soon to have countries, a situation which should otherwise be avoided at this stage. This is likely to put pressure on the UN which has neither the troops nor finances of its own but depend on the same member states.³³

The Security Council Reforms

Established as one of principal organs of the UN, The Security Council bears the responsibility for the maintenance of International peace and security. The Council's mandate outlined further in Article 24 of the Charter, coupled with its ability to make legally binding decisions, makes it arguably the most powerful organ of the UN. However, lack of reforms has led to doubts over its effectiveness and legitimacy in the contemporary global politics especially in maintaining regional and global peace. One observer referred to the situation of lack of reforms as one of the most 'successful failures' in the history of the UN.³⁴

30. Thakur R, Has R2P Worked in Libya?, *The Canberra Times* 19 September 2011, accessed on www.responsibilitytoprotect.org/index.php/crises/190-crisis-in-Libya.

31. Financing peacekeeping. Accessed on www.un.org/en/peacekeeping/operations/financing.shtml.

32. Peacekeeping Fact sheet: www.un.org/en/peacekeeping/resouces/statistics/factsheet.shtml.

33. The former Head of the Department of Peacekeeping Operations, Under Secretary Jean-Marie Guehenno (2000-2008) once cautioned the UN Member States that provision of well equipped, well trained and disciplined military and police personnel to UNPKO is the collective responsibility of the Member States. Countries from the South should not and must not be expected to shoulder this burden alone. See Provision of Well Equipped, Trained and Disciplines Peacekeepers Responsible of all Member States: Peacekeeping Committee Told. Available at <http://www.un.org/News/Press/docs/2003/gapk177.doc.htm>.

34. Rabin A, United Nations Security Council: Prospects for Reforms, International Energy Politics Culture 18 Jan 2012 accessed on inpec.in/2012/01/18/united-nations-reforms.

But while there is a call for a representative Council,³⁵ one of the major explanations for the continuous stalemate for a new formula for its membership partly is because the term ‘representation’ has also different meaning. Some take representation to mean the Council to be so composed as to reflect population distribution, reflecting the major cultures, religion and civilization of the world. Similarly, some see it is in-conscionable that Africa and Latin America are not among the permanent members of the Security Council.³⁶

An interesting argument is from the advocates of the functionalist perspective who are calling for the inclusion of the two G4 members, Japan and Germany, the second and third largest financial contributors to the Council respectively on the grounds of Article 23 (1) of the Charter which states that selection to the Council must take into account the country’s commitment to the maintenance of international peace and security and to the other purposes of the organization and geographical distribution.³⁷

However, the question here is even if one is to agree with the functionalist interpretation of article 23 (1) then the interpretation of “countries commitment to the maintenance of international peace and security” should not be limited to financial aspect. It should also include participation in peacekeeping missions since this in itself is an even bigger commitment to the maintenance of peace and security. So regardless of their economic status, the major peacekeeping contributing countries should see themselves as the main contenders in this category.

The Indian Ocean: A key Area for International Security

Earlier in the last century Alfred Thayer Mahan predicted that in the 21st Century, the destiny of the world will be decided by its waters.³⁸ He went on to say, Indian Ocean is going to be the true nexus of the world powers and conflicts in the coming years and that it is here that the fight for democracy, independence and religious freedom will be lost or won. The current shift of economic power and the rise of China and India are bringing in a ‘tectonic shift’ in the strategic landscape of the Indian Ocean. The Indian Ocean, *the ocean of the future*,³⁹ and

35. At present there is a widespread concern of how unrepresentative the Council, the apex body of the UN, has become. The UN membership has grown from 51 in 1945 to 193 today, while the Council has only grown from 11 members in 1945 to 15 today. Article 27 of the Charter grants the P5 a veto power whose membership is still restricted to five.

36. See Ramesh Thakur lecture delivered at the Institute of Security Studies, Pretoria, 18 November 2004 available at www.iss.co.za/pubs/asr/13No3/EThakur.htm.

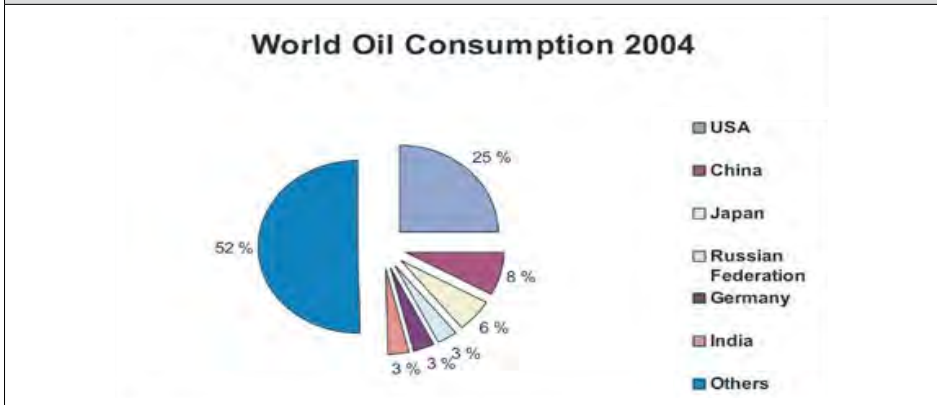
37. Rabin A – op cit.

38. Admiral Suresh Mehta, ‘India’s Maritime Diplomacy and International Security’, A speech delivered in International Institute of Strategic Studies (IISS) at London on 21 June 07. Accessed on www.iiss.org/EasySiteWeb/getresource.axd?AssetID=13389&type.

39. This was asserted by Aspi Cawasji a marine expert in a recent seminar in Canada, who stated that Atlantic Ocean was the ocean of the past, Pacific Ocean is the Ocean of the present and Indian Ocean is the ocean of the future. See David N Griffiths, *Regional Maritime Security in the Indian Ocean*, Centre for Foreign Policy Studies, Dalhousie University, 2011 p 79.

world's third largest ocean, is a key transit region for intercontinental trade in energy and commercial goods, desperately needed for China and India rapid growing economy.⁴⁰ China is the second world's largest oil consumer after the United States (**Figure 7**) and currently imports more than 50% of its petroleum need: 46% from the Middle East and 32% from Africa.⁴¹

Figure 7: Oil Consumption by Country.



Source: “Statistical Review of World Energy 2005”,BP

According to the 2004 US based consultancy Booz Allen report, Beijing is expanding its presence in the Indian Ocean using a “string of pearls strategy” which aims at cultivating Indian Ocean littoral states as friendly states, both to protect its economic interests and to bring about a balance of power in the Indian Ocean.⁴² The report further says “China has already built Gwadar Port in Pakistan and is acquiring more ports in Sri Lanka, Seychelles, Mauritius, Madagascar, Maldives and Myanmar. Each Pearl in the string is a link in a chain of the Chinese maritime presence that could take control over the world energy jugular.”⁴³

40. Associated Press, 6 August 2008, *India, China, jostle for influence in Indian Ocean* accessed on <http://www.msnbc.msn.com/id/25024945/ns/news-asiapacific>.

41. In 2009, China’s daily oil consumption was 7.85 million barrels of oil, and by 2015 this figure is projected to rise to 10 – 12 million barrels a day. 76% of the country’s oil needs are transported along its western SLOCs which begin in the Red Sea and Persian Gulf snake South across the Indian Ocean, on through the maritime chokepoints of South East Asia, and finally to the South China Sea to be offloaded at Chinese ports along the eastern seaboard a journey of more than 6000 miles. See Storey Ian, *Asia’s Changing Balance Of Military Implications for the South China Sea Dispute*, Dec 2011, *The National Bureau of Asian Research* available at <http://www.nbr.org>.

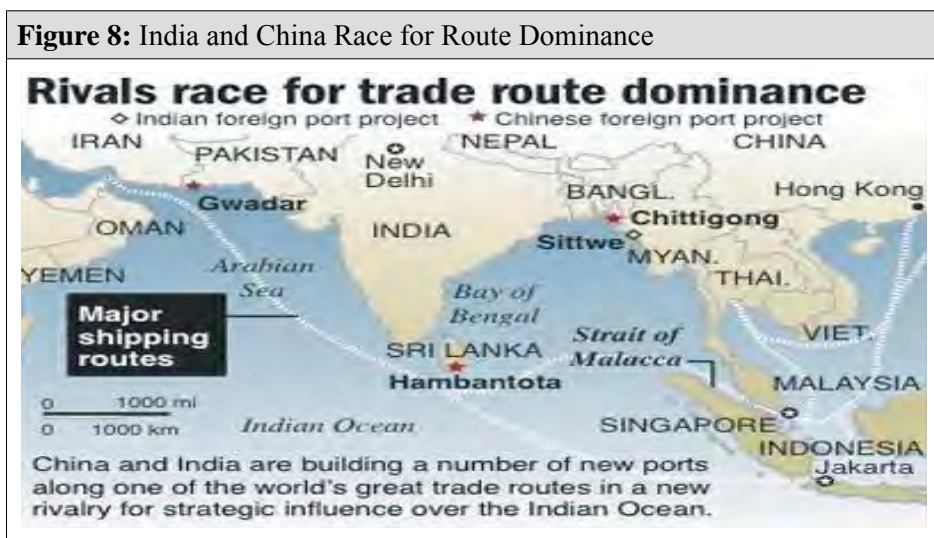
42. Blazevic J, *Defensive Realism in the Indian Ocean: Oil Sea Lanes and Defensive Dilemma*, *China Security*, Vol 5, No 3 2009, World Security Institute..

43. Associated Press, op cit.

Viewed alongside the large-scale naval modernization program being undertaken by China’s Army and Navy, some worry that these trade-oriented ports could be upgraded into permanent naval bases. In a worst-case scenario, Beijing could use these bases to threaten India’s security, menace global sea lanes and challenge the United States for regional naval primacy.⁴⁴

However, other observers see the ‘string of pearls’ assessment has been greatly exaggerated, saying although it does not necessarily mean these ports have no long term strategic value, but there is no evidence to suggest that the Chinese Navy is involved with these ports or are in future planning to transform these commercial ports into defendable forward bases.⁴⁵

Figure 8: India and China Race for Route Dominance



These activities in the Indian Ocean have also attracted the attention of the USA and other major sea powers that use Indian Ocean as a main sea route connecting to the Middle East, Africa and East Asia with Europe and the Americas. USA seems to be following Alfred Thayer Mahan’s advise who once cautioned in his seminal essay “*The Problem of Asia*”, that great navies based on coastal areas of Asia could, if not checked threaten America’s security.⁴⁶

This growing interest by the major powers in the Indian Ocean and the South China Sea poses a great threat of re-igniting bitter rivalry similar to the one witnessed during the Cold War. Slowly there seems to be a growing cold war mentality and signs that this rival race for trade route dominance is also becoming militarized and multi polarized.

44. Pehrson Christopher *String of Pearls: Meeting the Challenge of China’s Rising Power Across Asia Littoral*, July 2006 accessed on <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB721PDF>.

45. Townsend Ashley, China’s Indian Ocean ‘String of Pearls Is no Military Threat-At least for Now, 20 September 2011 available at www.pressdisplay.com/pressdisplay/viewer.aspx#_showdialog.

46. Mahan and Sempa, *The Problem of Asia* New York; Transaction Books, 1905, p 133.

Whither the United Nations

A pertinent question at this juncture is whether the United Nations is in serious crisis brought by the unpredictable multipolar system. Professor Ramesh Thakur is of the opinion that the UN is not quite as bad as often believed.⁴⁷ The UN is not in serious crisis. If the UN is in crisis then it is crisis of expectations. What the UN needs to achieve is a better balance between the wish of the people and the will of governments as well as the aspirations for a better world and its performance in the real world.

The United Nations is not expected to abrogate its role as the main custodian of peace to regional bodies even if regional integration initiatives have been established in line with the UN Charter. The UN and regional bodies need each other, but it is the UN that remains primarily responsible for dealing with 'threats to or breaches of the peace' in the world. There is need to ensure that regional and other ad hoc arrangements do complement and reinforce, rather than undermine the UN's legitimacy and capacity.

RECOMMENDATIONS

With the cold war now over, the UN is expected to be an effective tool in preventing global conflicts and to address some of the new threats and challenges to global peace in order to increase its effectiveness as an International organization. In view of the current regional and global security challenges, the following are therefore recommended:

- a. There is a great need of strengthening the United Nations' capacity in resolving conflicts and especially its decision making process, in order to avoid a perception that the UN is used (or misused) to rubberstamp certain decisions by the major powers.
- b. Proper assessment on the new asymmetrical threats to peace and stability is required. These new threats demand formulation and employment of new non-military strategies in addition to the traditional military engagements. Local regional solutions should also be encouraged instead of relying mostly on a 'one size fits all' type of international military engagements. Equal emphasis should be placed on both state security and human security.
- c. The international community needs to find lasting solution to the current stalemate on reforms of the Security Council whose composition does not reflect the contemporary political realities. Lack of reforms leads to doubts on its effectiveness and legitimacy.

47. Thakur op cit 12 November 2004.

- d. The UN and the International community as a whole must closely monitor and remain seized on the issue of the growing rival race of trade route and dominance in the Indian Ocean and see it as a global security issue. Concerted efforts should therefore be taken to make sure that Indian Ocean as well as the South China Sea which is now becoming Asia's potential military flashpoint, remains demilitarized and a zone of peace so as to avoid zero sum game, a product of the cold war politics.
- e. Given the importance of this topic to regional and global peace and security, it is highly recommended that further researches be conducted especially those aimed at enhancing capacity of regional cooperation and coordination between the regional bodies and the United Nations. It is high time the international community started realizing that the real test of power is not the capacity to make war, but rather capacity to prevent it.

CONCLUSION

Multipolarity, the trend that characterizes world affairs, is a key concept for understanding today's global situation. This paper has examined the trend of multipolarity with particular attention to regional integration activities and its implications for regional and international peace and security. The current power shift with the economic and business environment is gradually moving to a new multipolar balance and this has increased economic interdependence where national and regional boundaries are becoming less and less important. The balance of power is leaning towards Asia, with China and India's rise being hugely significant.

Regional arrangements differ in terms of their institutional design and this has the implication for what they can do or cannot do since there is a link between on the one hand design, and on the other hand, the level of resources and capacity available. Southern Africa and South Asia regions examined in this paper both have some kind of identical basic objective conditions which tend to emphasize the need for integrated intra and inter-regional planning, but they also have some unique characteristics which are important in understanding their readiness and potential for cooperation and integration.

BIBLIOGRAPHY

Books

1. Alfred Mahan and Francis Sempa, *The Problem of Asia*, New York; Transaction Books, 1905.
2. David N Griffiths, *Regional Maritime Security in the Indian Ocean*, Centre for Foreign Policy Studies, Dalhousie University.
3. Deborah Goodwin, *The Military and Negotiation: The Role of the Soldier-Diplomat*, Frank Cass, New York, 2006.
4. Fareed Zakaria, *The Post –America World*, Penguin-Viking, New York, 2008.
5. Hans Morganthau, *Politics Among Nations*, Alfred A. Knopf, New York, 1948.
6. Henry Kissinger, *Diplomacy*, New York: Simon & Schuster, 1994.
7. K Cole, *International Organisations and Peace Enforcement*, Cambridge University Press, 2007.
8. Lieutenant General CK Kapur, *Chinese Military Modernisation*, Manas Publications, New Delhi, 2008.
9. N. Sisodia and VKrishnappa, *Global Power Shifts and Strategic Transition in Asia*, Academic Foundation, New Delhi, 2009.
10. R Haider, *China-Contrasting Contours*, University Press Limited, Dhaka 2008,
11. Robert D Kaplan, *Monsoon: The Indian Ocean and the Future of American Power*, Random House, New York, 2010.
12. Shashi Tharoor, *The Elephant, the Tiger and the Cell Phone: India, The Emerging 21st –Century Power*, Arcade Publishing New Delhi, 2008.
13. V Hewitt, *The New International Politics of South Asia*, Manchester University Press, Manchester, 1997.
14. Wenger A and Zimmermann D, *International Relations: From Cold War to Globalised World*, New Delhi, Viva Books, 2010.

15. Yevgen Rumyantsev, *Indian Ocean and Asian Security*, Allied Publishers Private Limited, New Delhi, 1988.
16. Z R Khan (eds), *SAARC and the Superpowers*, University Press Limited, Dhaka, 1991.

Articles/Documents/ Reports /Papers

17. Admiral Suresh Mehta, (Retd) 'India's Maritime Diplomacy and International Security', A speech delivered in International Institute of Strategic Studies (IISS) at London on 21 June 07. Accessed on www.iiss.org/EasySiteWeb/getresource.axd?AssetID=13389&type
18. A Virmani, Tri-Polar World: India, China, and the United States in the 21st Century, Ashley J. Tellis Washington DC, Wednesday, February 9 2011
19. A Gupta, Will Cooperative Security Work in South Asia? *Institute for Defence Studies and Analysis* 13 November 2011, accessed on www.idsa.in/?q=idsacomment/willcooperativesecurityworkinsouthasia_agupta_131111
20. A Rabin United Nations Security Council: Prospects for Reforms, International Energy Politics Culture 18 Jan 2012 accessed on inpec.in/2012/01/18/united-nations-reforms
21. Ashley Townshend, China's Indian Ocean 'String of Pearls Is no Military Threat-At least for Now, 20 September 2011 available at www.pressdisplay.com/pressdisplay/viewer.aspx#_showdialog
22. Associated Press, 6 August 2008, *India, China, jostle for influence in Indian Ocean* accessed on <http://www.msnbc.msn.com/id/25024945/ns/news-asiapacific>
23. A Virmani Tripolar World : India, China and the United States in the 21st Century, *Carnegie Endowment for International Peace* ,Washington DC February 9 2011 accessed on carnegeaendowment.org/2011/02/09/tri-polar-world-India-China and United States
24. B Womack Asymmetry Theory and China's Concept of Multi polarity, *Journal of Contemporary China* vol 13(39) May 2004
25. Billy Tea, Unstringing China's Strategic Pearls, *Asia Times* 11 March 2011 available at www.atimes.com
26. C Hull and M Derblom, 2009, Abandoning Frontline Trenches? Capabilities for Peace and Security in the SADC region, *FOI Swedish Defence Research Agency*, Stockholm, accessible on www.foi.se

27. C Layne The Waning of US hegemony-Myth or Reality? A Review Essay, *International Security* 2009
28. C Bhatta Regional Integration and Peace in South Asia: An Analysis accessed on www.peacestudiesjournal.org.uk/dl/Regionalintegration.PDF
29. China's Peaceful Development, *State Council Information Office of the Peoples Republic of China*, 06 September 2011.
30. Christopher Pehrson *String of Pearls: Meeting the Challenge of China's Rising Power Across Asia Littoral*, July 2006 accessed on <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB721PDF>
31. Delinc Tomislav, SAARC-25 years of Regional Integration in South Asia, KAS International Report 02/2011 accessed on www.kas.de/saarc/en/publications/22415/
32. Fareed Zakaria, 10 strategic issues with Obama's East Asia "Pivot", *Global Public Square*, 15 January 2012, accessed on globalpublicsquare.blogs.cnn.com/.../top-ten
33. Gabriel Melabang, Peace building and Security in Southern Africa: The case of the SADC, *Hiroshima University*, Japan 25 August 2011 accessed on globalstudies.doshisha.ac.jp/English/i18n/...Gabriel_Full_paper.pdf
34. Gokhale Nitin, How Indian Navy is Expanding and Modernising, *NDTV*, 25 June 2012, accessed on www.ndtv.com
35. G Malebang National Security Policy: The Case of Botswana, Unpublished MM –P&DM Thesis, University of the Witwatersrand, Johannesburg
36. G Cawthra Southern Africa: Threats and Capabilities *Africa Program Working Paper Series International Peace Institute* November 2008
37. Ian Storey, Asia's Changing Balance Of Military Implications for the South China Sea Dispute, Dec 2011, *The National Bureau of Asian Research* available at <http://www.nbr.org>
38. J Haacke and P, Williams *Regional Arrangements and Security Challenges: A Comparative Analysis*, Crisis States Working Paper no 52, Regional and Global Axes of Conflict, Crisis States Research Centre and George Washington University, July 2009
39. J Chipasula and K Miti ,Botswana in Southern Africa: The strategy for Regional Co-existence, *PULA: Botswana Journal of African Studies*, Vol.6 No1

40. Joseph Nye Jr, *International Conflicts After the Cold War in Managing Conflicts in the Post –Cold War: The Role of Intervention Aspen Institute, Colorado 1996*
41. J Blazevic, *Defensive Realism in the Indian Ocean: Oil Sea Lanes and Defensive Dilemma, China Security, Vol 5, No 3 2009, World Security Institute.*
42. K A Musud, *Diffusion of Power in a Multipolar South Asian Analysis World Paper no 4847 January 2012. Accessed at www.southasiaanalysis.org/5Cpapers/49/5Cpaper4847.html*
43. K Deutsch and D, Singer *Multi Polar Systems and International Stability, World Politics, Vol 16, No 3 Apr 1964. Accessed on www.metu.edu.tr/~utuba/Deutsch.pdf*
44. K Mahbubani, *The New Asian Hemisphere: The Irresistible Shift of Power to the East New York Public Affairs , 2008*
45. K Waltz ,*The Emerging Structure of International Politics International Security 1993*
46. Lee-Roy, Chetty *Macroeconomic convergence within the SADC region, Mail and Guardian Online Network posted on 15 June 2012 accessed on www.thoughtleader.co.za/leeroychetty/2012/0615macroeconomic-convergence-withintheSADCregion*
47. Naison Ngoma *SADC: Towards a Security Community? African Security Review Vol 12 No 3 2003 available at www.iss.co.za/za/pubs/asr/12no3/F2.html*
48. O Stuenkel, *Emerging Powers Divided on R2P and RWP, Post- Western World 8 July 2012 accessible at www.postwesternworld.com/2012/07/08/why-emerging-powers-are-divided-on-r2p-and-rwp/*
49. Ramesh Thakur, *Has R2P Worked in Libya?, The Canberra Times 19 September 2011, accessed on www.responsibilitytoprotect.org/index.php/crises/190-crisis-in-Libya/*
50. Ramesh Thakur, *lecture delivered at the Institute of Security Studies, Pretoria, 18 November 2004 available at www.iss.co.za/pubs/asr/13No3/ETHakur.htm*
51. S Soare, *Security Architecture-Building and Regional Integration in Asia-Pacific accessed on www.garnet.sciencespobordeaux.fr/.../SOARE%20Simona.pdf*

52. Schulz M (ed) *Regionalism in a Globalizing World: A Comparative Perspective on Forms, Actors and Process*, Zed Books, London 2001
53. S Kapila, United States Global Strategic Dominance Diminished *South Asia Analysis Group* Paper No 4997 April 2012 accessed in <http://www.South Asia Analysis Organisation/default>
54. Southern African Development Community: Regional Indicative Strategic Development Plan accessed on www.sadc.org.int
55. SAARC Charter, accessed on www.saarc-sec.org
56. VK Aggarwal and R Mukherji *India's shifting Trade Policy: South Asia and Beyond* ,accessed on basc.berkeley.edu/pdf/articles/Aggarwal_Mukherji_ANIA_Ch9.pdf
57. X, Yang *The Unipolar Challenge: Power, Culture and Authority and the Advent of War. Politics and International Relations* (POIR) 2010 Accessed on www.peakyou.com/andrew_lessman-UnitedStates

Author

Brigadier General Gaudence Milanzi, was commissioned in the Tanzania Army in 1977 and joined the Air Defence Artillery unit. Besides his regimental appointments as Troop Commander, Battery Commander and Operations and Training Officer, he has also been an instructor at the Officers Cadet Training school at the Tanzania Military Academy. He has attended most of his military training courses in Tanzania and few others outside his country including his professional training in India, Pakistan and USA. He is a graduate of the Tanzania Command and Staff College and National Defence College Bangladesh. He holds Bachelor of Arts degree (International Relations) from the University of Dar es Salaam, Tanzania where he also obtained a Post Graduate Diploma in Law (International Law). He worked at the Tanzania Defence Headquarters as Director of History, Research and Evaluation from 1990 to 2000 before being assigned to Harare, Zimbabwe in 2001 to work as the Deputy Director and then Director of the SADC Regional Peacekeeping Training Centre till 2011 when he was posted back at the Tanzania Defence Headquarters. Apart from attending military training courses at home and abroad, Brigadier General Milanzi has also attended peacekeeping and conflict management courses as a participant and resource person in many parts of the world. He is married to Ansila Dolorosa Milanzi and blessed with three children. His hobbies include reading books, writing, travelling, sports and gardening. He is a keen follower of international politics events.

EXTENT AND MAGNITUDE OF URBAN POVERTY: CHALLENGES AND WAY FORWARD

Group Captain Mohammad Mostafizur Rahman, ndc, psc

INTRODUCTION

Urban poverty is a growing phenomenon. Rural-urban migration for seeking income is the main cause of the growth of low-income settlement. Transformation from one type of socio-economic setting to another creates not only the adaptation problem but losses control over the benefits of social networks and access to government services which are exclusively designed for rural populace. There is no disagreement among the researchers and policy makers that urban poverty offsets the development gains of the country. Nevertheless, according to security experts, there are adequate reasons to allude to sprawling slums as the dens, hideouts of outlaws and hub for anti-social activities and drugs. Pervasive natures of crime, violence and prevalence of potential security threats in those slums might transform into destabilize the “social security”.

Absence of a comprehensive urbanization policy has been identified as one of the major policy lacks to address emerging challenges. Added dimensions of poverty such as lack of access to urban utilities, exposure to poverty and degenerated sanitation and environmental hazards, potentials of infliction with communicable diseases further portray a complex and bleak picture of the trajectory of life. Although researchers in policy discussion frequently indicates to “less stability of urban environment,” while draws upon the conclusions such as resilience, flexibility and more adaptability to dire conditions they are exposed to.

It is clear that growing urban poverty poses challenge to attain the goals relating to Millennium Development Goals (MDG) and social development priorities. From this point of view, in-depth research initiatives should be considered important to capture various dimensions of urban poverty.

A combination of socio-economic, political and demographic factors is responsible for this. The growth in the magnitude of urban economy, change in the scale and nature of economic activity and distribution of income between regions and among classes, demographic transition and change in the scale and nature of governance are likely to be influenced by rapid urbanization and urban settlements patterns in Bangladesh.

URBAN POVERTY

Definition: There is no consensus on a definition of urban poverty. Conventional economic definitions use income or consumption complemented by a range of other social indicators such as life expectancy, infant mortality, nutrition, the proportion of the household budget spent on food, literacy, school enrolment rates, access to health clinics or drinking water, to classify poor groups against a common index of material welfare.

However, Centre for Urban Studies (CUS) in 1996 gave a working definition of urban poor as: “The urban poor are people who cannot afford to meet the basic needs requirements with their own income.” Basic needs requirements include food or nutrition, clothing, primary health care, education and shelter. The items that meet the basic needs are, nutrition – 2122 kilo calories as minimum requirements, clothing – at least 2 set, health – real access to primary health care facilities, education - access and ability to obtain primary education or vocational training with literacy, shelter – an independent room which is strong enough to withstand weather elements and which provides minimum decent privacy with access to drinking water and toilet facilities.

In urban context there have some specific characteristics for poverty. They are as follows:

- a. After food major expenditure on house rent or health or on bribe in case of pavement dwellers;
- b. Live in environmentally hazardous condition;
- c. More prone to water borne, infectious or respiratory diseases;
- d. Lack of access to drinking water and toilets;
- e. Lack of Day Care Centre impacts their livelihoods more severely;
- f. Adolescent girls are more vulnerable to early marriage and sexual exploitation;
- g. Face constant threat of eviction and harassment in their work situation (esp. hawkers, beggars, sex workers);
- h. Eviction makes them more vulnerable and many become homeless and stay on pavements.

Present Trend of Urban Poverty in Bangladesh

In the recent past, the incidence of overall poverty has reduced to a great extent. The following table illustrates the fact.

Table 1: Present Poverty trend of Bangladesh

	Upper poverty line		Lower poverty line	
	2000	2010	2000	2010
National	48.9	31.5	34.3	17.6
Urban	35.2	21.3	19.9	7.7
Rural	52.3	35.2	37.9	21.1

Source: HIES 2000 and 2010; Bangladesh Bureau of Statistics

However, despite the reduction of urban poverty, the overall poverty in urban area is still widespread due to various factors.

Urbanization

Urbanization can be defined as being the process of becoming urban, moving to cities, changing from agriculture to other pursuits common to cities and changing and corresponding changes of behaviour patterns.¹ The rural urban migration that leads to urbanization in Bangladesh represents the transfer of poverty from rural to urban areas. Most of the slum dwellers come to urban areas in search of living.

Unplanned growth of towns and cities is another cause of the growth of the slum areas. There is a legislation banning unauthorized construction in urban areas but this is not strictly followed. So, whenever, people find a vacant government plot, they construct thatches and start living there.²

Bangladesh is a rapidly urbanizing country where urban base has expanded rapidly from 7.6% to nearly 25% between 1970 and 2005. With a population of 14.3 million, Dhaka mega city currently ranks as the world's ninth largest city³ and it is likely to be world's second largest urban agglomeration by 2020.⁴ Dhaka district has the highest level of urbanization. Dhaka is a low income city with large numbers of poor when compared with most mega cities of the world. In a recent newspaper report, Dhaka has been rated as the least liveable location of the world among 140 cities surveyed by Economist Intelligence Unit (EIU). The ratings are based on 30 factors, across five broad categories -- stability, healthcare, culture and environment, education and infrastructure.⁵

1. Clyde Mitchell, "Urbanisation, Detribalisation and Stabilisation in Southern Africa: A problem of Definition Measurements" in Social Implication of Industrialisation and Urbanisation in Africa, South of Sahara, UNESCO, Paris, 1957. Cited by Mohammad Habibur Rahman, Urbanization and Urban Social Service in BD. P.20.
2. Rahman, M. H., 2002. *Urbanization and Urban Social Service in Bangladesh*, Dhaka: Ananya Publishers.p.36
3. World Urbanization Prospects: The 2009 Revision, UN.
4. World Bank 2007, Cited by Nicola Banks.
5. The daily Star, *Dhaka is least liveable city in the world*, 15 Aug 2012.

Trend of Urbanization in Bangladesh

Trend of urban growth in Bangladesh for last one century, shows a very slow and retarded urban growth for Bangladesh. In Bangladesh the rate of urbanization is being consistently over 5 per cent since 1974, and even up-to 7 per cent in some years.⁶ The large number of urban population since 1981 is due to the definitional change of urban area in those censuses. The high urban growth rate from 1981 through 2011 was due to the extended definition of urban area in 1981. Though the urban population has increased from 2.4% in 1901 to 28% in 2011, the exponential growth rate indicates much slower growth for the said period, from 1.4 during 1901-11, it increased to 3.2 during 1991-2011. The overall trend is curvilinear, unstable and periodically fluctuating. It reflects both global and internal dynamism as well as statistical manipulation by the politicized administration of a peripheral state.

Table 2: Trend of Urbanization in Bangladesh					
Census year	Total population	Urban population	Percent urban	Variation	Exponential growth rate
1901	28,928,000	702,035	2.43	-	-
1911	31,555,000	807,024	2.56	14.95	1.39
1921	33,254,000	878,480	2.64	8.85	0.85
1931	35,604,000	1,073,489	3.02	22.2	2
1941	41,997,000	1,537,244	3.66	43.2	3.59
1951	42,063,000	1,819,773	4.33	18.38	1.69
1961	50,840,000	2,640,726	5.19	45.11	3.72
1974	71,479,000	6,273,602	8.78	137.57	6.66
1981	87,120,000	13,228,163	15.18	110.85	10.66
1991	106,314,000	20,872,204	19.63	57.79	4.56
2001	123,851,120	28,605,200	23.1	37.05	3.15
2011	158,570,535	44,399,750	28	21.21	3.2

Source: Government of Bangladesh, Statistical year book 2010 Bangladesh Bureau of Statistics

Causes of Urban Poverty

Urban poverty is not a detached matter. All of the physical, mental and socio economic condition are interrelated with this poverty situation. When people stay in an unemployed situation then they can not start business or house because

6. Islam, N., 1997. Urbanization, Migration And Development In Bangladesh: Recent Trends And Emerging Issue.

of credit. And this situation leads them not to have an adequate housing and forced them to live an unhygienic condition that causes a poor health and poor education. This entire poor situation makes sense of insecurity, isolation and disempowerment.⁷ There are various reasons of urban poverty. Professor Nazrul Islam identifies some of the reasons of increase of urban poverty. Those are as follows:

- a. Natural disaster like flood, cyclone, tidal bore and river erosion;
- b. Increase of population disproportionate to limited resources;
- c. Low index of human development like illiteracy, health, skill etc;
- d. Low productivity;
- e. Lack of policy support and development programme for poor.

FIELD STUDY AREAS

There are about 4966 slums of Dhaka city.⁸ The slums are widespread in Dhaka city. For this study, 5 slums are selected for primary survey in order to gather and correlate some present scenario with the available data of secondary source in respect of urban poverty in different locations of Dhaka. The selected slums are:

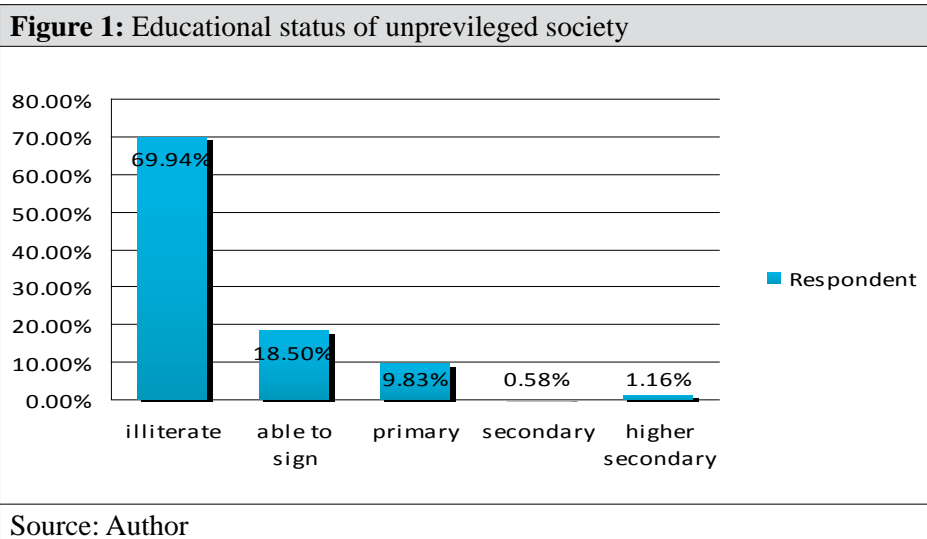
- a. Begun Tila slum (Mirpur-12).
- b. Rayer Bazar Slum (Over the western dam of Dhaka)
- c. Slum adjacent to Kamalapur Railway Station.
- d. Karail Slum.
- e. Slums around Tejgaon Rail Station.

Demographic Characteristics of the Study Area:

Educational Status. This field of study reflect very poor scenario of educational status of underprivileged society. Around 70% people are illiterate here. A little number of slum dwellers are able to sign and passed primary school. Despite the govt provides free primary education, the slum people are not able to avail the scope of the opportunity.

7. Deniz Baharoglu and Christine Kessides *Urban Poverty*, Chapter 16.

8. Ishtiaque, Ahmed & Sezan Mahumud, Malik., *Migration objectives and their fulfilment: A Micro Study of the Rural-Urban Migrations of the Slums of Dhaka City*. www.ukm.my/geografia/images/upload/4.geografia-2011-4-Asif-bangladesh-english--editedfinal1.pdf [Accessed on 19 Aug 2012].



Reason of Discontinuation of Study. Most of the slum dwellers are not able to continue their education and the drop out rate is very high. From the study, some interrelated causes for discontinuation of study were found. 50% of the sample directly indicate poverty as a reason of discontinuation of their study. Early marriage is the next important reason for discontinuation of study that occurs with about 38% of the respondent.

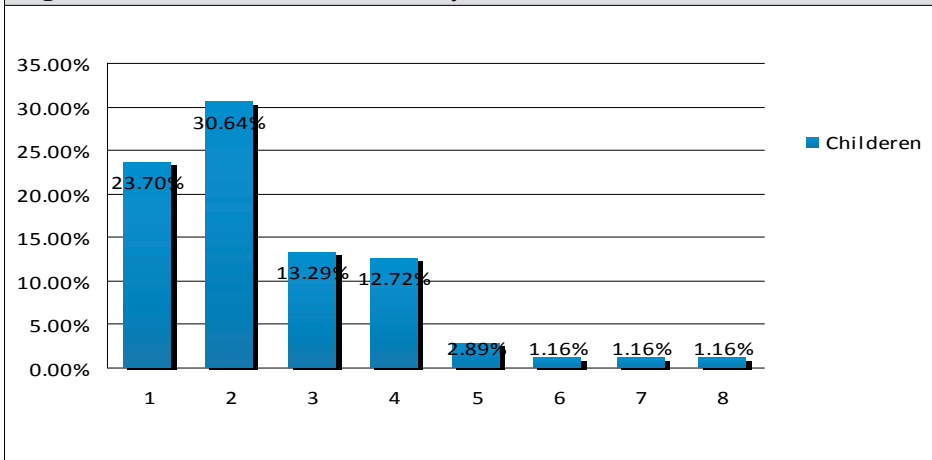
Socio - Economic Characteristics

Respondent Occupation. From the study we reveal that majority of the slum dwellers constitute day labour (39.88%). The next higher category of profession in order of percentage are domestic help and garment worker (22.54% and 14.45% respectively). Informal sector dominates the livelihood of slum dwellers.

Reason of Migration. Study reveals that Dhaka attracts between 300,000 to 400,000 new migrants each year (World Bank 2007). Both push and pull factors – such as lack of job opportunities or land erosion- have been the main contributing factors to migration (Opel 2000; Siddiqui, Ahmed et al 2000; Islam 2005). In this study also we can find almost the similar scenario for the reason of migration. Majority of the people migrated to Dhaka for economic reasons like financial crisis (67%). A substantial portion (15%) of people migrated due to river erosion. Unemployment accounts for (6%) but aspirations for high income constitute only (1%). It is important to note that majority people migrated from Barisal (19%) and second large percentage people migrated from Rangpur (15%).

Family Structure. Urban poors are perceived to be basically not vary attentive about their family size but this study reveals different. Large family size are not very significant. Around 54% family have only 1 to 2 children. 25% of house holds have 3 to 4 children.

Figure 2: Number of child in a family

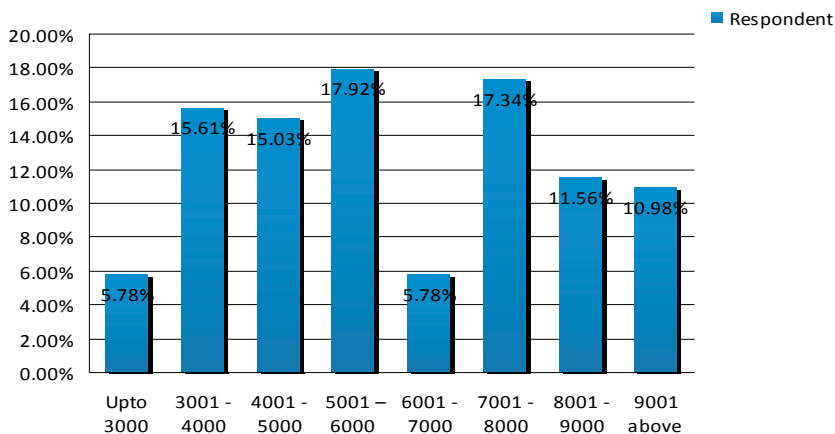


Source: Author

Status of Children: In urban slum area children are mostly deprived of their rights. Because of poverty most of the parents are forced to send their children to work. Only 39% child go to school and rests are engaged in other jobs. But it is good to see that there are growing concern in parents for giving education to their children. 83% of respondents desire to send their child to school. This is very good sign in terms of their resilience in the slum life.

Monthly Income. Income is one of the most comon factor to measure poverty. Thorough the study, monthly income of the respondents found to vary from Tk. 3000 to Tk. 9000. 5.78% urban slum dwellers earn only upto Tk. 3000. More than 54% of them earn upto Tk. 6000 only. This income is not enough to support their family. A significant portion (28.9%) of the respondents earn Tk. 7000 to Tk. 9000.

Figure 3: Monthly Income



Source: Author

Expenditure of Food. In the previous study, it has been revealed that there are high percentage of earnings spent on food. In this study also, it is found that, people spend nearly about 70% of their income on food. Mean food expenditure is Tk. 3675 of the respondents slum dwellers. As their income is very limited most of the times they face crisis in this issue and most of them (80%) take loan to cope with this situation which obviously affect their regular livelihood.

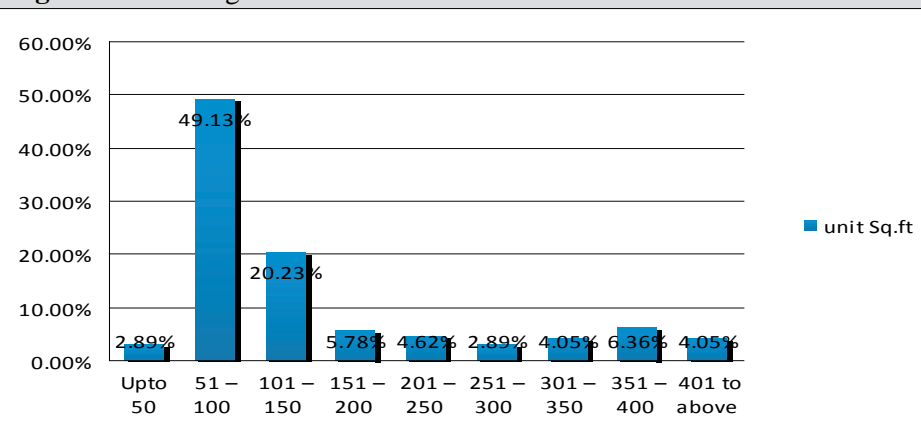
Expenditure for House Rent. Rent structure of slum area is generally very high compared to other areas of the city. For a dwelling unit of the size of 51 to 100 sq.ft, the rent is about Tk.1500, meaning that per sq.ft rent is Tk.15. By contrast, for example, Now in Mirpur DOHS. Average house rent is Tk. 30,000 (±) for a house of the size of around 2000 sq. ft i.e. per sq. ft rent is Tk. 15, same as of a slum. It means that that house rent in slum areas is proportinalety very high compared to the availabiity of basic amenities and overall consideration in respect of standard of living. 44% slum dwellers falls in that category. Only 27% pay below Tk. 1000. Another 24% pay between Tk. 1500 – 1999. Some of them (5%) pay 2000 or more for house rent.

Savings. Urban poor have difficulty in savings. After paying for food and house rent, the amount of money they have are not sufficient. In the study it is found that only 39% of them can save some of their income while 61% have no money to save. The same phenomenon i.e. lack of savings has been seen during the earlier study as well. It means that the situation in regard to income and savings has not improved. This condition lead them to future insecurity of livelihood.

Status of Accommodation

Dwelling Unit. Dwelling unit size is the most important factor that represents accommodation status. In urban slum area poor people live in a very congested area. This scenario also reflects at our study. Almost 50% of them live in a dwelling unit of the size of only 51-100 sq feet. Another 20.23% of them are living in a dwelling unit of 100-150 sq feet. Other categories of dwelling unit size are not very much significant. 88% of the total household occupy only a single room to live. 9% use two rooms to live.

Figure 4: Dwelling Unit Size



Source: Author

Water, Sanitation and Hygiene

Water, sanitation and hygiene scenario in the slum areas are not satisfactory, because most of the people do not have access to good sanitation and hygienic environment. Only 8% people drink boil water whereas 92% do not. 18% use hygienic toilet⁹ facilities and other 82% use unhygienic toilet¹⁰ facility (Chart-23); among them only 9% get the facility to use their own toilet and rest 91% common or shared toilet. In addition, some (33%) had to pay for the toilet in addition to their house rent that takes a toll on their income.

Moreover solid waste disposal condition of these areas are also in a very critical situation. Only 36% use dustbin whereas 32% leave solid waste on the road and 23% put solid waste in the drain which are the potent reasons of other health and environmental hazard in the urban area.

9. Hygienic toilet refers to a toilet from where no bad smell comes out, excreta are closed and no fly can enter.

10. Unhygienic toilet refers to a toilet that lacks any or all conditions of hygienic toilet.

Hazard and Risk

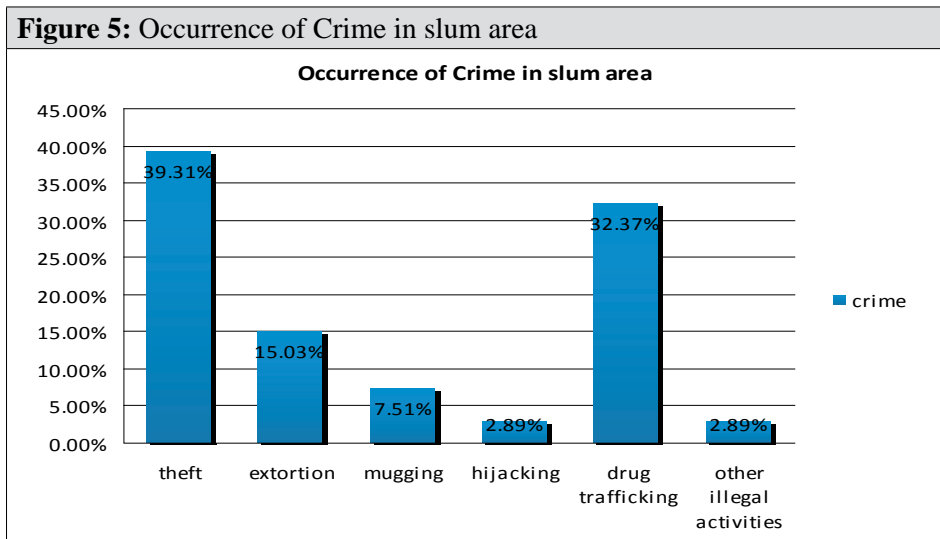
Eviction. A significant portion of poor people (37%) have faced eviction from their slum in last 5 years where 88% of the evicted peoples had to live in public spaces to cope with the situation and only 12% could shift to other places. Moreover 48% peoples still live in the slums with the fear of eviction.

Flood. Though floods are not very regular event in this metropolitan area, 36% still suffer from flood events regularly which mainly occur by waterlogging in moonson time. They mainly suffer from this hazard as they live in low land and flood flow land.

Fire Hazard. Though fire hazards are known as a regular hazardous event for slum, only 22% of the respondents faced this event. And other 78% of the respondents have never faced this event.

Crime. Though crime relates primarily to law and civic security issues, but magnitude of this problem presently has turned to be a hazard now. As far as the type and magnitude of the crime events are concerned, there were theft (39.31%), drug trafficking (32.37%), extortion (15.03%), mugging (7.51%), hijacking (2.89%) and so on. Moreover 63% respondents replied that crime incidents are increasing day by day.

Figure 5: Occurrence of Crime in slum area



Source: Author

Now-a-days the problem of sexual harassment is becoming a major concern. Most of the respondents (58%) said that their families have face this problem. According to the information of Rapid Action Battalion (RAB), it is also clear that slums are a major source of crime which has a negative impact on other neighbouring areas of the city. Slums are a major places of drug trafficking. In the area of RAB-2 (Mohammadpur area), during the period of June- 2011 to July- 2012, a total of 537 persons were arrested for various crimes; of which about 10% belong to the slum/ Bihari Camp area.

Social Safety

Under the Ministry of Social Welfare, there are programmes like Urban Community Development (UCD). Besides, there are policy strategy and different poverty reduction programme those are run by government under social safety net, but none of the programmes found to be functioning in the surveyed slums. Some NGOs are running their activity on social safety net like micro credit (45%), education (24%), health programme (16%) and sanitation (15%).

Health and Nutrition

Knowledge about Primary Health Care Issues. Most of the poor are very much conscious about the general diseases like diarrhoea (71%) and other communicable diseases (83%). But unfortunately they do not drink boiled water. Only 8% people drink boiled water. They mostly know how to prepare ORS (63%). But in case of complex diseases like malaria only 27% are aware about the symptoms and in case of HIV 62% have no idea about it or its prevention methods.

General Health Care Service Facilities. Most of the people get easy access to NGO health facilities (51%) and local doctor (44%), Therefore, they mostly go there. Only 4% go to government hospital and 1% to community hospitals. It is, therefore, evident that due to non availability of government hospital, slum people go to NGO health facilities and local doctors. Scarcity of govt hospital is an issue that need to be taken care of.

Knowledge of Slum Dwellers about Hygienic Issues. It is very good sign that the slum dwellers are more knowledgeable and aware about some of the hygienic issues and they put into practices in their daily lives. The following table illustrates such testimony.

Table 3: Knowledge of slum dwellers about hygienic issues					
SL No	Hygiene Issue	Knowledge		Practice	
		Know	Don't know	Yes	No
1	Hand wash with soap/ ash before eating	95.95%	4.05%	95.95%	4.05%
2	Hand wash with soap/ ash before feeding children	91.91%	8.09%	91.91%	8.09%
3	Hand wash with soap/ash after defecation	68.79%	31.21%	68.79%	31.21%
4.	Hand wash before food preparation	24.28%	75.72%	24.28%	75.72%
5	Keeping food under cover	80.35%	19.65%	80.35%	19.65%
6	Cutting nail regularly	64.16%	35.84%	64.16%	35.84%
7.	Go to Latrine with shoes	96.53%	3.47%	96.53%	3.47%

Source: Author

But there are still some worrying factors that need to be taken care of. From the above table we find that almost 1/3 of the sample (32.32%) don't know that they have to wash their hands with soap after defecation, 3/4 of the sample (75.72%) is unaware of washing hands before food preparation and 1/3 of the people (35.84%) don't know that they have to cut their nails regularly and they don't put into practice that also in their daily lives.

Impact of Urban Poverty

Impact of urban poverty is multifaceted. Due to poverty, urban poor are unable to meet very basic needs of their life. Combination of the study of the secondary and primary data, it is found that out of many important elements that have serious impact on the life and livelihood of urban poor those are enumerated below:

Housing Problem. Urban poverty accelerates the existing housing problem of the large cities of our country. Population increase and low income of a huge portion of population makes this problem more acute. As a result, poor people of urban areas are forced to live in miserable condition at slums in a very congested space or live beside road and rail line or under open air with minimum possible

civic amenities. It is also found that their houses are often flooded by rain. In addition, According to UN, around 3 million people of Dhaka live in slum. A 1995 study on 10 cities of Bangladesh reveals that 9% of its population lives in illegal slums and in Dhaka this number is 18%.

Employment Problem. As we have gathered from conceptual analysis that rapid urbanization creates new employment opportunity, but gradual population increase, illiteracy, unskilled manpower and over all mismanagement and corruption in various sectors makes the urban unemployment problem acute. Owing to such situation, this research reveals that a bulk portion of the slum people engaged in day labour and domestic aid. In our country total 2.6% (BBS-2010) of labour force is unemployed and most of them are from urban area.

Lack of Education Facility. Most of the urban poor people keep their children away from going to school because of poverty and some due to early marriage. And the evident outcome is that the people of this class remain illiterate. Primary data reveals that 70% people of slum area are illiterate. But as mentioned before that a growing aspiration is prevalent in urban slum people (83%) to send their children to school.

Criminal Activities. With the increase of poor population at urban area, the incidence of criminal or anti-social activities has also increased substantially. Problems of poverty like unemployment, illiteracy, decline of morality, frustration, rapid population increase etc. contribute to spread of urban criminal activity. Originally drug addiction, drug trafficking, mugging, theft, violence against women, rape and other offence related activity are common scenario of urban poor people's life. This study also reveals similar situation of criminal and anti-social activities.

Spread of Diseases. Generally, outbreak of different diseases is very much common to urban poor. From the field survey it is found that about 47.6% of the surveyed households suffered from diarrhoea and 51.7% suffered to other diseases.

Marital Problem & Increase of Sexual Crime. Incidence of early marriage is a problem in urban poor people. From the primary survey we find that 38% respondents left school due to early marriage. Sexual abuse and sexual crime also exist in this class of people. As we have found that women (58%) are subjected to sexual harassment. Prostitution is another problem that impacts the life of the slum people.

Increase of Child Labour. Natural growth of children can get hampered by poverty. Mainly most of the poor children have to engage with labour instead of being educated. Primary data disclosed that 31% of children work in garments. BBS conducted survey represent that around 3.2 million child labours (almost 43%) include within the total number of children involves with economic activity. The UNICEF supported study marked 430 types of child labour in Bangladesh and most of them are in urban area. Originally the incidence of child labour is because of the prevalence of the poverty in urban area.

Problems of Access to Urban Facilities. Urban poor are deprived from most of the urban facilities. To this effect, we find that there is not enough sewerage and drainage facilities, medical services are insufficient, roads are inaccessible, and garbage and rubbish disposal facilities are not good at all.

Challenges of Urban Poverty

Urban poverty creates a complex dynamics along with the host of challenges. Besides there are various challenges that the government and policy makers would face in order to address the urban poverty. From the study, following challenges of urban poverty are identified :

- a. Creation of Employment.
- b. Controlling Criminal and Anti Social Activities.
- c. Access to Urban Facilities.
- d. Providing Housing for all.
- e. Access to Education.
- f. Access to Healthcare.
- g. Scarcity of Resources.
- h. Mass Transportation.
- j. Unequal Distribution of Wealth and Social Change.

RECOMMENDATIONS

In view of study of secondary and primary data and challenges drawn previously, followings are the recommendations made in alleviating urban poverty:

Community Development Programme (CDP). Community Development is a term applied to leaders, activists, involving citizens and professionals to improve various social aspects of local communities. CDP aims to empower individuals and groups of people by providing them with the skills they need to effect change in their own communities. Under this programme, slum dwellers

may be organised for various training programme, providing education and run awareness programme on various social issues and organised them to develop cooperative for savings etc.

Housing Assistant Programme. In order for rehabilitation of the slum poor people, low cost housing/flat may be made in government khas land and distribute to the slum dwellers in long term instalment.

No Eviction without Arranging Alternative Site for Resettlement. Before arranging alternate site for slum dwellers, it is recommended that no eviction should be undertaken. It is very inhuman to throw people on the street overnight without arranging alternate dwelling site that is the responsibility of the state as per the constitution.

Implementation of National Housing Policy. In the National Housing Policy 2008, it was decided to allot 5 acre land in Mirpur area for construction of low cost housing, but that has not yet been implemented.

Urban Bank for the Poor. A specialised bank like Krishi Bank or Prabashi Kallyan bank may be established in which urban poor will be allowed to open bank account with very nominal charges and they may be included in the micro loan project like the farmers take loan from krishi Bank without any collateral.

Only One Organization is to be Made Responsible. Only one organization like DCC or RAJUK may be made responsible to look into the affair of slum management. This will facilitate management and administration easier.

Social Business¹¹ In a social business, the company must cover all costs and make profit, but at same time achieve the social objective, such as, healthcare for the poor, housing for the poor, financial services for the poor, nutrition for malnourished children, providing safe drinking water, etc in a business way. No personal gain is desired by the investors.

Affluent sector of the society may come forward in realising the idea of Dr Yunus in establishing the social business aiming the poor people.

Providing Vocational Training to Slum Dwellers. Slum dwellers constitute almost 30% of the total urban area population. Govt may consider providing vocational training to able personnel among slum people that will make them human resource instead of being burden of the society.

11. <http://www.muhammadyunus.org/Social-Business/social-business>.

Birth Registration. It is learnt that at times poor people are subjected to force bribing during the birth registration. As a result they lose interest in this process. Awareness programme may be launched for birth registration of the slum children.

Stipend for Children. In some cases children are forced to go to work. Poor children may be brought under the stipend programme as employment substitution. This may help bring back drop out children to the school.

Micro Financing for Employment Generation. Urban sustainability requires the inclusion of poor into the mainstream economic and social life of the city. Micro financing on various projects like poultry, sewing, hens farming, may be done in order to create more employment facilities.

Awareness about HIV, Malaria and other Contagious Diseases. Although slum people are more aware in respect of health and hygiene than before but they seem to be less aware about HIV and other contagious disease. Necessary programme in this respect may be run to create more awareness.

Prevention of Early Marriage. Early marriage is still prevalent in the society. More campaign may be launched in this respect in order to get rid of it.

Contribution to Zakat Fund. Govt may sensitise people more to contribute to zakat fund that can be utilised for poverty alleviation programmes.

Formation of Appropriate Pro-Poor Macro-economic Policies and Tools. A comprehensive and integrated approach should be taken to alleviate poverty and sustainable development for urban areas. It should also link urban planning and development with MDGs and poverty strategies.

Community Health Care. Mosque based Community Health care may be developed. As the density of mosque is comparatively more, this may help in poor without development of further establishment.

Cheap Transportation. Mass transportation may be developed aiming the poor and common people. This is basically a need of the time.

Improvement of Sanitation Facilities. Community toilet/public toilet near the slum area with shower facilities may be developed with minimum pay system.

Land Zoning. Land scarcity is one of the serious problems in Bangladesh due to overpopulation. Land may be earmarked for specific uses so that unplanned housing does not take place either both at rural or urban areas. This will prevent further slum growth as well.

Rural Development Programme. Efforts may be undertaken to create more jobs in rural areas through rural development programme to reduce the pull factor of rural people towards cities.

Control of Law and Order Situation. Efforts may continue to keep law and order situation under control. In this regard, additional community policing aiming the slum people may be thought of.

CONCLUSION

Urban transformation of Dhaka City has created severe pressure on existing infrastructures and its absorbing capacities. A significant portion of poor residents are forced to live in a variety of slums in the city which are mostly vulnerable to flooding, unhealthy environments and diseases, and generally unsuitable for habitation. Although the phenomenon of the slum is as old as the city itself, nearly all the slums have developed in recent decades as a consequence of rapid mass urbanization.

The causes of urban poverty remains as migration of people from rural areas, low income, illiteracy and failure to have savings. This research found that the majority migration took place from Barisal and Rangpur district. Therefore, it is evident that the economic activity in those two districts are not enough to provide sufficient employment and consequently they migrate to cities.

Few concerns of urban poverty are; 70% slum people are still illiterate, child labour is still predominant (70%), and very high house rent (about Tk. 15 per sq. ft) that is very disproportionate to availability of amenities. By some indicators although it was found that their awareness over health and hygiene has improved but at the same time it can be seen that there are unsatisfactory levels of awareness in some important issues in the field like washing hands before daily activities.

Poverty in Dhaka City is clearly seen in patterns of income, consumption and household assets. In the sample study group it is found that the overall earnings have improved but they spend the majority of their earnings on food and house rent. As a result, essential non food items like health and education are often neglected. The urban poor usually buy food items at a low cost and generally avoid costly items. Furthermore, the urban poor lacks access to formal sources of credit and other resources and are consequently usually forced to seek credit from informal sources. The whole picture of deprivation presses the slum dwellers to increase their earnings and to save and secure their livelihoods by any means. Some vested quarters take the advantages of this situation and motivate the poor to unethical works. In this circumstances, due to lack of education and

awareness and sometimes their greed drive them to the world of crime. Again as the slum areas are very congested and not counted as formal housing area to the government, perpetrators are using these slums as their hideout and centre of their all activity. Thus urban poverty and urban slums pose various problems to social life of Dhaka in many ways. Until Sixth Five Year plan, there has not been much emphasis on urban poverty.

Although slum dwellers are the sources of informal workforce in the cities, but they pose innumerable problems to the urban life as well. It is not easy to combat urban poverty overnight. There is scarcity of resources and there are more priority sectors. However, the important challenges that remain as impediments to this effect are creation of employment, controlling criminal and anti social activities, providing housing for all, access to education and healthcare etc.

BIBLIOGRAPHY

Books

1. Chowdhury A.M. and Faruqui S., 1991. *Physical Growth of Dhaka City in Dhaka: Past Present and Future*, Dhaka: The Asiatic Society of Bangladesh.
2. Faruque, C.J., and Samad, M., 2009. *The Invisible People, Poverty and Resilience in the Dhaka Slums*, Baltimore: Baltimore Press.
3. Islam, N., 1997. *Urbanization, Migration and Development In Bangladesh: Recent Trends And Emerging Issues*.
4. Rahman, M. H., 2002. *Urbanization and Urban Social Service in Bangladesh*, Dhaka: Ananya Publishers.
5. Rahman, H. Zillur., 2011. *Urban Bangladesh: Challenges of Transition, Power and Participation Research (PPRC)*.

Journals

6. Banks, N., Roy, M. and Hulme, D., 2011. *Neglecting the urban Poor in Bangladesh: Research, Policy and action in the context of climate change*, Brooks World Poverty Institute.
7. Coalition for the Urban Poor.,2008. *Recommendation of Urban Based Workshop in order to reduce Urban Poverty*.
8. Faruque, Md, Omar.,2008. *Practical Training Report*, Institute of Social Science, Dhaka University.

9. Gordon, D. D., 2005. *Indicators of Poverty and Hunger*, Journal of University of Bristol.
10. Islam, N., September, 1999. *Urbanization, Migration And Development in Bangladesh: Recent Trends And Emerging Issues*, Centre for Policy Dialogue Report, Dhaka.
11. Ishtiaque, Ahmed and Sezan Mahumud, Malik., 2011. *Migration objectives and their fulfilment: A Micro Study of the Rural-Urban Migrations of the Slums of Dhaka City*. Malaysian Journal of Society and Space 7 issue 4 (24-29).
12. Jabeen, H., and Mallick, F. H., 2009. *Urban Poverty,. Climate Change and Built Environment*.
13. *Journal of Rural Development*, Vol 12(3), pp. 257-267(1993). NIRD, Hyderabad, India.
14. Kamal, Sultana.,2008. *Housing Right of Citizens and Responsibility of State*, Aine O Shalish Kendra, Dhaka
15. Kabir, S.,2008, Practical Training Report, Institute of Social Sciences. Dhaka University.
16. LGED Survey of Slums.,2005. Government of Bangladesh.
17. Lister, R., 2004. *Relative poverty*, South Borough University.
18. Ravallion, M., 1992. *Poverty freak: A Guide to Concepts and Methods. Living Standards Measurement Papers*, The World Bank.
19. Ravallion, M. et al, 2009. *Dollar a day. The World Bank Economic Review*, pp. 163-184
20. Zaman, H., 2005. Measuring income poverty in Bangladesh. *World Bank Report*. Washington DC.

Official Documents/Lectures

21. Ahsan, F., May 2012. *Poverty Reduction Strategy*, Government of Bangladesh.
22. Dhaka: Improving Living Conditions for the Urban Poor, *Bangladesh Development Series*, Paper No. 17, The World Bank Office, Dhaka, June 2007.
23. Household Income and Expenditure Survey- 2010., The Government of Bangladesh.

24. Sixth Five Year Plan, FY2011-FY2015, *Accelerating Growth and Reducing Poverty*, Planning Commission, Ministry of Planning, Government of the People's Republic of Bangladesh
25. World Urbanization Prospects: The 2009 Revision, UN.
26. World Bank Report 2007.

Internet

27. <http://en.wikipedia.org/wiki/Poverty> [Accessed on 27 Apr 2012]
28. http://library.thinkquest.org/05aug/00282/over_what.htm [Accessed on 21 May 2012]
29. <http://www.gdrc.org/uem/define-squatter.html>, [Accessed on 27 May, 2012]
30. <http://www.unhabitat.org/downloads/docs/>[Accessed on 02 July 2012]
31. www.ngoforum.net/index.php?option=com_docman&task=doc_view&gid=6
32. <http://www.banglapedia.com> Asiatic Society of Bangladesh
33. <http://www.muhammadyunus.org/Social-Business/social-business/> [Accessed on 29 Aug 2012]

Interview

34. Ahsan, F, Jt Secy (ret'd)., 29 Aug 2012. Ministry of Planning, Government of Bangladesh.
35. Zillur, H., 01 Sep 2012. Executive Chairman, Power and Participation Research Centre (PPRC).

Author

Group captain Mohammad Mostafizur Rahman, ndc, psc, has been commissioned in Bangladesh Air Force in 1987 in General Duties Pilot Branch. He obtained Bachelor of Science (aeronautics) degree from Rajshahi University and Master of Security Studies from Bangladesh University of Professionals. During the service career, he served as Squadron Pilot, Flight Commander and Officer Commanding of various helicopter flying squadrons of BAF. He is a graduate of Malaysian Armed Forces Staff College and National Defence College, Bangladesh. He served under United Nations in Kuwait and Democratic Republic of Congo. Presently he is serving as Officer Commanding, Flying Wing of Bangladesh Air Force Bashar in Dhaka.

NIGERIA'S NATIONAL SECURITY: CHALLENGES AND PROSPECTS FOR THE ARMED FORCES

Colonel Ben-Bella Ahmed Raji ndc, FSS MSS Psc+ Bsc, PGD

INTRODUCTION

It is widely acknowledged that a peaceful and secure environment is imperative for any meaningful and beneficial human activity to thrive. This places security and survival in the domain of man's primary concerns right from the prehistoric times (Armstrong 2001). Since the end of the Cold War (CW), the focus has shifted from traditional threats of conventional and nuclear warfare to non-conventional threats which could be referred to as 'Fourth Generation Warfare' (Lynn & Jeremy 2003).

In Nigeria today, a fundamental evolution in security threats has taken over national life. Non-traditional threats to national security has gained grounds and exacerbated within a short period. Issues which have raised serious security concerns in the country include but not limited to internal civil strife, socio-economic and political instability, armed violence, arms and drug trafficking and kidnapping. Others include assassination, natural disasters, ethnic crisis and religious extremism, terrorism and criminality among others. The Nation now calls for Nigerian Armed Forces (NAF) to respond to different kinds of non-military contingencies largely due to the low performance of the law enforcement and other security agencies in curbing same.

The NAF has shown its ability to undertake multiple deployments at home and abroad though, these have stretched her beyond its limits as it struggles to define itself in the new security environment. Non-military role of the armed forces has thus assumed importance greater than its primary mission giving the changed nature of the security environment. Its enlarged function poses daunting training, logistics and doctrinal challenges in its bid to effectively respond to current national security issues.

Again, the NAF has responded to the changed environment by embarking on capacity building efforts to radically shape the military instrument to confront the new challenges. How far have these efforts assisted in repositioning the NAF in addressing the security problems? As it appears, the NAF is ill-prepared for the changed nature of threat due to its traditional ways of war fighting. How adequate is Nigeria's national security strategy to meet the diverse challenges as the military strength alone does not ensure national security? National security policies must

be in relation to current threat perception and analysis. The challenges the new security threats poses on the NAF, thus, demands fresh thinking and redefinition of doctrine, strategies, new ways and means of mitigating them.

Based on current developments it has become clearer that the armed forces must embark on a fundamental transformation of its structure and methods of operation. Thus, the need for a comprehensive review of the threats to national security in-tandem with the military capability in order to create a safe and stable Nigerian environment became altogether apparent.

CONCEPTUAL DISCOURSE

National Security

Security, from a national perspective, is perhaps the most often examined and contentious concept. It is a concept with roots stemming from realist theory and the 1648 Treaty of Westphalia, which see the state as the primary actor (Canim 1993, p.4). This put the focus of national security on the protection of one's territorial boundaries and sovereignty. The nation-state often assumes the role of guarantor for individual, group and regional security. This is why King and Murray (2001, p.34-38) defined national security as "the entirety of conditions; political, economic, military, social and cultural, necessary to guarantee the sovereignty, independence, and promotion of national interest..."

Security from the military point of view is highly visible, and a nation will act when it is threatened militarily. Thus, national security refers to the ability of a sovereign state to defend itself from armed aggression. Realist theory in support of this position asserts that the fundamental duty of the state is to protect itself and its citizens from catastrophic effects of military invasion (King & Murray 2001). There is much more to these definitions when the issue of national security is closely observed.

Armed Forces

According to Engels (1977, p.180), armed forces refers to an "organized association of armed men maintained by a state for the purpose of offensive and defensive warfare". This latter definition is in line with that of military power given by Garnet (1987, p.71), who considers the concept as the legally sanctioned instrument of violence that governments use in their relations with each other, to protect their countries from external aggressions and internal subversions.

According to Garnet (1987, p.105), ‘the overwhelming military approach to national security is founded on the assumption that the principal threat to security comes from other nations’. In the same vein, he observed that “...the urge to acquire armaments derives from a natural human response to the ever present sense of insecurity in a Hobbesian state of international chaos”. Consequently, armed forces enable governments to ward off any attempt at occupation or destruction.

From the above discourse, the researcher’s standpoint on armed forces refers to an instrument of power placed under the command and control of any given state. In peace time, or in the absence of any given threat to the territorial integrity, the armed forces comprised of skilled personnel, well trained, well equipped and committed, constitute a useful channel through which the legal authorities can address their problem of development.

Relationship between National Security and Armed Forces

A major criterion that has refocused national security is the phenomenon by which the privileged position of the state within the security discourse has been eroded. This refocusing of national security has three implications for the armed forces. First, the military is called to address contingencies for which they are not configured, equipped and trained. Secondly, the military is increasingly being required to support law enforcement, customs, border control agencies, search and rescue and provision of services, which have traditionally not been its responsibility. Thirdly, the military is increasingly undertaking non-military organizations’ tasks like humanitarian relief, supply and development efforts aimed to provide basic services.

The reality is that the armed forces are mobilised to play in most cases lead role in countering non-military threats, which is not its core function. The relationship therefore, between national security and the NAF is that as long as the threats continue to escalate beyond the capacity and capability of the law enforcement agencies and is inimical to national security, the NAF would always be drawn in to perform its constitutional role of protecting the territorial integrity of the nation. Thus, the armed forces will always be involved in curbing threats which directly impact national security.

NATURE AND MAGNITUDE OF THREATS

Arms Trafficking

The issue of arms trafficking is a serious security concern to the stability of Nigeria in view of the subsisting civil conflicts within the West African Sub-Region. The after effects of the conflicts in Liberia, Sierra Leone and 'Arab Spring'¹ have fuelled the issue of small arms and light weapons (SALW) trafficking across the land borders of West African countries. Nigeria probably being a profitable destination to traffickers at present is of particular concern especially in relation to continued fierce armed violence in the country. The increasing activities of militants, terrorists and armed robbers in the country with particular reference to the recent militancy in the Niger Delta area and currently the terrorists' activities of Boko Haram Sect are clear examples.

There is the need to block illegal arms trafficking routes into the country, while also increasing vigilance across the country's borders with neighbouring African states. It suggests the need for stricter border management, monitoring and supervision, need for the desired platforms, border guards and patrols, surveillance of porous routes using unmanned aerial vehicles and helicopters among others.

Drug Trafficking

Drug trafficking is another major Transnational Crime (TC) in Nigeria. Statistics from the Nigerian Drug Law Enforcement Agency (NDLEA), 2011 show that cannabis, cocaine, heroin and psychotropic substances which are referred to as 'others' in Table 1 are the major drugs trafficked in Nigeria.

1. Arab Spring is a revolutionary wave of demonstrations and protests occurring in the Arab world that began on 18 December 2010.

Table 1: NDLEA Drug Seizures 1999-2010

Drug seizures in Kilograms						Persons Prosecutions		
Year	Cannabis	Cocaine	Heroin	Others	Total	Prosecuted	Won by NDLEA	Lost by NDLEA
(a)	(b)	(c)	(d)	(e)	(f)	(i)	(j)	(k)
1999	17,691.14	16.64	81.35	322.25	18,110.38	1474	1454	20
2000	272,260.02	53.42	56.6	234.28	272,604.32	1626	1624	2
2001	317,950.20	195.82	46.63	308.84	318,501.49	1172	1172	0
2002	506,846.09	35.35	55.62	791	507,728.06	870	870	0
2003	535,593.75	134.74	87.58	937.41	536,753.48	817	817	0
2004	68,310.07	124.47	90.94	233.83	68,759.31	853	853	0
2005	125,989	395.91	70.42	88.72	126,543.65	779	779	0
2006	192,368.30	14,435.88	33.09	515.57	207,352.84	1363	1362	1
2007	210,262.90	393,678	120.687	699.735	211,477.00	1508	1459	49
2008	348.759	318.93	11.18	348.6	1,027.469	2019	2015	4
2009	475.26	398.20	13.15	379.70	1,266.31	1997	1996	1
2010	401.50	256.70	9.25	365.90	1,037.35	1805	1800	5

Source: Nigerian Drug Law Enforcement Agency- 24 February 2011.

Table 1 also shows that the high rate of success in convicting the drug traffickers prosecuted, averaging 99.3 percent (NDLEA Prosecution Records 1999-2010) did not abate drug trafficking. This situation is dangerous because drug trafficking has linkages to various crimes, which result in violence and insecurity in the society. Thus, there is the need to identify and clampdown on sources, routes and cartel involved in drug trafficking to address the problem of insecurity in Nigeria.

Islamic Fundamentalism and Sectarian Violence

Khuri (1990, p.43) in his study of understanding religion and sectarianism in Islam classified religion as (Din) judgment, faith and divine law, and sect (Ta'ifa),

which connotes a segregated group of persons who hold to certain fundamentals of the religion as platforms of belief and expression. Every religion is therefore inundated with different sectarian movements. That is the reason why Suberu (1996, p.50) said that 'Islam is a continuously interpretive revolution', which means that sectarian movements would continue to emerge as long as there is dynamism in religious thoughts and practices.

In Nigeria, religion plays a vital role in the society and has manifested itself as a potent force in the political development of the country. Several religious crises in Nigeria have often been caused by the different Islamic sects in the country. The activities of the sects are based on the ideologies, characteristics and behaviour of the Sunnis and the Shiites. The Maitatsine² and Boko Haram sectarian riots of December 1980 and July 2009 are clear examples. The NAF is currently conducting Internal Security (IS) operations in Borno, Yobe and Kano States to curtail Islamic fundamentalism and sectarian activities, which has continued to pose serious challenges to the military as it has remained in a protracted deployment since 2005.

Terrorism and Militancy

Terrorism is considered the most sophisticated form of global violence. Terrorist activities have continued to pose significant challenges to international peace and security and have compelled nations to place them as top security priorities. It often involves an individual or group with a common ideology unleashing violence on society to create fear and undermine government in order to achieve set goals (Buseni 2007, p.47).

Nigeria has not been immune to attacks by terrorist groups. The recent spate of violence and bombing Northern states and the Federal Capital Territory has confirmed the Nigeria's vulnerability and underscores the realities of terrorist intentions against the country. Terrorism is the most significant threat facing the country today.

Boko Haram is a threat to Nigeria's national security because it seeks to impose the Sharia³ legal system throughout the country. Its suspected links with Al-Qaeda in the Islamic Maghreb (AQIM) and Al-Shabaab, point to its influence in the global terrorist network. The tragic terrorists incidents carried out by

2. Maitatsine is the nickname of Mohammed Marwa (died 1980), who was a controversial Islamic scholar in Nigeria. It is a Hausa (Nigerian local dialect) word meaning "the one who damns" and refers to his curse-laden public speeches against the Nigerian state.

3. Sharia is the moral code and religious law of Islam Sharia which deals with many topics addressed by secular law, including crime, politics and economics, as well as personal matters such as sexual intercourse, hygiene, diet, prayer, and fasting etc.

Boko Haram Sect between 2010 and 2012 show that eliminating the threat of terrorism completely in Nigeria may be a long way off, though a lot can be done to minimize the threats. A positive step could be the immediate prosecution of all those already arrested in connection with acts of terrorism.

Poverty

Endemic poverty in most nations, as in the case of Nigeria, combined with bad governance, social injustice and political alienation create an environment that attracts religious fundamentalists to export their philosophy to find local support for their nefarious acts. It could be argued that the Boko Haram Sect is a result of the prevalent poverty in Nigeria because many of the jobless youths are ready to be recruited for the Sect. Poverty thus has a consequential effect on national security and would no doubt require government to put in place poverty reduction and eradication mechanisms.

IMPACT OF THREATS ON NIGERIA'S NATIONAL SECURITY

Political Implications

The identified threats have potential to undermine Federal Government of Nigeria (FGN) and can lead to political instability and the truncation of the nation's nascent democracy. The current acts of terrorism unleashed by the Boko Haram Sect and its likes could affect the unity of Nigeria since it is agitating for a sovereign Islamic State. A nation that is constantly under terrorist attacks cannot be stable as the leadership will divert its attention to security matters, which would affect other socio-economic developmental programs. It, thus, necessitates that the FGN be responsive to the threats and initiate measures to mitigating them.

Impact on Economy

Oil and gas is the lifeline of the nation's revenues, economy and national survival as it accounts for about 40% of the Gross Domestic Product and 70% of the nation's revenues (Augustine 2005). The issue of insecurity in various parts of the country discourages Foreign Direct Investment (FDI) which is key to economic growth and development. This situation threatens national productivity, retards the rate of economic development and reduces employment opportunities, thus, affecting national security negatively.

CHALLENGES

Lack of an Elaborate National Security Policy

According to Rear Admiral Lokoson, Commandant national Defence Academy Nigeria, 'the lack of a clear document on national security policy has remained one of the major challenges confronting Nigeria (Tribune 2011). Nigeria needs to rethink and redesign its security policy to serve as a road map for effective management of the IS environment. It will also stipulate the roles of the various security agencies and the military in crises situations and forestall clash of jurisdictional control. Nigeria's current document on National Security Policy 2011, much as it is a step in the desired direction if not all comprehensive as it does not assess and address the threat of terrorism and does not codify the roles of the military in counter terrorism. This is a shortcoming and need to be addressed.

Poor Legal and Judicial System

The courts are charged with the responsibility of conducting trial of offenders charged to court and punishing those found guilty. However, the legal system faces problems of court congestion, corruption, slow pace of trial and frequent adjournment of cases among others. These problems lead to delay in determination of cases thereby giving room for criminals to sometimes free their agents or members by bribing corrupt agents to the detriment of national security. The Nigerian judicial system thus needs to be strengthened to minimize these lapses in the interest of national security.

Manpower

A criterion for determining the strength of a nation's armed forces is the perceived threat, and this must be sustainable by the national economy. The manpower of the NAF is 86,000 (0.0005% of country population of 166,629,000) all ranks. Nigeria ranks 164 out of 178 countries when the military and para-military and ratio per thousand inhabitants are compared (Wikipedia 2012). When compared with Brazil, Mexico and Venezuela, which are equally oil rich nations, it is expected that Nigeria with a population of 166,629,000 can sustain a military manpower of 320,000 (0.19% of population) personnel. This opinion is further justified given that Bangladesh, which ranks 41 amongst the 42 poorest countries in the world (UN Human Development Report 2010), has a population of 161,083,804 and a military strength of 157,053 (0.001% of population) personnel (CIA World Fact Book 2012). It is desirable that the issue of increase in manpower for the military be examined.

Poorly Trained and Ill-Equipped Nigeria Police (NP)

The NP has not been able to effectively manage IS situations within the nation. This has been attributed to shortage of manpower, inadequate training and lack of necessary equipment. On so many occasions the police have proved incapable of containing crises situations in various parts of the country to the extent that the military had to be deployed to restore normalcy in those areas. The scenario has not changed today and the inability of the NP to perform its assigned role has been responsible for the continued deployment of the military in the cities and towns carrying out law enforcement duties. This calls for a review of the quality of training, provision of modern equipment and total transformation of the NP.

Inadequate Requisite Training in Counter Terrorism

The main focus training by the NAF since its existence in 1954 has been regular or conventional warfare and it has equipped its forces in this regard. The current threat confronting the force is Irregular Warfare (IW) for which it does not have the requisite training.

In its efforts on fight terrorism, the military introduced counter terrorism (CT) training at the Nigerian Army School of Infantry (NASI) in 1994 and also established the Counter Insurgency (COIN) Centre in 2011. Training at the centre is not comprehensive due to inadequate funding and lack of necessary platforms and equipment (Fesobi 2011). Also, training is still focused on kinetic capabilities rather than non-kinetic capabilities relevant to IW. Furthermore, joint and combined training and exercises for personnel of the military, police and other security agencies are insufficient. Thus the necessary blending and synergy required for successful counter terrorism operations is not attained.

Strategies for Formulation of an Elaborate National Security Policy

The basis for resolving security issues is dependent on the ability of the FGN to effectively employ coercive and non coercive components of IS management which can only be achieved through a robust national security policy. It is based on the requirements of the policy that military, NP and other security agencies will equip and train. The draft security policy need to be subjected to further analysis to capture current realities of national security in order to articulate a more realistic document.

Adequate Training and Equipment for the Nigeria Police

In order to facilitate the operational effectiveness of the NP, training needs to be enhanced, personnel strength needs to be increased and necessary equipment provided. The NP requires repositioning and transformation regarding law enforcement duties. This will enhance professionalism in the military and eradicate its negative perception by the citizenry.

Implementation of Recommendations of Boards of Inquiry

One of the major pitfalls in government handling of IS matters is lack of implementation of Board recommendations. Government has on many occasions set up panels but failed to utilize the recommendations of these panels. The reports of the recent inquiries into the Jos crisis of 2010 and the Kaduna North central crisis after the 2011 Presidential Elections have been submitted to the FGN of which their recommendations are yet to be implemented. The FGN needs to implement relevant portions of reports of boards of inquiry.

Strengthening Border Security

A major security concern in Nigeria is the ease with which persons enter and leave the country through borders. The porous nature of the borders has been responsible for all forms of transnational crimes. This will require strengthening border security. A good example of border security is the Border Guard Bangladesh (BGB) which is a para-military force under the Ministry of Home Affairs responsible for border security and anti-smuggling operations. Nigeria could consider an outfit of this nature. It is not in doubt that the BGB is a model for border guard security and is an area for further research for adoption by Nigeria.

Building Capacity for Counter Terrorism and Counter Insurgency Operations

The military has developed some level of CT and COIN capabilities and established a counter terrorist centre (CTC) at the Office of the National Security Adviser. A good example of a success story in COIN is that of the Sri Lankan Armed Forces (SAF) against the Liberation Tigers of Tamil Eelam (LTTE) which was an armed insurgent group that waged a ruthless insurgency in 1971 to establish a separate state in Sri Lanka. This success story is obviously an area the Nigerian military could conduct further study of the strategies adopted by the Lankan Armed Forces (SAF) in defeating the LTTE to identify areas for adaptation in its fight on terrorism.

Increase in Manpower

Manpower increase for the military is not only desirable but necessary. The current manpower of 86,000 (0.0005% of country population) personnel in the military is grossly inadequate given the reality of dearth of manpower (AHQ 2011). The reality is that an increase in the manpower of the military to the acceptable ratio has the advantages of tackling the manpower challenge of the military due to its numerous commitments in IS and Peace Support Operation (PSO). It would also assist the FGN in the area of providing job opportunities for the masses of unemployed youths. The military would need to articulate this requirement and seek governments consent and appropriate legislation enacted to increase the strength of the military to 320,000 personnel which is about 0.2% of country population.

RECOMMENDATIONS

It is recommended that:

- a. The FGN should immediately review the national security policy document to feature the security architecture for CT including role of the NAF and security agencies.
- b. The FGN should take urgent steps to reform and reposition the NP and the judiciary to effectively carry out their constitutional responsibilities.
- c. The FGN should implement the recommendations of boards of inquiry convened on various crises within the country, discourage religious fundamentalism and sectarian violence and initiate a social security system for the citizenry.
- d. The FGN should strengthen border security, while studying the BGB model for possible adoption.
- e. The FGN should provide the military with Unmanned Aerial Vehicles (UAVs), helicopters, bomb detectors and disposal equipment, and effective communication systems for CT operations.
- f. The NAF should build capacity on CT/COIN operations and non-kinetic capabilities in IW, while studying the SAF strategies on the LTTE for possible adoption.
- g. The NAF should make a presentation to the FGN on the need for manpower increase to 320,000 personnel (0.2% of country population).

CONCLUSION

This study identified and discussed the emerging new external and internal threats and its danger to Nigeria's peace and security and in particular the challenges they pose to the NAF. The threats include illicit arms and drug trafficking, Islamic fundamentalism and sectarian violence, terrorism and militancy, poverty and proliferation of SALW aided by porous borders. These threats have adversely affected national security and eroded the integrity and credibility of state security agencies and exacerbated domestic conflicts.

It was discovered that the identified threats have political implications, negative impact on the economy and has increased FGN expenditure on the military. The study established that the challenges confronting the NAF to include the lack of an elaborate national security policy, poor judicial system, use of military force in law enforcement duties, manpower shortage, poorly trained and ill equipped NP and poor intelligence among others.

The FGN would need to immediately review the current national security policy, reform and reposition the NP and the judiciary and implement the recommendations of boards of inquiry on various crises within the country. On border security and management, the BGB was suggested as a brilliant model which could be studied and adopted.

On terrorism and militancy, the FGN would need to provide the military with requisite platforms like UAVs, helicopters, bomb detection and disposal equipment and effective communications systems to enhance the fight on terrorism. The military would need to build capacity for CT and COIN operations and acquisition of non-kinetic capabilities in IW, while intensifying measures on intelligence acquisition and building capacity on information warfare. The strategy adopted by the SAF in the defeat of the LTTE was suggested as an area for further study and possible adoption by the NAF in dealing with terrorism in the country. Others strategies were the need for increase in manpower for the NAF to 320,000 personnel.

BIBLIOGRAPHY

Books

1. Adedoyin, J.O., 2006, *Nigeria's Relations with Her Neighbours*, Department of Political Science, University of Ilorin, Ilorin Kwara State Nigeria.
2. Adeyinka. O., 2004, *Mass Media and Nigeria's Development*, 2nd ed, Jos: Ehindero Press Nigeria.

3. Alemika, E.O., 1993, *Colonialism, State and Policing Nigeria*, Department of Social Sciences Jos Nigeria: University Press.
4. Alemika, E.O., 2006, quoted in *United Nations Office on Drugs and Crimes: Transnational Organised Crime in the West African Sub Region*.
5. Anil, B., 2008, *Information and Security: Where Truth Lies*, New Delhi: Manas Publication.
6. Carol Lancaster, *Developing Countries: Winners or Losers?* in Richard Kugler, L. & Ellen, L. Frost, 2001, *The Global Century: Globalization and National Security, Volume II*, 3rd ed, Washington, D.C: National Defence University Press.
7. Christopher, C. H., (n.d). *Terrorism Today*, London: Frank Cass Publishers.
8. Farooq, M., Maj Gen (Retd), 2004, *Pakistan Green Book-Article Extremism and Terrorism in Pakistan*.
9. Huntington Samuel, P., 1996, *The Clash of Civilizations and the Remaking of the World Order*, New York: Touchstone Publishers.
10. Khuri Fuad, I., 1990, *Imam and Emirs: State, Religion and Sect in Islam*, London: Saqi Books.
11. Lynn Davis, E., and Jeremy Shapiro, eds., 2003, *The US Army and the New National Security Strategy*, Santa Monica, CA.
12. Mark, E. K., 2000, *The Military Response to Terrorism*.
13. Martin, B., and William, W. K., (1989), *US Army Guard and Reserve: Rhetoric, Realities, Risk*, Washington: The Brookings Institution.
14. McNamara, R.S., 1968, *The Essence of Security*, New York: Harper and Row.
15. Namara, N. C., in Samaddar, S., 2005. *Defence, Development and National Security*, New Delhi: Ciyan Publishing House.
16. Obasanjo A.O., 2008, quoted in Alao Abiodun, 2000, *Security Reform in Democratic Nigeria, London: The Conflict, Security & Development Group at the Centre for Defence Studies Kings College, University of London Strand*.
17. Robert Mandel, 1994, *The Changing Face of National Security: A Conceptual Analysis*, Connecticut London: Greenwood Press Westport.
18. Robert, A. Pape, (n.d), *Dying to Win the Strategic Logic of Suicide Terrorism*,

New York: Random House.

19. Sanusi Lamaido, S., 2007, *Politics and Sharia in Northern Nigeria*. in Soares, Benjamin and Rene Otayek. eds., *Islam and Muslim Politics in Africa*, New York: Palgrave Macmillan Press.
20. Stephen, J. Cimbala. ed., 1984, *National Security Strategy: Choices and Limits*, New York.
21. Suberu Rotimi, 1996. *Ethnic Minority Conflicts and Governance In Nigeria*, Ibadan: Spectrum Books
22. Thomas Hobbes, 1651, *Leviathan*, London: Andrew Crooke.
23. Trager, F.N., & Simonie, F.L., *An Introduction to the Study of National Security*, in Trager, F.N., & Kronenberg, P.S. eds., 1973, *National Security and American Society: Theory, Process and Policy*. Kansas: University Press of Kansas.
24. Walter Lippman, 1943, *US Foreign Policy: Shield of the Republic*. Boston: Little Brown and Co.
25. Windham, W., *The Armed Forces*, in Howard, M. ed., 1957, *Soldier and Governments: Nine in Civil-Military Relations*, Westport: Greenwood Press.

E- Books

26. CIA, 2012, *World Fact Book*. [e-book].
27. Available at: <https://www.cia.gov/library/publications/the-worldfactbook> [accessed 1 May 2012]
28. Verne Orr, 1985. *Quoted in Erickson, R.J., 1989, Legitimate Use of Military Force*. [e-book]. Available at : www.au.af.mil/au/awc/awcgate/au/erickson.pdf [accessed 14 May 2012]

Journal Articles

29. Augustine Ikelegbe, 2005, Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria, *Nordic Journal of African Studies*, [Online], 14(2), Pp.208-234. Available at: <http://www.njas.helsinki.fi/> [accessed 15 March 2012].
30. King, G., & Murray, C., 2001. Rethinking Human Security, *Political Science Quarterly*, 1(116), Pp. 34-38.
31. Shiping Tang, 2007, A Systemic Theory of the Security Environment. *The*

Journal of Strategic Studies, 3(27), Pp.6-9.

Internet

32. Army Doctrine Publications Operations. 2010, *Components of Fighting Power*. [Online]. Available at: www.mod.uk/dcdc [accessed 9 March 2012]
33. British Broadcasting Corporation. 2010, *Ghadaffi Says Nigeria Should Split into Several States*. [Online]. Available at: <http://news.bbc.co.uk/2/hi/8593358.stm> [accessed 7 April 2012]
34. Colin, S. G., 2011, *Hard Power and Soft Power: The Utility of Military Force as an Instrument of Policy in the 21st Century*. [Online].
35. Available at: <http://www.strategicStudiesInstitute.army.mil/> [accessed 15 March 2012]
36. Dike Onwuamaeze, 2009, Oil theft in the Niger Delta: Findings of the Technical Committee on Niger Delta, *Newswatch Magazine*, [Internet] 11Apr.
37. Available at: <http://www.newswatchngr.com/index.php> [accessed 20 May 2012]
38. Gwen Ifill, 2003, *President Gloria Macapagal Arroyo of the Philippines discusses her country's efforts to combat terrorism and its relationship with the United States*. [Online].
39. Available at: http://www.pbs.org/newshour/bb/asia/jan-june03/arroyo_5-20.html [Accessed 13 May 2012]
40. Laurence EJ, 2012, *Surplus Weapons and the Micro-Disarmament Process*. [Online]. Available at: <http://catalogue.sipri.org/cgi-bin/koha/opac-detail.pl?biblionumber=44736> [accessed 3 April 2012]
41. Manoharan, N., (Dr). 2009, *Taming the Tigers: Factors Behind LTTE's Military Downfall*. [Online] (updated 20 December 2009) Available at: <http://www.claws.in> [accessed 2 June 2012]
42. Ministry of Defence, 2012, *Organisational Data Base Record for the Ministry of Defence*. [Online]. Available at: www.afdevinfo.com/htmlreports/org/org_14011.html accessed 4 March 2012.
43. Organisation of the Petroleum Exporting Countries, 2008, *Annual Oil Market Report*. [Online]. Available at: http://www.opec.org/opec_web/en/publications/461.htm [accessed 5 May 2012]
44. Peel Michael, 2005, *Crisis in the Niger Delta*. [Online]. Available at: <http://>

www.chathamhouse.org/publications/papers/view/108069 [accessed 10 May 2012]

45. United Nations Human Development Report, 2010, *World Military and Economies*, 20th ed. [Internet]. Available at: <http://hdr.undp.org/en/reports/global/hdr2010/> [accessed 4 May 2012]
46. Winslow and Zhang, 2009, quoted in *Definitions of Organised Crimes: Collection by Klaus von Lampe*. [Online]. Available at: www.organized-crime.de/organizedcrimedefinitions.htm [accessed 22 May 2009]

Newspapers

47. Chris Agbambu, 2011, Lokoson. T. J., quoted in Lack of National Security Policy, Nigeria's Major Problem. *Tribune*, [Internet] 02 Aug. Available at: <http://www.tribune.com.ng/index.php/news/25917-lack-of-national-security-policy-nigerias-major-problem> [accessed 24 March 2012]
48. Dele Vincent, 2010, Nigeria: Arms trafficking Threatens Our Peace. *Daily Trust*, [Internet] 2 Sep. Available at: <http://www.thisdaylive.com/articles/nigeria-ranks-19th-on-terrorism-risk-index/95933/> [accessed 11 March 2012]
49. Godwin Oritse, 2010, Seizure of Arms at Lagos Port: Round Tripping Goes Awry? *Vanguard*, [Internet]. 30 Oct. Available at: www.vanguardngr.com/2010/10/seizure-of-arms-at-lagos-port-round-tripping-goes-awry [accessed 17 March 2012.]
50. Turaki A. Hassan, 2012, Ehindero. S., quoted in State Police Will Disintegrate Nigeria. *Sunday Trust*, [Internet] 27 March.
51. Available at: http://sundaytrust.com.ng/index.php?option=com_content&view=article&id
52. =10287:state-police-will-disintegrate-nigeria-ehindero&catid [accessed 2 April 2012]
53. Rajapakse, Mahinda, 2009, quoted in interview by Inderjit Badhwar, 2009. *Prabakaran Closed The Door On Me. I Wanted Peace*. *Daily Mirror*, [Internet] August 2009.
54. Available at: www.dailymirror.lk [accessed 2 June 2012]
55. Sayyid Azim, 2009, Wangari Maathai, quoted in AGOA and Hilary Clinton in Kenya. *Kenya Times*, [Internet] November 2010.
56. Available at: <http://www.theworldpress.com/press/worldpress/kenyapress/>

kenyatimes.htm [accessed 27 April 2012]

Command Papers and Other Official Publications

57. *African Union Strategy in the Control of Illicit Proliferation, Circulation and Trafficking of Small Arms and Light Weapons*, 2011 (AU SALW Report) Lome, Togo.
58. Army Headquarters, 2011, *Details of Arms and Ammunition Recovered in Internal Security* (DATOPS Report) Abuja.
59. National Drug Law Enforcement Agency, 2011, *Statistics of Drug Seizures 1999-2008* (NDLEA Report) Abuja.
60. Nigeria Customs Service, 2009, *Statistical Data of Arms and Ammunition Seizure 1999-2008* (NCS Report) Abuja.
61. Hurley, W. J. et al., 2009, *Non-Kinetic Capabilities for Irregular Warfare: Four Case Studies* Alexandria, Virginia.
62. The White House, 1995, *National Security Strategy of Engagement and Enlargement* Washington.
63. United States State Department, 2009, *Trafficking in Persons Report* (SD Report) Washington.
64. United Nations Office on Drugs and Crime, 2005, *Report on Transnational Organized Crime in the West African Sub-Region* (UNODC Report) New York.

Unpublished Works

65. Amoni-Okwuonu MA, *Terrorism and Counter Terrorism: Implications for Nigeria's National Security*, National War College, Course 15, Abuja, June 2007.
66. Anwar Hussain, Maj Gen, *Border Management and Border Trade*, [Lecture]. National Defence College, Course 2012, Bangladesh, June 2012.
67. Buseni, G.A.S., *Trends in Global Terrorism: Challenges for Nigeria*, National War College, Course 15, Abuja, June 2007.
68. Fesobi, G., *Combating Terrorism and National Security: Implications and Challenges for Nigeria*, National Defence College, Bangladesh, September 2011.
69. Koleoso, M.A., *Global Security Trends and National Security: Challenges*

for the Nigerian Armed Forces, National Defence College, Nigeria, July 2008.

70. Muktar A.S., *Meeting the Current Challenges of National Security*, [Lecture]. National War College, Course 15, Nigeria 22 January 2007.

Author

Colonel Ben-bella Ahmed Raji was a Course Member of NDC 2012. He was Born on 16 August 1968 and commissioned into the Nigerian Army as a Second Lieutenant on 27 September 1990. He held the appointments of Platoon Commander, Company Second in Command, Adjutant and Company Commander in four infantry units and commanded a rapid deployment force in Economic Community of West African States Monitoring Group operations in Liberia and Sierra Leone. He was an instructor in weapons wing at the Infantry Centre and School. He was a staff officer in an infantry division and a Directing Staff at the Armed Forces Command and Staff College Nigeria. He was also Deputy Director Operations at Army Headquarters. He attended several courses at home and abroad; notably among which, were the Armed Forces Command and Staff College Nigeria, International Peace Support Operations and Civil Military Relations Courses in Ghana. He obtained a Bachelor of Mathematics Degree at the Nigerian Defence Academy, a Masters Degree in International Affairs and Diplomacy and a Post Graduate Diploma in Computer Science from the Ahmadu Bello University Nigeria. He was awarded the Force Service Star and the Meritorious Service Star. Raji has a wife, Irene and a son, Idris. His hobbies are reading, travelling, swimming and playing golf.

CLIMATE CHANGE AND NATIONAL RESPONSE: BANGLADESH PERSPECTIVE

Group Captain Javed Tanveer Khan, afwc, psc

INTRODUCTION

Climate change is one of the most critical challenges facing the humanity today. It is increasingly becoming an environmental and intergenerational concern that challenges development and human progress all over the world. However, few regions have taken a more severe toll than South Asia and particularly Bangladesh. Although, Bangladesh is one of the least contributors to the annual load of carbon-dioxide (CO₂) and other greenhouse gases to the atmosphere, because of her geographical location, widespread poverty, weak infrastructure, high population density, heavy reliance on climate-sensitive sectors such as rural agriculture and fisheries, Bangladesh is one of the worst sufferers of this natural phenomenon. The consequence of climate change on Bangladesh is multifaceted affecting the country's economic systems, ecological networks and even social relationships. More specifically, there are increasing risks to food security, energy security, water security, livelihood security, health security, and habitat security. As a whole, climate change would heavily undermine the capacity of Bangladesh to provide the opportunities and services that help people to sustain their livelihoods. Hence, the issue of climate change has turned out to be a national concern for Bangladesh warranting an immediate response.

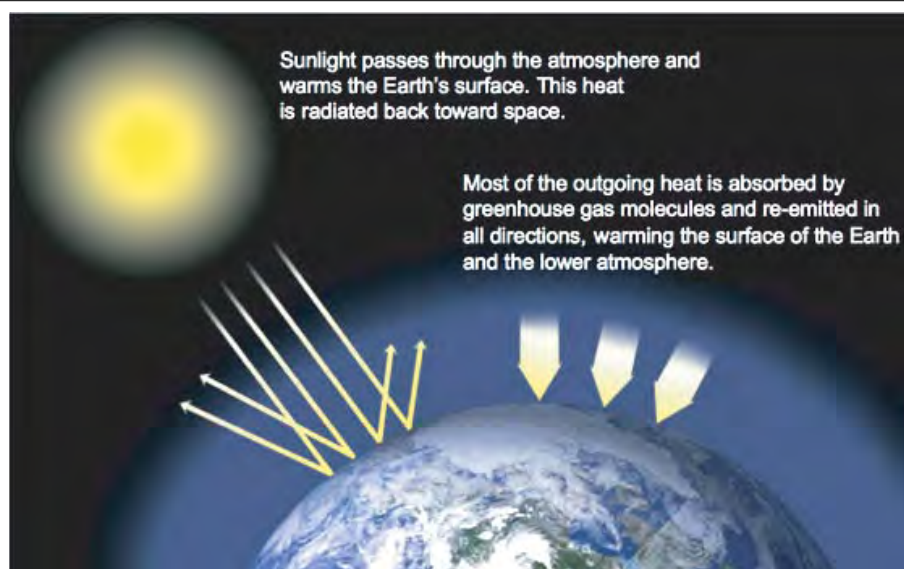
Understanding Climate Change

The World Meteorological Organization (WMO) defines climate change as, "A statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer)."¹ However, Article 1 of United Nations Framework Convention on Climate Change (UNFCCC) defines the term as, "A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."² This definition makes a distinction between climate change attributable to human activities and climate variability attributable to natural causes. Climate change attributable to human activities broadly refers to persisting change in the earth's atmospheric state due to emission of greenhouse

-
1. William Burroughs, (ed.), *Climate into the 21st Century*, Cambridge, UK: Cambridge University Press, 2003, p. 223.
 2. http://unfccc.int/essential_background/convention/background/items/2536.php, accessed on 18 April 2012.

gases (GHG). The aforesaid definitions indicate two broad causes of climate change: natural and human induced. The natural causes of climate change may include volcanic eruptions, ocean current and earth orbital changes. However, it is now almost a universal agreement that natural causes are rather less significant while global warming over the last century has largely been contributed by human activity, i.e. emission of GHG. The following figure explains the mechanics of greenhouse effects.³

Figure 1: Mechanics of Greenhouse Effects



Source: Internet

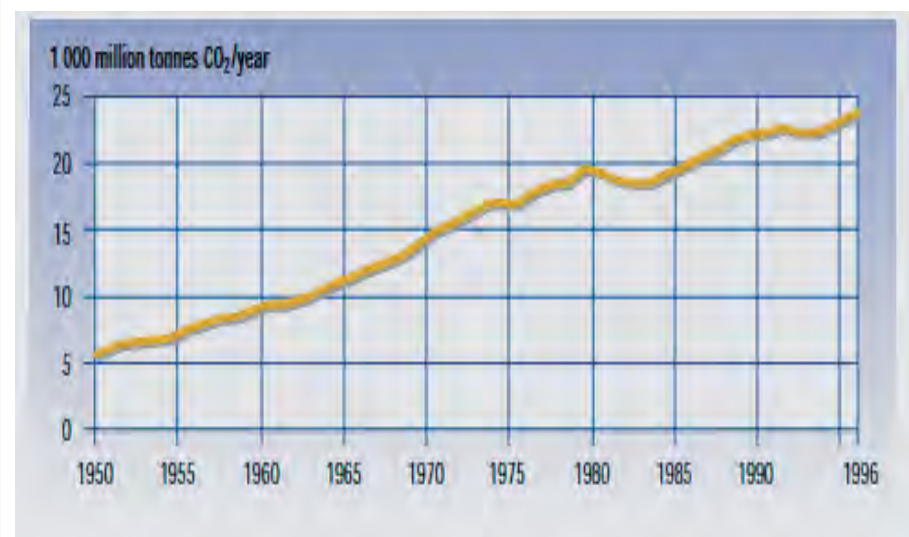
Human activity in emission of GHG in the atmosphere could be in three different ways, first being the burning of fossil fuels. People burn fossil fuels like coal, oil and gas to create energy and when fossil fuels are burned, they release GHG. Cutting down forests faster than they are replaced (deforestation) is another cause of carbon emission. Deforestation makes a huge contribution to carbon emissions because trees absorb CO₂ as they grow. Thirdly, changes in land use pattern, land clearing, agriculture, and other activities like livestock, oil drilling, coal mining all led to a rise in the emission of CO₂ and methane.⁴ Over the years rise in global CO₂ emission is depicted in the following figure.⁵

3. <http://climate.nasa.gov/causes> , accessed on 19 April 2012.

4. http://www.direct.gov.uk/en/environmentandgreenerliving/thewiderenvironment/climatechange/DG_072920, accessed on 19 April 2012.

5. UNEP, *Global Environmental Outlook 2000*, Nairobi, UNEP, 1999, p. 4.

Figure 2: Rise of Global CO₂ Emission

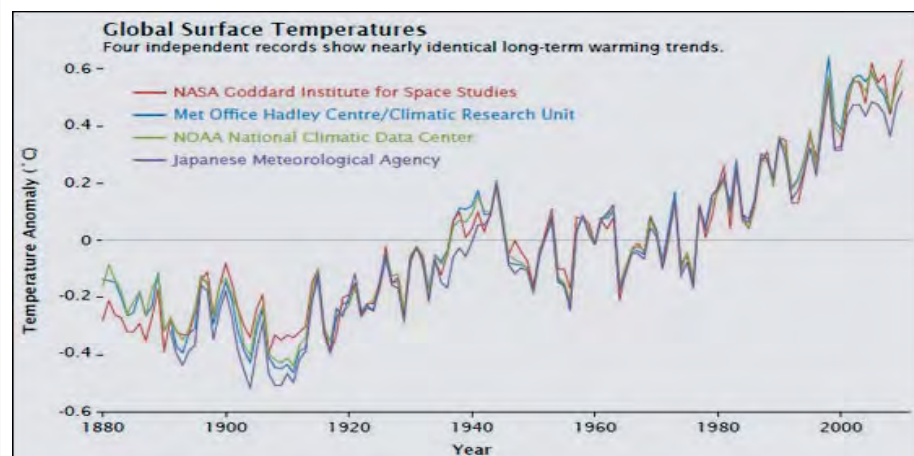


Source: Author

Climate Change: A Brief Look at the Global Scenario

A key effect of climate change is the rise in global surface temperature. During the period of 1969-2003, the heat content of the upper 700 meter of the ocean has witnessed an increase by more than 50%. In the case of Indian Ocean, each 1°C of global temperature rise has boosted sea surface temperature by 1.5°C during the past few decades. It is important to note that ocean temperature plays a contributory role in global sea level rise (SLR), which has multiple consequences, as explained later.⁶

6. Office of the US Secretary of Defence, *Trends and Implications of Climate Change for National and International Security*, 2011, p. 24.

Figure 3: Global Increase in Surface Temperature

Source: Climate Research Unit, NASA

Rising trend in global surface temperature has caused glaciers and snow cover to melt, resulting in near-term flood followed by scarcity of water. Importantly, glaciers and snow covers reflect the solar radiation into the atmosphere. As such, reduction of snow surface adds to further global warming besides being responsible for 80% of global SLR. Compared to the average rate between 1980-1999, the melting of glacier has been doubled since 2000. Recent studies show that the average winter ice thickness in Arctic Ocean has reduced to 1.9 meter in 2008 compared to 3.6 meter in 1980. It is predicted that global warming will cause the Arctic Ocean to be free of summer ice sometime in between 2030 to 2080, further adding to the effects of global warming.⁷

As mentioned before, a major concern of climate change is the global SLR, with multifaceted adverse effects. Global SLR has been noted at an average rate of 1.8 ± 0.5 mm/year during the period 1961-2003. However, the rate showed rising trend of 3.2 mm/year during the period 1993-2006 and in the recent years the average rate of increase is around 3 mm/year.⁸ The consequence of possible population displacement because of the SLR is significant, since almost two-thirds of the world's population lives within 100 kilometers of the coast and 30 of the world's 50 largest cities are located along or near the coast.⁹

7. *Ibid.* Pp. 26-29.

8. *Ibid.* p. 40.

9. Graeme Hugo, "Environmental Concerns and International Migration," *International Migration Review*, Spring, 1996, p. 119.

Alongside various physical effects of climate change as noted above, a major concern is the second order effect on water resources. In Asia, freshwater availability in Central, South, East and South-East Asia, particularly in large river basins, is projected to decrease, which along with population growth and increasing demand arising from higher standards of living, could adversely affect more than a billion people by 2050. It is also projected that crop yields could decrease up to 30% in Central and South Asia by the mid-21st century. On the other side of the globe, some 75 to 250 million people in Africa are projected to be exposed to increase water stress by 2020 due to climate change.¹⁰

Effects of Climate Change on Bangladesh

According to Climate Change Vulnerability Index (CCVI) 2011, Bangladesh is ranked as the most vulnerable country and considered in the ‘extreme risk’ category among 170 countries over next 30 years.¹¹ Bangladesh’s vulnerability to climate change is largely due to her geographic location and geo-morphological conditions. With Himalayas to the north and the Bay of Bengal to the south, Bangladesh is located at the junction of two diverse environments, which not only causes heavy monsoon downpour but also brings about catastrophic natural disasters. Moreover, about 10% of the country is hardly one meter above the mean sea level¹² risking it to be submerged under sea water due to SLR. World Bank’s study on the impact of SLR in Bangladesh reveals that 100 cm SLR within next 100 years is likely to inundate 15% to 17% of country’s land area i.e. 22135 to 26562 square kilometers.¹³ It is vital to note that the compounding effects of SLR on coastal area of Bangladesh will have severe consequence. There will be increasing risk of coastal salinity of both soil and surface water causing loss of cultivable land and scarcity of saline free drinking water.

A recent study, as shown in Figure 4, depicts that saline water could penetrate about 40 km inland in case of SLR by 88 cm affecting most of Khulna, Jessore, Barisal, Patuakhali and Noakhali districts and parts of Faridpur and Comilla districts.¹⁴ It is further predicted that one million coastal people of Bangladesh could be climate refugee by 2050 due to SLR.¹⁵ Even at present, around 31

10. IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability*. 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), Cambridge, Cambridge University, p. 13.

11. Transparency International Bangladesh, *Challenges in Climate Finance Governance and the Way Out*, Dhaka, 2012, p.5.

12. Dept of Environment, *Climate Change and Bangladesh*, Dhaka, Climate Change Cell, 2007, p. 4.

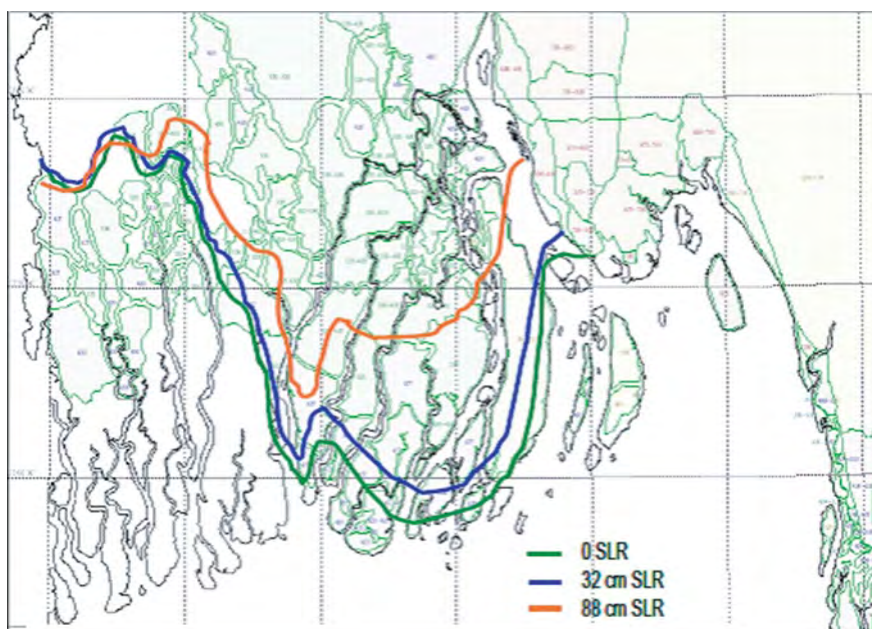
13. Shamsuddoha, Md and Rezaul Karim Chowdhury, *Climate change impact and disaster vulnerabilities in the coastal areas of Bangladesh*, Dhaka, COAST Trust, 2007, p. 8.

14. Dept of Environment, *Bangladesh Climate Change Impacts and Vulnerability: A Synthesis*, Dhaka, Climate Change Cell, 2006, p. 24.

15. *Challenges in Climate Finance Governance and the Way Out*, *op.cit.*, p.5.

upazillas of Jessore, Satkhira, Khulna, Narail, Bagerhat and Gopalganj districts are already facing severe salinity problem, which has resulted in marked change in agricultural activities.¹⁶

Figure 4: Line of Equal Salinity for Different SLR During Dry Seasons



Source: Internet

Bangladesh's further vulnerability to climate change is due to the fact that she is among the least developed countries (LDCs) in the world with high population density. Although Bangladesh has witnessed sustained gross domestic product (GDP) growth for last couple of years, higher population density increases her vulnerability because more people are exposed to risk, and opportunities for internal relocation or migration are limited. Moreover, given the fact that 25% of the country's GDP comes from agriculture sector¹⁷ and 48% of the labor force is still dependent on agriculture for income and livelihood,¹⁸ the agro production loss due to climate change would certainly pose a serious threat to the national economy, human security, and as a whole impede national development.

16. *Ibid.* p. 13.

17. Dept of Environment, *Climate Change and Bangladesh*, Dhaka, Climate Change Cell, 2007, p. 4.

18. Dept of Environment, *Adaptive Crop Agriculture Including Innovative Farming Practices in the Coastal Zone of Bangladesh*, Dhaka, Climate Change Cell, 2009, p. 1.

In addition to the impact on agricultural sector, changes to water resources and hydrology due to climate change will have a major effect on Bangladesh, as the people of this soil heavily rely on water for irrigation, fishery, navigation, and industrial and domestic purposes. Moreover, under general climate variability, mostly in the dry season, the annual per capita water availability in 2025 will become 7,670 cubic meters as against 12,162 cubic meters in 1991.¹⁹ What it means is that availability of freshwater will be reduced by increased salinity intrusion into fresh water sources affecting irrigation and constricting availability of drinking water against the rising demand. Alarming, there is a possibility of gradual extinct of the Sundarbans, the largest single block mangrove forest of the world. According to Intergovernmental Panel on Climate Change (IPCC)²⁰ prediction, about 84% of the Sundarbans area could be deeply inundated due to 32 cm SLR, while the entire Sundarbans could be lost in case of 88 cm SLR.²¹

Various environmental effects of climate change and its subsequent impacts on various sectors like agriculture, water resource, forestry etc would undoubtedly affect people's livelihood in terms of employment, income and consumption. Moreover, recurring floods would create major problems of livelihood and macroeconomic dislocations, slowing growth and pushing people down the poverty line. Another major concern for national development of Bangladesh because of SLR is the ever increasing number of victims who seek refuge to other places due to loss of their homes and land. A study indicates that if sea level rises up to one meter this century, approximately 30-35 million Bangladeshis could become climate refugees²² with severe economic and social consequences.

An Overview of Bangladesh's Response to Climate Change

Government of Bangladesh has entrusted the Ministry of Environment and Forest (MoEF) in general and Department of Environment (DoE) in particular with the responsibility to address issues related to climate change. A Climate Change Cell (CCC) has been formed under the DoE with a view to making an integrated approach to climate change risk management at national and local levels. CCC is the technical arm of the national focal point, which undertakes a range of activities relating to climate change. Since its inception in 2004, the CCC has been engaged in establishing links among the sectoral agencies and preparing a common knowledge base for non-governmental organizations (NGO) efforts on climate change related issues.²³

19. Bangladesh Climate Change Impacts and Vulnerability: A Synthesis, *op.cit.*, p. 13.
20. The IPCC is the leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.
21. Dept of Environment, *Impact Assessment of Climate Change and Sea Level Rise on Monsoon Flooding*, Dhaka, Climate Change Cell, 2009, p. 7.
22. Shamsuddoha, *op.cit.*, p. 13.
23. Author's interview with Md Kamurzzaman, Research Fellow, CCC, on 12 April 2012.

Till date, two strategy documents, i.e. National Adaptation Programmes of Action (NAPA) and Bangladesh Climate Change Strategy and Action Plan (BCCSAP), are in place. NAPA, which was first published in 2005 and later reviewed in 2009, provides information on potential adverse impacts of climate change on water resources, coastal zones, crop agriculture and food security, fisheries and livestock, forestry and biodiversity, human health, and industry and infrastructure. NAPA also includes 38 identified adaptation measures categorized into eight thematic areas like research and knowledge management, agriculture, health, disaster management, fisheries and livestock, livelihood, biodiversity; and policy and institutional capacity building. However, policy makers in Bangladesh soon realized that the NAPA was an inadequate plan, which did not address the magnitude of the climate change problem in the country. The government then undertook a more comprehensive planning process, with its own financial and intellectual resources. The BCCSAP, a much more comprehensive strategy document consisting of two major parts, was completed and presented to the Cabinet of Bangladesh in 2009. The first part provides a contextual background, highlights the climate hazards in Bangladesh, elaborates on the impacts of climate change, and discusses briefly about adaptation and mitigation. The second part of the document includes the details of 'Climate Change Action Plan'. The 'Climate Change Action Plan' is a 10-year (2009-2018) programme prepared with a view to augment capacity building and resilience of the country and the people to face the challenges of climate change. For the 1st five year period, i.e. 2009-2013, the programmes are built on six pillars, namely (i) Food security, social protection and health, (ii) Comprehensive disaster management, (iii) Infrastructure, (iv) Research and knowledge management, (v) Mitigation and low carbon development and (vi) Capacity building and institutional strengthening.²⁴

The Government of Bangladesh also felt that immediate action on the BCCSAP was crucial and that the country should initiate action with national funds, rather than wait for finance from the international community. However, since the costs involved are far greater than the government could provide on its own, appeal was made to the international community for assistance and donations. This resulted in the creation of two separate funds: the Bangladesh Climate Change Trust Fund (BCCTF), and the Bangladesh Climate Change Resilience Fund (BCCRF). The two funds have differing governance and management arrangements, but both are meant to support the implementation of the BCCSAP. The BCCTF is resourced entirely from the government's own budget. In 2011, US\$ 95.36 million has been allocated for 62 projects mainly

24. Ministry of Environment and Forest (MOEF), *Bangladesh Climate Change Strategy and Action Plan*, Dhaka, MOEF, 2009, Pp. 27-29.

related to agricultural research, mitigation, adaptation, disaster risk reduction, and non-government projects relating to research and knowledge generation. The BCCRF, on the other hand, consists of funds pledged and provided by developed countries or groups (such as the United Kingdom, Sweden and the European Union).²⁵ Till date, BCCRF has received \$170 million from donor agencies and countries, out of which BCCRF has approved \$153 million for six projects in the fields of coastal forestation, adaptation in agriculture and infrastructure development.²⁶

On overall count, the Government of Bangladesh has performed better in undertaking various measures to deal with climate change risks when compared to many LDCs. However, considering the magnitude of the problem affecting Bangladesh, more prudent measures are essential.

Countering the Risks: Way Ahead

For Bangladesh, climate change is not only an environmental or geo-climatic issue, but certainly a multifaceted problem affecting her development prospect in numerous ways. As such, a single track approach is not likely to be successful in dealing with the challenges posed by it. Rather a multidimensional approach with multi actor involvement is essential to effectively address the ill consequences of climate change.²⁷ Besides, it is also essential to ensure that various measures taken in this connection are well coordinated and integrated. In this regard, some prudent measures that are expected to bring about a worthwhile result for Bangladesh are illustrated in the succeeding paragraphs.

Raising awareness among vulnerable communities, agencies, professionals and practitioners at different levels of activity is undoubtedly an important step towards meeting the challenges posed by climate change. At the most basic level, there is a need for increased awareness of the general public regarding climate change, its causes, the risks it poses to life and property, measures for reducing the risks, and the benefits of different courses of action. Populations that are particularly vulnerable need an understanding of the contributing factors that make them susceptible to the climate change risks. As a long term option, climate related issues need to be included in the education system and as part of the routine curricula of academic institutions. Building awareness among children and young adult is likely to be an effective process since they are often

25. International Institute for Environment and Development (IIED), *The Bangladesh National Climate Funds*, Dhaka, IIED, 2011, Pp.3-5.

26. www.bdnews24.com/details.php?cid=2&id=226286, accessed on 29 August 2012.

27. Interview with Dr. M Aslam Alam, Secretary, Disaster Management and Relief Division on 14 May 2012.

more open to change and can influence their families. Moreover, continued education on relevant aspects of climate change issues is likely to develop a pool of experts, who in turn would provide critical services to the nation in years to come.²⁸ Moreover, as part of awareness building programme, ICT applications in creating a platform for information dissemination and channeling services can be of great significance.²⁹

Besides awareness-raising at local levels, it is also important to involve policymakers so as to ensure integration of climate change risks into national development policies. It is equally vital that policy making takes local knowledge into account to ensure appropriate adaptation³⁰ actions. Local coping strategies and traditional knowledge need to be used in synergy with government policy and actions. Moreover, on climate change related issues, Bangladesh has a number of functional NGOs, some reputed experts and institutions. For the efficient management of climate change risks, Government should formalize having their input into the policy formulation, training, project mobilization and fund facilitation processes by developing functional Government – NGO collaboration systems.³¹ Due to the cross-sectoral and comprehensive nature of many of the impacts of climate change, greater intercommunication between ministries and government agencies is also critical.³² Importantly, there is a crucial need to bring synergy among different polices for better management of climate change risks. Planning Commission as central policy making institution of the country may assume the prime role in initiating policy review toward incorporation of climate change issues in the sectoral policies, programmes and project development. Besides, Planning Commission may initiate a process of regular review of policies, strategies and action plans in the context of climate change.³³

28. Church of Bangladesh, *Climate Change, Its Impacts and Possible Community Based Responses in Bangladesh (2nd Ed)*, Dhaka, 2010, p.58.

29. Presentation by Dr Jamilur Reza Choudhury, on “*Science and Technology and ICT Environment*”, at National Defence College on 29 August 2012, Dhaka.

30. Adaptation entails measures and efforts to deal or cope with the unavoidable impacts of climate change. It is the long term response to anticipated effects of climate change and more pertinent for the poor and vulnerable countries because certain impacts of climate change are inevitable even though all mitigation measures are taken.

31. UNDP Human Development Report, *Risks, Vulnerability and Adaptation in Bangladesh*, Dhaka, Bangladesh Centre for Advanced Studies (BCAS), 2007, p.83.

32. Interview with Fahmida Khatun, PhD, Research Director, Centre for Policy Dialogue, Dhaka, on 16 May 2012.

33. General Economics Division (Planning Commission), *The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh*, Dhaka, UNDP, 2009, p.99.

It has increasingly been recognized that adaptation efforts would be needed to reduce some of the risks associated with climate change impacts. Adaptation is primarily a local process; as such, it is crucial to involve local communities in adaptation to climate change.³⁴ Many of us may be unaware that there is vast knowledge and experience within local communities regarding coping with climatic variability and extreme weather events. A key to developing sound adaptation strategies is, therefore, identifying communities' own priorities and needs, and valuing their knowledge alongside scientific knowledge. In this regard, considerable investments and long-term engagement are required to facilitate adaptation locally.³⁵ Hence, it is important to realize that community based adaptation approach at times depends heavily on foreign aid donors. As such, there must be an effective mechanism in place to oversee how international adaptation funds are disbursed and spent to ensure that they achieve the objective of enabling adaptation.³⁶ Also critical for adaptation is the capacity building³⁷ of the administration so that there is an adequate preparedness of Bangladesh-specific impacts on various sectors.³⁸ Although the people of Bangladesh have for long shown their resilience in fighting environmental disasters, peacetime preparation of the state mechanism, at times, does not appear to be adequate.³⁹ Therefore, capacity building of all tiers of administration is a key requirement.

It is also important to understand that adaptation needs coordination between central and local levels of management. Government endeavours will be more relevant, sustainable and ultimately strengthened if local government organizations are provided with a more central role in activities. In this regard, the experience of Nepal can be a relevant lesson for Bangladesh. In 2010, Nepal developed the Local Adaptation Plans of Action (LAPA).⁴⁰ LAPA entails an approach of integrating top-down planning with an institutionalized bottom-up feedback process, which aims at identifying local adaptation needs focusing on

34. Action Aid Bangladesh, *Understanding climate change from below, addressing barriers from above: Practical experience and learning from a community-based adaptation project in Bangladesh*, Dhaka, 2010, p. 11.

35. Interview with M Abu Sumon, National Coordinator, Community Based Adaptation to Climate Change in Bangladesh, UNDP, Dhaka on 19 April 2012.

36. <http://www.equitybd.org/campaigns/economicjustice/budgetdiscussion/climate-adaptation-must-be-a-integrated-part-of-national-budget>, accessed on 14 July 2012.

37. Capacity-building is the process and means through which national Governments and local communities develop the necessary skills and expertise to manage their environment and natural resources in a sustainable manner within their daily activities.

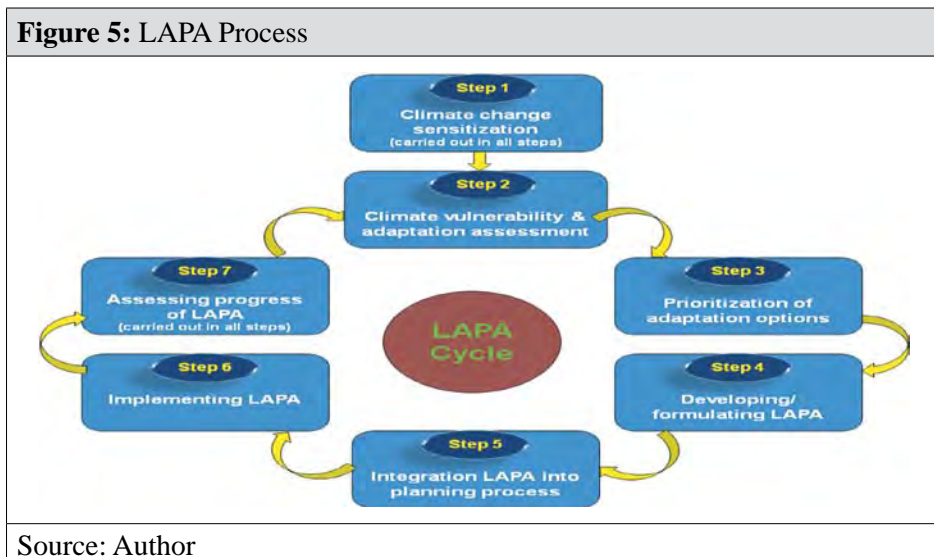
38. Scoping Assessment on Climate Change Adaptation in Bangladesh, *op.cit.*, p. 22.

39. Interview with Dr. Hussain Zillur Rahman, Executive Chairman, Power and Participation Research Centre, Dhaka on 11 April 2012.

40. <http://www.napanepal.gov.np/.../Local%20Adaptation%20Plan%20of%20>, accessed on 15 May 2012.

reducing local risks and vulnerabilities, and increasing resilience.⁴¹ Through its pioneering framework of LAPA, Nepal has decided to dedicate at least 80% of the country’s climate change adaptation funding to projects at the local level.⁴² Based on principles like decentralized and bottom up planning, multi actor involvement, local level ownership, decentralized financial flow and implementation etc,⁴³ LAPA process uses a seven-steps approach as shown in the following figure.⁴⁴

Figure 5: LAPA Process



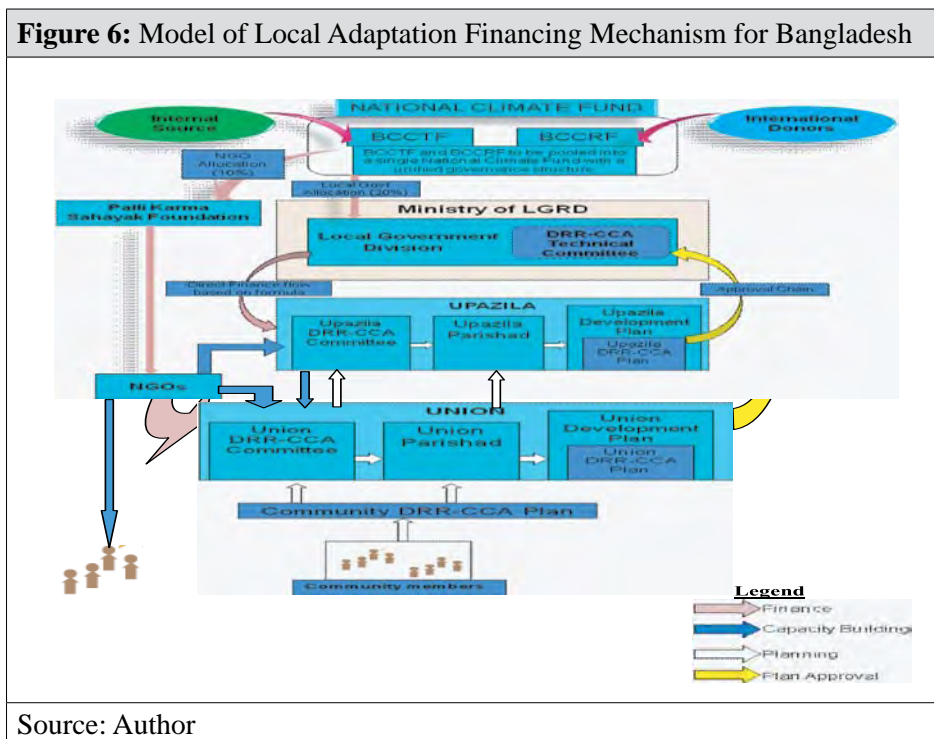
Source: Author

Bangladesh can derive benefit out of LAPA framework as it is designed to integrate national and top-down assessments of climatic risks with bottom-up planning, options and priorities. The LAPA framework is suitable for Bangladesh in the sense that it would encourage people’s participation and make adaptation strategy more meaningful. Taking planning to the local level is crucial in order to understand, enable and respond to what people of Bangladesh would actually do in response to the opportunities and constraints they face in the context of climate change. Customizing the LAPA framework in the context of Bangladesh would offer a way to bridge the apparent gap between adaptation ‘by the people’ and adaptation ‘for the people’.⁴⁵

41. <http://www.idsnepal.org/nseu/knowledge%20products/NAPA%20TO%20LAPA.pdf>, accessed on 15 May 2012.
 42. ActionAid Bangladesh (AAB), *Ensuring Access for the Climate Vulnerable in Bangladesh: Financing Local Adaptation*, Dhaka, AAB, 2012, p.27.
 43. <http://www.napanepal.gov.np/.../Local%20Adaptation%20Plan%20of%20>, accessed on 15 May 2012.
 44. <http://www.idsnepal.org/nseu/knowledge%20products/NAPA%20TO%20LAPA.pdf>, accessed on 15 May 2012.
 45. <http://www.ids.ac.uk/files/dmfile/LHcasestudy03-NepalLAPA.pdf>, accessed on 30 August 2012.

Since the costs involved in materializing various programmes and projects for adaptation are far greater than the Government of Bangladesh can afford, it is important for Bangladesh to consider as to how to attract and leverage different types of climate change investment, including that from international community and private sources. However, there are indications of resource misappropriation of National Climate Fund at implementation and project formulation stages.⁴⁶ Therefore, alongside prudent diplomacy and expert negotiation to attract foreign funds in combating climate change, ensuring transparency and accountability remains a core issue that would help building confidence among the donor countries and organizations, and create opportunities for more funding to address adaptation projects and programmes. In this connection, a step could be the involvement of local government institutions (LGI). LGIs like Upazila Parishads (UZPs) and Union Parishads (UPs) could provide a gateway for vulnerable communities to gain increased access to climate adaptation finance. A model for financing mechanism involving the LGIs could be as shown below.⁴⁷

Figure 6: Model of Local Adaptation Financing Mechanism for Bangladesh



Source: Author

46. Staff Correspondent, "Climate Change-Fund Use Must be Transparent", *The Daily Star*, Dhaka, 10 April 2012.

47. Ensuring Access for the Climate Vulnerable in Bangladesh: Financing Local Adaptation, *op.cit.*, p.87.

As depicted in Figure-6, it is suggested that the BCCTF and BCCRF should be pooled into a single National Climate Fund with a unified governance structure and procedures to ensure close coordination for disbursing money and thereby reducing the number of parallel funding streams. In the case of fund allocation for the local government, instead of fund allotment on a project-by-project basis, a consistent and predictable level of funding should flow to LGIs on an annual basis. Initially, a set percentage (e.g. 20%) of the available funding could be allocated to a local government, just like the current practice of 10% of the BCCRF has been allocated for utilization by civil society/NGO. A starting allocation of 20% would make substantial fund available to LGIs and over time this percentage could be increased if LGIs collectively demonstrate good performance.⁴⁸

Within each tier, funding would be allocated among LGIs on the basis of a set formula drawn from several relevant indicators developed in consultation with experts. These indicators should be clear and transparent and could include climate change vulnerability, poverty level, population and size of area. Use of a set formula is intended to reduce the possible political influence over the allocation of funds. The funds for the LGIs would be initially transferred to the Local Government Division (LGD), in order to take advantage of its experience in managing fund transfers to UPs and UZPs. In order to qualify for receiving funds, LGIs would have to meet certain criteria like having an approved Disaster Risk Reduction and Climate Change Adaptation plan (DRR-CCA plan) and a functioning committee capable of supervising disaster and climate adaptation issues.⁴⁹ As far as adaptation planning is concerned, as depicted in the model above, it should stem out from the local communities. The community DRR-CCA plan should be routed through the Union DRR-CCA committee to be included in the Union DRR-CCA plan. The Union DRR-CCA plan should then be channeled to the DRR-CCA technical committee under the LGD for technical scrutiny and labeling priority. Similar mechanism may also be followed for the Upazila DRR-CCA plan.

As noted before, Bangladesh being one of the worst sufferers of climate change, it is vital for her to seek and attract international support to implement adaptation measures. In this connection, a comprehensive strategy is needed for participating in international negotiations with a team of trained negotiators, backed up by a national pool of experts drawn only from related sectors. Here, it is imperative that the government negotiators should maintain continuity of participation in various international forums to derive the best possible output from international discussions/negotiation as well as to contribute to the in-house skill development and policy formulation keeping in mind the long-term consequence.

48. *Ibid.* p. 86.

49. *Ibid.*

Besides all possible national efforts, a regional approach is of crucial importance. Although the South Asian countries have contributed very little to the causes leading to climate change, regrettably they stand to lose much from its adverse effects. Such a grim situation inevitably demands a firm based regional response to climate change. Although there have been some recent regional initiatives in this area, most of these remained in the area of collaborative research, with rather limited actions on ground.⁵⁰ Therefore, the South Asian Association for Regional Cooperation (SAARC) countries need to explore the inter-linked issues of climate change and share knowledge, good practices and achievements within the region. This will facilitate cross-learning from one another's experiences, and pool resources and expertise to develop appropriate adaptive capacities. SAARC countries may also work together to protect and enhance their collective common interests in international climate change negotiations.

Conclusion

An increasing number of evidences for years have clearly established the fact that anthropogenic climate change is a reality, which in the recent years has been recognized as the greatest long term threat facing the humanity. Since the mid 20th century, human caused GHG emission in the earth's atmosphere is considered to be the key reason of global warming and consequent climate change. The major impacts of climate change, include melting of glaciers, global SLR with consequent effects on water resources, changes in the frequency, intensity and location of storms, displacement of population etc.

Climate change warrants special attention for a country like Bangladesh since she is recognized as one of the most vulnerable countries of the world. Geography coupled with low level of economic development and corresponding low investment capacity, inadequate infrastructure, lack of institutional capacity, and a high dependency on the natural resource base make the country highly vulnerable to climate change. The physical effects of climate change and its subsequent impacts on various sectors like agriculture, water resource, infrastructure, forestry etc pose an unprecedented threat to people of Bangladesh who are already struggling to sustain their livelihoods.

50. Fourth South Asia Economic Summit (SAES IV), *Global Recovery, New Risks and Sustainable Growth Repositioning South Asia*, Dhaka, Centre for Policy Dialogue (CPD), 2011, p.8.

Burdened with a number of socio-economic problems, Bangladesh is caught in a vicious circle of poverty and faces an array of challenges in improving the livelihood of her citizens in a sustainable manner. The problem is further compounded by her severe vulnerability to climate change. On all account, the multidimensional effects of climate change are likely to undermine the development prospects of Bangladesh. Thus, climate change has turned out to be a serious national concern. Only a comprehensive national approach, which includes prudent measures like raising mass awareness, capacity building, wide-range integration with the involvement of local people in planning adaptation measures, empowering local government with local adaptation financing, regional collective approach etc can provide practical leverage in facing the challenge successfully.

BIBLIOGRAPHY

Books

1. Burroughs, William, (ed.), *Climate into the 21st Century*, Cambridge, University of Cambridge, 2003.
2. Dewan, Dr. M.L and Devendra Sahai, *Global and Regional Perspective of Global Warming*, New Delhi, Jnanada Prakanshan, 2009.
3. Johansen, Bruce E, *Global Warming in the 21st Century*, London, Praeger Publishers, Westport, USA, 2006.
4. Nishat, Ainun, Mahfuz Ullah and A.K Enamul Haque, (ed.), *Bangladesh Environment Outlook 2001*, Dhaka, Center for Sustainable Development, 2001.
5. Rahman, A Atiq, Saleemul Huq, Raana Haider and Eirik G Jansen, (ed.), *Environment and Development in Bangladesh*, Dhaka, University Press Limited, 1994.
6. Shagufta, Chandrawati Jee, *Global Warming and Climate Change*, New Delhi, A.P.H Publishing Corporation, 2010.
7. Ruth, Matthias and Maria E. Ibarraran, (ed.), *Distributional Impacts of Climate Change and Disasters*, Cheltenham, UK, Edward Elgar Publishing Limited, 2009.

Journals

8. Graeme Hugo, “Environmental Concerns and International Migration,” *International Migration Review*, Spring, 1996.
9. Patwary, Obayedul Hoque, “The Security Dimensions of Climate Change”, *Peace and Security Review*, Dhaka, Vol.2, No.2, Second Quarter 2009.

Documents/Reports

10. Action Aid Bangladesh, *Understanding climate change from below, addressing barriers from above: Practical experience and learning from a community-based adaptation project in Bangladesh*, Dhaka, 2010.
11. ActionAid Bangladesh (AAB), *Ensuring Access for the Climate Vulnerable in Bangladesh: Financing Local Adaptation*, Dhaka, AAB, 2012
12. BCAS, *Scoping Assessment on Climate Change Adaptation in Bangladesh*, Dhaka, BCAS, 2010.
13. Church of Bangladesh, *Climate Change, Its Impacts and Possible Community Based Responses in Bangladesh (2nd Ed)*, Dhaka, 2010.
14. Dept of Environment, *Bangladesh Climate Change Impacts and Vulnerability: A Synthesis*, Dhaka, Climate Change Cell, 2006.
15. Dept of Environment, *Impact Assessment of Climate Change and Sea Level Rise on Monsoon Flooding*, Dhaka, Climate Change Cell, 2009.
16. Dept of Environment, *Climate Change and Bangladesh*, Dhaka, Climate Change Cell, 2007.
17. Dept of Environment, *Adaptive Crop Agriculture Including Innovative Farming Practices in the Coastal Zone of Bangladesh*, Dhaka, Climate Change Cell, 2009.
18. Dept of Environment, *Environment Cost for Climate Change*, Dhaka, Climate Change Cell, 2009.
19. Fourth South Asia Economic Summit (SAES IV), *Global Recovery, New Risks and Sustainable Growth Repositioning South Asia*, Dhaka, Centre for Policy Dialogue (CPD), 2011.
20. General Economics Division (Planning Commission), *The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh*, Dhaka, UNDP, 2009.

21. International Institute for Environment and Development (IIED), *The Bangladesh National Climate Funds*, Dhaka, IIED, 2011
22. IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability*. 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), Cambridge, Cambridge University, 2007.
23. Ministry of Environment and Forest, *Bangladesh Climate Change Strategy and Action Plan*, Dhaka, MOEF, 2009.
24. Md Shamsuddoha and Rezaul Karim Chowdhury, *Climate change impact and disaster vulnerabilities in the coastal areas of Bangladesh*, Dhaka, COAST Trust, 2007.
25. Office of the Secretary of Defense, *Trends and Implications of Climate Change for National and International Security*, Washington, 2011.
26. Planning Commission, *GOB, The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh*, Dhaka, Support to Monitoring PRS and MDGs in Bangladesh, 2009.
27. Transparency International Bangladesh, *Challenges in Climate Finance Governance and the Way Out*, Dhaka, TIB, 2012.
28. UNDP Human Development Report, *Risks, Vulnerability and Adaptation in Bangladesh*, Dhaka, BCAS, 2007.
29. UNEP, *Global Environmental Outlook 2000*, UNEP, 1999.
30. UNEP, Adaptation Knowledge Platform, *Scoping Assessment on Climate Change Adaptation in Bangladesh*, Bangkok,-UNEP Regional Resource Centre, 2010.
31. World Bank, *Bangladesh: Climate Change and Sustainable Development*, Dhaka, World Bank Office, 2001.

Web Documents/Sites

32. http://unfccc.int/essential_background/convention/background/items/2536.php, accessed on 18 April 2012.
33. <http://climate.nasa.gov/causes>, accessed on 19 April 2012.
34. http://www.direct.gov.uk/en/environmentandgreenerliving/thewiderenvironment/climatechange/DG_072920, accessed on 19 April 2012.

35. http://www.ipcc.ch/pdf/press/ipcc_leaflets_2010/ipcc-brochure_understanding.pdf, accessed on 19 April 2012.
36. http://unfccc.int/essential_background/items/6031.php , accessed on 20 April 2012.
37. <http://www.oecd.org/dataoecd/46/55/21055658.pdf>, accessed on 23 April 2012.
38. [http:// www.napanepal.gov.np/.../Local%20Adaptation%20Plan%20of%20](http://www.napanepal.gov.np/.../Local%20Adaptation%20Plan%20of%20), accessed on 15 May 2012.
39. <http://www.idsnepal.org/nseu/knowledge%20products/NAPA%20TO%20LAPA.pdf>, accessed on 15 May 2012.
40. <http://www.equitybd.org/campaigns/economicjustice/budgetdiscussion/climate-adaptation-must-be-a-integrated-part-of-national-budget>, accessed on 14 July 2012.
41. http://www.saarc-sec.org/areaofcooperation/detail.php?activity_id=32, accessed on 14 August 2012.
42. <http://www.bdnews24.com/details.php?cid=2&id=226286>, accessed on 29 August 2012.
43. <http://www.ids.ac.uk/files/dmfile/LHcasestudy03-NepalLAPA.pdf>, accessed on 30 August 2012.

Presentation/Seminar/Conference

44. Conference Proceedings, 5th International Conference on Community based adaptation, Bangladesh Centre for Advance Studies (BCAS), 2011.
45. Presentation by Fahmida Khatun, PhD, on “*Climate Change and Security*”, on 16 May 2012, National Defence College, Dhaka.
46. Presentation by Dr. Jamilur Reza Choudhury, on “*Science and Technology and ICT Environment*”, on 29 August 2012, National Defence College, Dhaka.

Newspapers

47. Shammunul Islam and Mizanur Rahman, “Climate Change: Pressure on Urbanization”, *The Daily Star*, Dhaka, 10 July 2011.
48. Staff Reporter, “Climate Change Adaptation should be Strengthened”, *The Independent*, Dhaka, 9 April 2012.
49. Staff Correspondent, “Climate Change- Fund Use must be Transparent”, *The Daily Star*, Dhaka, 10 April 2012.

Interviews

50. Kamruzzaman, Md, Research Fellow, Climate Change Cell, Dept of Environment, Dhaka, Interviewed on 12 April 2012.
51. Rahman, Hussain Zillur, Executive Chairman, Power and Participation Research Centre, Interviewed on 11 April 2012, Dhaka.
52. Sumon, M Abu: National Coordinator, Community Based Adaptation to Climate Change in Bangladesh, UNDP, Dhaka, Interviewed on 19 April 2012 and 23 July 2012.
53. Alam, Dr. M Aslam, Secretary, Disaster management and Relief Division, Interviewed on 14 May 2012.
54. Khatun, Fahmida, PhD, Head of Research, Centre for Policy Dialogue, Interviewed on 16 May 2012.

Author

Group Captain Javed Tanveer Khan was commissioned on 23 January 1990 in General Duties (Pilot) branch of Bangladesh Air Force. He is a Qualified Flying Instructor and served as a flying instructor in Bangladesh Air Force Academy, Flying Instructors School and Operational Fighter Squadrons. He has also commanded an operational Fighter Squadron. In staff appointment, the officer served as Deputy Director at Air Headquarters and Private Secretary to the Chief of Air Staff. Group Captain Tanveer is a graduate of Defence Services Command and Staff College, Mirpur, Air Command and Staff College, Alabama, USA and Armed Forces War Course, NDC, Bangladesh. He has served in United Nations Missions both as Military Observer and contingent member. Group Captain Tanveer has served as a Directing Staff of Defence Services Command and Staff College, Mirpur and currently he is serving as a faculty member of Armed Forces War Course Wing of NDC.

NIGERIA'S MARITIME RESOURCES PROTECTION: INTEGRATED APPROACH FOR THE ARMED FORCES

Captain Willams Onovuhe Kayoda, ndc, MSS, psc, MRIN, M.Sc

INTRODUCTION

The world is an ocean world¹. The sea is a common heritage to mankind and covers about two-thirds of the earth's surface². Most nations' resources are embedded in the ocean, seas and marine ecosystem. The world populations rely greatly on the vast and abundant resources of the sea as vital means of sustenance, livelihood, sources of food, energy, minerals, mining, scientific research, transportation and recreation amongst others. Hence, Admiral Goshkov posited that the strength of a maritime state is the capacity to place all the resources and possibilities offered by the ocean at the service of mankind and make full use of them to develop the economy, the wealth of which finally determines all facets of life of the country including its defence capability³.

The legal regime for appropriate defence and governance for the exploitation of the sea resources are regulated under United Nations Charter and Conventions on The Law of the Sea (UNCLOS). Article 56 of UNCLOS III further empowers littoral states to enact their own laws and regulations for the protection of the maritime resources⁴. The constitution of the Federal Government of Nigeria (FGN) and the Armed Forces Cap A20 Laws of the Federation of Nigeria, entrusted responsibility of securing Nigeria's maritime environment to the Nigerian Navy (NN) as lead agency in collaboration with the Nigerian Army (NA), the Nigerian Air Force (NAF)⁵ and other several supporting maritime agencies. Despite this array of Services and agencies, Nigeria's maritime environment has been characterized with series of nefarious and illegal activities which portend threat to the nation state.

Nigeria as a littoral state has a coast line of about 420 nautical miles (nm) which translates to about 84000 square nautical miles (nm²) maritime area based on a 200nm Exclusive Economic Zone (EEZ). In line with UNCLOS III, Nigeria lays sovereign claim to 12nm of territorial seas, and 350nm continental shelf

1. Langewieshe, W. in Ibrahim, O.S., 2005. Piracy and Maritime Crime on the Coast of Africa: Trends and Countermeasures, A paper delivered at Sea Power Symposium Africa, South Africa, p.4.
2. Encarta 2008.
3. Admiral Goshkov, quoted in Ibrahim, O.S., 2011, The Nigerian Navy: Challenges and Future Perspectives. Lecture delivered to Participant National Defence College Course 19, p.6.
4. Pugh, M., 1994. *Maritime Security and Peacekeeping: A Framework for United Nations Operations*. New York: Manchester University Press, p.1.
5. *Constitution of the Federal Republic of Nigeria*, 1999, p.34.

limit all extending from the baseline⁶. However, Nigeria's maritime area of interest extends beyond her maritime environment. It covers the entire stretch of the Gulf of Guinea.

The environment is endowed with huge deposit of living and non-living resources such as aquatic marine resources, oil and gas, natural resources, amongst others. At the dawn of the new millennium, the rise in the profile of international maritime terrorism, militancy and quest for resource control assumed a new dimension in Nigeria's maritime environment. Given the rising profile, there have been calls in various quarters for improved security arrangement for the protection of Nigeria's maritime environment. Although, the FGN Amnesty Programme initiated for ex-militants has drastically reduced some of the threats, there are still persistent attacks on shipping and other vices unabated. The capacity and effectiveness of the Armed Forces of Nigeria (AFN) and the other agencies saddled with the responsibilities to mitigate the challenges seems doubtful. This necessarily compels the need for a collective approach for synergy towards harnessing and protecting the nation's maritime resources. In this study, therefore, maritime resources protection shall mean, the art of using all available means to, preserve, safeguard or prevent the living and non-living resources, as well as activities that are legally conducted in the waters, seabed and subsoil within the maritime domain of a nation from danger or threat.

Threats to Nigeria's Maritime Resources

Threats to Nigeria's maritime interests represent those acts that are inimical likely to endanger or undermine the exploration and exploitation of the seabed resources. Such threats could be either external or internal.

EXTERNAL THREATS

External threats manifest in various forms such as hostile propaganda, territorial contention, threat of force by unfriendly states, sabotage as well as the denial of access to sea for transit or exploitation. External threats to Nigeria in the maritime domain are likely to manifest in the maritime boundaries between countries of the Gulf of Guinea, weak and vulnerable neighbours. Gladly, Nigeria's foreign policy with her maritime neighbours has been consistently characterised by peaceful resolution of conflict situations. The resolution of the Bakassi conflict and the existing Joint Development Zone (JDZ) agreements with Sao Tome and Principe and Equatorial Guinea attest to this fact. Therefore, it may be safe to assert that external threats may not be an imminent challenge in Nigeria's maritime environment.

6. Adenote, S., 2002, Maritime Crimes and Coastal Security: Challenges for the Nigerian Navy, Project submitted to the National War College, Nigeria, p.12.

INTERNAL THREATS

Major internal threats to Nigeria's maritime interests amongst others include:

Poaching. Poaching (illegal fishing) is the act of fishing in a nation's waters without permission or licence⁷. The Food and Agricultural Organisation (FAO) stated that one-quarter of all fish stocks worldwide are being increasingly overexploited largely due to poaching⁸. Illegal fishing and over exploitation by both own and foreign trawlers in the nations waters are frequent occurrence and the losses are enormous. The fish resources are becoming depleted, unregulated fishing as to species, size and premature harvest of fingerlings/ baby fishes are quite high. In the case of Nigeria, the Nigerian Institute of Oceanography and Marine Research (NIOMR) recently confirmed the increase in incidents of illegal, unregulated and unreported fishing in our EEZ⁹. Inability to check this negative trend has been traced to lack of fishery patrol vessels and inadequate Maritime Domain Awareness (MDA) capability. Poaching is depriving the country huge revenue base required for national developments and it is a matter of utmost concern.

Piracy and Sea Robbery. The International Maritime Organisation (IMO) defines piracy as 'any illegal act of violence or detention, or any act of deprivation, committed for private ends by the crews or passengers of a private ship or a private aircraft and directed on the high seas against another ship or against persons or property on board such ship'¹⁰. Sea robbery, on the other hand is 'the commission of these acts in ports or terminal waters'. Although, incidents of piracy are not significant around Nigeria's maritime environment, sea robbery and armed attacks on shipping and fishing vessels have unfortunately been on the increase, particularly around Nigeria's harbour approaches. The International Maritime Bureau (IMB), in 2007, ranked Nigeria's maritime environment as one of the most troubled global waterways due to piracy.¹¹ This development has the potential of giving Nigeria a very negative global image that could impact adversely on the inflow of foreign investment. Attacks on shipping and piracy persist and it remains a matter of concern for Nigeria as depicted in figures below:

7. *Microsoft Encarta 2009.*

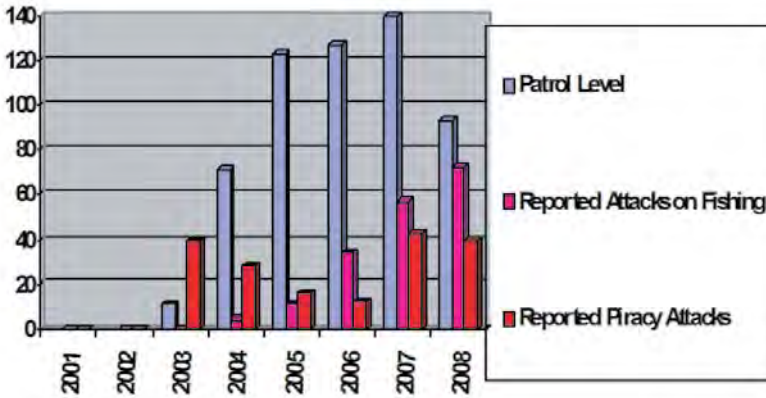
8. FAO cited in Jonah,G.J.,2010. Maritime Dimensions of Nigeria's National Security. Constructive Engagement, *Journal of Alumni Association of National Defence College Nigeria*, vol 1. p.82.

9. Solarin,B.B.,2012. Head of Department, Fishery Resources Department, Nigerian Institute of Oceanography and Marine Research, Records of Reports – *Operations Room Manual* 16 April. p.3.

10. *The International Chamber of Commerce(ICC)- International Maritime Bureau (IMB) Annual Report-2008.*

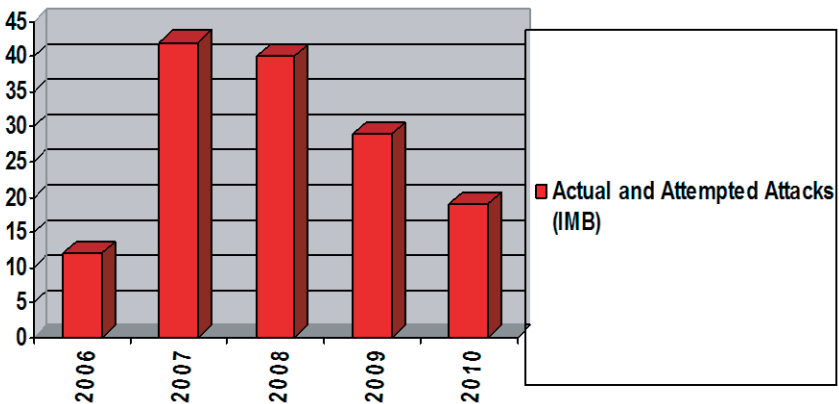
11. *Ibid.*

Figure 1. Profile of Maritime Crimes and Containment Activities in Nigeria (2001 – 2008)



Source: International Maritime Bureau

Figure 2. Profile of Attacks on Shipping in Nigeria (2006-2010).



Source: International Maritime Bureau

The proponent of this statistical argument is that the reduction observed in the trend of attacks is largely due to the level of investment in policing, operational coordination and political initiatives. However, the degrading state and challenges of platforms inadequacies has not ensure the sustenance of these efforts.

Illegal Bunkering, Pipeline Vandalism and Crude Oil Theft. Illegal bunkering is the illegal transfer of fuels and other petroleum products between vessels, from storage facilities to vessels and vice versa. Crude oil theft involves the vandalism of crude product pipes or oil wellheads and the subsequent theft of the products from the wellheads or pipes that leads to the various terminals. The increase in public awareness of the monetary value of oil and gas products coupled with the remote location of most of the facilities associated with them, have ensured a rise in the spate of pipeline vandalism and sabotage. According to Obadina, most of the ex- militant groups during the Niger Delta crisis were involved in this criminal act¹². Illegal bunkering and crude oil theft complicate the security situation in the nation's maritime domain. It remains a major criminal activity that is unabated which amounts to quantum loss of revenue and severe implications for Nigeria's economy since the oil industry accounts for over 90 percent of Nigeria's foreign earnings. It is however gladdening to note that the amnesty programme for the ex-militants has significantly reduced the incidents.

Marine Pollution. Marine pollution occurs mainly due to the discharge or dumping of toxic or hazardous waste from land based sources into the seas. The wastes are mainly from domestic household, agro-chemicals, organic, industrial waste, petro-chemicals, flood and sewage. Oil, ballast discharge/ bilges washings while at sea, noxious/harmful substances from ships and discharges caused by collisions/grounding and blow out of offshore rigs are other sources of pollution at sea. The petroleum industry is the major culprit resulting in the destruction of biomass and the marine ecosystem. Recent assessment by the FAO indicated that water pollution has led to distortion of ecological balance, environmental degradation and depletion of fishery resources¹³. The limited marine pollution control capability has contributed to the noticeable increase of the menace.

EXISTING MEASURES FOR COMBATING THE THREATS TO MARITIME RESOURCES PROTECTION IN NIGERIA

The current approach to the security of Nigeria's maritime resources is a multi-agency approach involving the Armed Forces (NN, NA and NAF) and other supporting agencies.

12. Interview with Obadina,S.O, on 16 April 2012 at NNS DELTA, Warri, Nigeria.

13. Barkindo,M.S., Op cit.p.7.

NIGERIAN NAVY

The NN is principally charged with the Maritime Defence of Nigeria by sea¹⁴. The NN conducts sea, air and land patrols by utilizing a mix of platforms, sensors and the physical presence of armed security personnel to sustain adequate deterrent posture and presence within the maritime environment. The NN fleet of ships includes Frigates, Covettes, Fast Attack Crafts, Mine Sweepers, Landing Ship Tanks, Survey Ship, River Town Class, Buoy Tenders, several boats/ interceptors and helicopters in the 3 Operational Commands. The NN Trident Strategy conceptualized the Navy's maritime mission as defence-in-depth within three overlapping perimeters¹⁵. Level One, the highest priority, is coastal defence and inshore operations involving surveillance, early warning, anti-smuggling and piracy operations; protecting offshore oil installations; search and rescue; and policing Nigeria's waters out to 100nm. Level two encompasses the maintenance of credible naval presence in the EEZ for monitoring, policing, and sea control; and for coordinating regional efforts, such as prevention of poaching, dumping of hazardous materials or toxic waste, and marine research up to 200nm. Level three, the outer ring, involves surveillance, intelligence-gathering, training and flag-showing cruises; independent and joint exercises; and allied operations. The patrols in this environment involve the protection of critical nodes and offshore maritime resources and activities. In view of emerging security challenges which are far removed from NN traditional areas of expertise, the NN has developed a special force known as the NN Special Boat Service (NNSBS) for maritime terrorism. Also, the NN has acquired and installed Maritime Domain Awareness (MDA) sensors under the Regional Maritime Awareness Capability (RMAC) Project. This facility which comprises AIS, radar and camera sensors, has effectively assisted the Nigerian Navy in the remote monitoring of coastal shipping movements and activities.

The operational effectiveness of the NN is inherently linked to the level of synergy with both the sister Armed Services, inter-navy co-operation and MoU with the other relevant national maritime agencies. These cordial relationships is being maintained and sustained by the NN.

The NN is adequately organized to carry out its role in securing Nigeria's maritime resources. However, it is obvious that the present degraded platforms holding of the NN cannot adequately meet the emerging threats for the effective maritime defence of Nigeria's maritime domain.

14. *The Constitution of the Federal Republic of Nigeria*. p.12.

15. *NN Standing Operating Procedure Manual*

NIGERIAN AIR FORCE

The NAF Air Maritime Group (81 AMG) is tasked with air maritime operations in conjunction with the NN and other maritime agencies for surveillance, search and rescue and other combat air support operations¹⁶. The unit has ATR – 42 MPA for maritime patrol. In its surveillance role, the ATR– 42 can fly for patrol well beyond the Nigerian EEZ. The Automatic Identification System (AIS) and the Elect Optical Surveillance and Tracking System (EOST) of the aircraft can detect and track any target within 200nm radius of its position. Identified and acquired information's are relayed live to the Air Maritime Coordinating Centre (AMCC) and are shared with other agencies for informed actions. The NAF is poised to work in synergy with the other maritime agencies within an established integrated framework to protect Nigeria's maritime assets and guarantee Nigeria's national security.

NIGERIAN ARMY

The 82 Division of the Nigerian Army (NA) is a composite division charged with the responsibilities of providing static security for oil installations and terminal in the Niger Delta area¹⁷. The units are equipped with few small size craft and patrol boats to support their operations. The activities of these units have been co-opted into the duties of the Joint Task Force (JTF)- OP PULO SHIELD with an expanded role. The main role of the JTF is to secure the water ways and curtail the spate of militancy, illegal oil bunkering, armed attack, vandalism of pipe lines and other criminal acts in the Niger Delta region. The JTF comprises of personnel drawn from the 3 services, state security service and civil defence corps with the NA as majority/ lead agency. The maritime and air assets of the organic bases of the NN and NAF support the activities of the JTF . OP PULO SHIELD is still in its formative stage and inter-agency engagements with other maritime agencies are yet to be properly enshrined for cooperation. The activity of the JTF are still confined to the creeks, river entrances and anchorages and still rely on the NN and NAF to project capabilities to the sea for the protection of Nigeria's maritime resources.

16. Iya,A.A.,2011, Brief on Operational Readiness of the Nigerian Air Force. Lecture delivered to Senior Course 34 , Armed Forces Command and Staff College, Nigeria, 12 March, p.4.

17. Ochoga,J.A.O.,2011. Brief for the Chief of Army Staff on the Activities of OP-PULO SHIELD, Yenegoa: Nigeria on 7March, p.3.

OTHER AGENCIES

The Fisheries Department of the Ministry of Agriculture is responsible for the regulation of fishery activities and oceanographic research in the country. The department collaborates with other relevant agencies in the enforcement of fisheries laws in order to prevent illegal fishing and over exploitation within the restricted and prohibited zones. The agency is poorly equipped and lack boats, craft and adequate vessels to perform the task¹⁸.

The Nigeria Ports Authority (NPA) is vested with statutory power under the Port acts of 1954 and 1999 to operate and regulate ports facilities and activities in Nigeria. She is expected to comply with the International Maritime Organization (IMO) and ensure compliance with the Safety of Lives at Sea (SOLAS) and International Ship and Port Facility Safety (ISPS) code. The marine police (NPF) and Nigerian Custom Service (NCS) marine section are equipped with few boats to enforce security against economic crimes within the inland waters, terminals and ports in support of the NPA. The NPA is fairly equipped with boats, craft, tugboats and few vessels across the various ports in Nigeria for its task¹⁹.

NIMASA is responsible for regulating Nigerian shipping, maritime safety administration, maritime labour, allocate export cargoes and implementation of cabotage, registration of ships and sea farers²⁰. NIMASA is equipped with few vessels and helicopters. The platforms holdings are inadequate given the expanded roles of the agency. The agency has MDA initiative tagged "Maritime Electronic Highway" comprise of a synergy of Vessel Traffic Services (VTS) and Automatic Identification System (AIS). NIMASA has MoU supported by 4 pillars activity lines on response, training, information sharing and hydrography with other agencies. A jointly manned Maritime Guard Command (MGC) between the NN and NIMASA has been established to aid the law enforcement roles of NIMASA²¹.

The Presidential Implementation Committee on Maritime Safety and Security (PICOMMS), an ad-hoc committee was primarily established in 2004 to ensure that Nigeria meet with the internationally mandated implementation of the ISPS code²². PICOMSS has Integrated Coastal Maritime Radar Surveillance System (COMARASS) project to facilitate MDA within Nigeria's coastal areas. The

18. Solarin,B.,2012, Director Fishery Department, Nigerian Institute for Oceanography and Marine Research, Lagos, Nigeria, Interview granted Researcher on 16 April.

19. Adewusi,A.B.,2012. Operations Manager, Container Terminal , Nigerian Ports Authority, Apapa, Lagos, Nigeria, Interview granted Researcher on 16 April.

20. Nimasa. Available at <http://nimasa.gov.ng>. [Accessed 25 May 2012]

21. Akpobolokemi,Z.P., Op. cit.p3.

22. http://www.nigeriafirst.org/objspeeches/2004/maritime_safety.html. [Accessed 25 May2012]

outfit also operates MPA aircraft and Unmanned Aerial Vehicles (UAVs) that can be launched for real time data compilation and link for patrol of Nigeria’s coastal areas.

CHALLENGES AGAINST THE EXISTING MEASURES AT PROTECTING NIGERIA’S MARITIME RESOURCES AND STRATEGIES FOR EFFICIENCIES

CHALLENGES

The key challenges that are common to all the agencies are:

Platforms Inadequacy. The lack of adequate platforms for effective patrol and monitoring of the Nigeria’s maritime domain is a common challenge amongst all the agencies saddled with the protection of the maritime resources. Adequacy refers to increase in number and ideal platforms type (appropriateness and correct mix) for a given maritime task. The numbers, balanced and correct mix of ships, aircraft, coastal radars, equipment, UAVs amongst others for the Armed Forces and other agencies are grossly insufficient to jointly secure the large expanse of Nigeria’s waters.

Inadequate Funding. Funding for the Armed Forces and the other agencies has been a challenge to the establishment of appropriate structure for the maritime security of Nigeria. The Federal Government spends 0.9% of the GDP on defence. This is well below the United Nations recommendation of 3%. As shown in Table 1, on defence expenditure as a percentage of the GDP there has been a decline in Nigeria’s expenditure for defence and quite low when compared with some major developing countries like Brazil, India, Egypt and South Africa.

Table 1: Defence Expenditure as Percentage of Gross Domestic Product				
Serial No	Country	Year 2004	Year 2005	Year 2006
(a)	(b)	(c)	(d)	(e)
1.	Brazil	1.5	1.6	1.6
2.	India	2.6	2.8	2.9
3.	Egypt	3.0	2.8	2.9
4.	South Africa	1.5	1.5	1.5
5.	Nigeria	0.8	0.7	0.7

Source: Nigerian Naval Headquarters.

There is no agency that can embark on new platform acquisition without special funding from the government. The underlining fact in the prevailing situation is that the current practice of annual budget appropriation is not sufficient to meet platforms acquisition requirements.

Inadequate MDA Infrastructure. Maritime Domain Awareness (MDA) is the effective understanding of anything associated with the global maritime domain that could impact on the security, safety, economy or environment of a country. This is attainable through coastal defence radars and surveillance systems which are almost absent along the 420nm coastline of Nigeria. Overview of the few that exist include the followings; PICOMSS has Integrated Coastal Maritime Radar Surveillance System (COMARASS), the NIMASA MDA initiative tagged “Maritime Electronic Highway” and the NN MDA facility RMAC located in Lagos, Badagry, Bonny and Ibaka. Currently, besides these efforts, the nation practically lacks adequate MDA capacity to cover the coastline. This observation therefore calls for provisions of more MDA infrastructure and a better coordinated approach for national MDA architecture.

Limited Inter-Agency Cooperation. There exist near absence or at best limited inter-agency engagement and cooperation in the maritime sector. The duplication and assignment of agencies statutory roles backed with appropriate legislation to Committees and Task Forces by subsequent Government has continued to breed mistrust, animosity and inter-agency rivalry. For instance, NPA Act 1954 empowers the agency to monitor maritime environment while MARPOL73/78 empowers NIMASA to do the same task. PICOMMS is agitating to take over the duties of the NN and NIMASA with the MASECA bill if enacted without organic platforms in place. OP PULO SHIELD has virtually arrogated powers to itself and almost wanting all the organic NN and NAF asset ceded to its operations in the Niger Delta. This unhealthy conflict often results in hoarding of timely information sharing in the protection of Nigeria's maritime resources. The agencies operate independently and only interact when compelled by circumstances and their interaction lacks genuine trust and continuity. Appropriate policy guidelines and coordination infrastructure could be enshrined for cooperation with other agency.

Lack of Institutional Policy Framework and Doctrinal Capacity. There is absence of institutional policy framework and doctrinal capacity for coordinating activities in Nigeria's maritime domain. Although there are several maritime agencies, each does so independently under their various institutional organs. For instance, fisheries control is under the Federal Ministry of Agriculture; NIMASA is under the Ministry of Transport while the Armed Forces is under the Ministry

of Defence. There is no central body to coordinate all maritime stakeholders for better effectiveness. In addition, there is no policy and emplacement of appropriate common procedures, particularly on joint operations, training and information sharing to address the efficient management of the environment. There are no established Standing Operating Procedures (SOPs) on maritime policing operations. Where there are guidelines for individual agency, there is no unified doctrinal document that contains all existing policies on activities in Nigeria's maritime environment. Hence, there is no clear procedure for coordination. This inadequate institutional and policy framework adversely impacts effective protection of Nigeria's maritime resources and needs proper attention.

STRATEGIES

There is need for synergy in coordinating the activities of the several agencies for effective policing into a common security framework. To this end, an integrated approach for security of Nigeria's maritime resources in which the NN plays the lead agency role is hereby proposed to ensure cost effectiveness, joint usage of resources, sharing of information and burden as follows:

Establishment of an Integrated Maritime Security Command

The lack of unified synergy and defining a key agency to be held responsible for the success or failure in the protection of the maritime resources has continued to create room for lapses amongst the agencies saddled with the task. For instance, the Royal Norwegian Navy has command specifically dedicated to the protection of strategic installations within her territorial waters. Similarly, the Royal Australian Navy (RAN) empowers a section of its naval force known as the Patrol Boat Force to carry out the policing of her maritime environment. Nigeria could adopt the model, whereby an organ specifically the newly established Central Naval Command (CNC) of the NN under the proposed integrated approach could function as an Integrated Maritime Security Command (IMSC) dedicated for maritime resources protection with appropriate assets.

Platforms Recapitalisation

The AFN and the other maritime agencies must be capable of sustaining continuous patrol by sea and air over the EEZ and along the coast and adjoining waters. This capability requires the provision of adequate ideal and appropriate mix of platforms and infrastructure for the agencies by Government. The asset recapitalisation would include a combination of Inshore Patrol Craft

(IPCs), Seaward Defence Boats (SDBs), Offshore Patrol Vessels (OPVs), Fast Attack Craft (FAC), Speed boats, Tug boats, Maritime Patrol Aircraft (MPAs) and helicopters. This would provide a long – term solution as having a virile and strong integrated maritime force with effective deterrence posture for the protection of Nigeria's maritime resources.

Establishment of National Maritime Security Trust Fund

The enormous funds generated from the maritime sector demands that adequate provision of funds be made available to protect and secure the resources. It has become apparent that budgetary allocation alone would not meet the needs of security agencies in the protection of the maritime environment. There is the need for the establishment of a National Maritime Security Trust Fund (NMSTF) for sustainable process of equipping and funding of the maritime safety and security activities in Nigeria. The relevant stakeholders could consider adopting a collaborative funding through contributions derived from 0.5% of the agencies annual appropriation, 1%-1.5% contributions from the major stakeholders involved in exploration and exploitation annual net profits as well as levies on commercial activities in the maritime environment. To this end, a legislation to establish the NMSTF and the modality for the contributions and execution would be appropriate. The fund could be used mainly to implement approved platforms acquisition and capacity building programmes for the agencies. The mechanism could be jointly managed by an inter-agency committee under the Presidency.

Development of National MDA Cooperation Plan

The Maritime Operations Coordinating Board Act CAP. M4 of 1992 No. 74, which was established to formulate policies for the effective control of all maritime operations in Nigeria's waters could be leveraged upon to develop a National MDA Cooperation Capacity Development Plan for Nigeria. The existing networks of the various agencies MDA efforts could be integrated into a common harmonised and interfaced sensor system for the maritime domain. The COMARASS of PICOMSS, Maritime Electronic Highway of the NIMASA and RMAC project of the NN could be merged and expanded to develop a unified National MDA plan to conserve resources and ensure a common effective capability. The developed National MDA Plan could also be interfaced with the Total Radar Coverage of Nigeria (TRACON) project to give a total air picture of Nigeria for both civil and military uses.

Development of Adequate Institutional Policy Framework and Cooperative Engagement

It is imperative that Nigeria articulates all her policies on various aspects of maritime operations covering economic, political, military and scientific activities into a single unified doctrinal policy document. Joint training programmes on maritime policing, SOPs and other cooperative engagement frame work well spelt out for guidance. This would enable all stakeholders operate from a common framework for mutual cooperation and interest in the security of the domain devoid of rivalry. Establishing an integrated maritime operations coordination network including communication, information generation and distribution network is therefore necessary. Towards achieving this, it is suggested that inter-agency Maritime Operations Coordination Centre (MOCC) could be initiated and established at Lagos, Warri, Port-Harcourt, and Calabar to support the proposed Integrated Maritime Security Command (IMSC) operations.

Political Commitment

Finally, strong political will and national ownership are vital parts of an effective strategy. Government and the leaders of the various agencies must demonstrate an unwavering commitment to ensure the comprehensive implementation of the strategies. An unwavering political will (which is central to any successful strategy) is therefore required for the success of the proposed strategy.

RECOMMENDATIONS

It is recommended that the FGN should:

- a. Designate the CNC as an Integrated Maritime Security Command.
- b. Embark on platforms recapitalisation.
- c. Establish a National Maritime Security Trust Fund.
- d. Develop a common National MDA Cooperation Plan.
- e. Develop an adequate Maritime Policy Framework.
- f. Demonstrate political commitment.

CONCLUSION

The sea is a common heritage to mankind and embedded therein lies huge resources for exploration and exploitation for survival of littoral states. Nigeria is a littoral state with total sea room of about 84,000sqm. The maritime environment is endowed with abundant deposit of living and non- living resources such as aquatic marine lives, oil and gas, minerals amongst others. The maritime resources constitute the main revenue base for the development and well being of the country. The geo- strategic importance is appreciated as a huge maritime estate and gateway for trade (shipping) and source of oil and gas producer and exporter for the world economy. The oil and gas account for about 70% of the total GDP, 90% foreign exchange earnings and 80% of total revenue.

The maritime resources are undermined in diverse ways by external and internal threats. The domestic threats include illegal bunkering/crude oil theft, smuggling, poaching and piracy amongst others. These formidable threats have continued to impact negatively on the economy and have led to loss of revenue, unemployment and depletion of marine resources. Thus, the over- riding goal is to develop, protect, sustain and secure the entire maritime environment safe for viable economic activities to thrive. The regulatory legal regime for appropriate defence and protection of the maritime resources is enshrined in the Constitution of Nigeria and Armed Forces Cap A20 Laws of the Federation. The responsibility lies with the AFN and the other supporting maritime stakeholders with the NN as lead agency.

The study assessed the AFN and the other maritime agency efforts and capability in the protection of maritime resources. The parameters used for the assessment included adequacies of structure, instruments for inter-agency cooperation and availability of platforms for surveillance and enforcement. The survey reveals that Nigeria is rich in living and non- living resources. The environment is characterised with rising threats profile, series of nefarious and unabated illegal activities, abused exploration and exploitation and unattended security gaps which calls for concerns. Consequently, there is the need to forge a robust mechanism in fighting the scourge.

The assessment of the current security capability to protect the maritime resources established that the AFN and the other agencies are adequately organised to perform their roles. However, their approach and delivery effectiveness is adjudged low and inadequate to curb the menace. This was found to be due to contemporary challenges identified mainly as inadequate platforms, limited inter-agency cooperation, inadequate funding, lack of common MDA capabilities, lack of joint maritime security frame work and limited political will. To mitigate these

challenges, these strategies proffered include the establishment of an Integrated Maritime Security Command, platforms recapitalisation and establishment of National Maritime Security Trust Fund to pull resources and efforts together into a common pool for cost effectiveness and synergy. Others are the merging of the MDAs efforts and task to develop a common National MDA Cooperation Plan for picture compilation and information sharing, development of adequate Joint Maritime Policy Framework/ Cooperative engagement for unified actions and demonstrable political commitment to enforcement.

BIBLIOGRAPHY

Books

1. Armed Forces Command and Staff College, Maritime Warfare Division, Handbook *Brown Water Operations in the Nigerian Navy*, (DMN/SPS/01/Vol 1).
2. Clarke, B. et al.,1994, *Coastal Forces*, London: Brassey's UK.
3. *Constitution of the Federal Republic of Nigeria*, 1999.
4. Imobighe,P.,2010 cited in Phelps,S.,2002, *Nigeria Maritime Security, the Reality*, Published by Mark Lowe Nigeria, 2010.
5. *Macmillan Dictionary* (online version), Macmillan Publishers Limited.
6. *Microsoft Encarta 2009*
7. *NN Standing Operating Procedure Manual*
8. Pugh,M.,1994, *Maritime Security and Peacekeeping: A Framework for United Nations Operations*. New York: Manchester University Press.
9. *The Armed Forces Act CAP A20 Part 1, Section 1, Subsection 49*.

Journals

10. FAO cited in Jonah,G.J.,2010, Maritime Dimensions of Nigeria's National Security. Constructive Engagement, *Journal of Alumni Association of National Defence College Nigeria*, vol 1.
11. Oyewo.,E.O et al.,2002, Anthropogenic Activities and their Impact on Aquatic Resources in the Nigerian Coastal Zone cited in Mbare,N.,2009. *Impact of pollution on Aquatic Living Resources in Africa*, Proceedings of the 5th Session of Inter- Africa Committee on Oceanography Sea and Inland Fisheries.
12. The International Chamber of Commerce(ICC)- International Maritime

Bureau (IMB) Annual Report-2008.

13. Wiley,J., 2008, The Role of Cognitive Skills in Economic Development Literature, *Journal of Economic Literature*.

Unpublished Materials

14. Admiral Goshkov, quoted in Ibrahim,O.S., 2011. The Nigerian Navy: Challenges and Future Perspectives, Lecture delivered to Participant National Defence College Course 19.
15. Adenote,S.,2002, Maritime Crimes and Coastal Security: Challenges for the Nigerian Navy. Project submitted to the National War College, Nigeria.
16. Akpobolokemi, Z.P., 2011, National Maritime Security Challenges and Responses. A paper delivered at the occasion of the Maritime Reporters Congress Annual Conference, Uyo, Nigeria.
17. Ayoola,O.,2010, Deep Sea Oil Exploration: Security Implication to Nigeria, Lecture delivered at the Armed Forces Command and Staff College, Jaji, Nigeria.
18. Barkindo,M.S.,2010, The Oil and Gas Industry and the Nigerian Economy, A paper delivered at the National Institute of Strategic Studies, Kuru, Jos, Nigeria.
19. Ibrahim,O.S.,2011, Challenges to Maritime Security: Nigerian Navy Perspective. Paper presented to the Panel Perspective Challenges to Maritime Security at the 20th International Sea power Symposium, Rhodes Island, USA.
20. Iya,A.A.,2011, Brief on Operational Readiness of the Nigerian Air Force. Lecture delivered to Senior Course 34 , Armed Forces Command and Staff College, Nigeria, 12 March.
21. Langewieshe,W. in Ibrahim,O.S., 2005, Piracy and Maritime Crime on the Coast of Africa: Trends and Countermeasures, A paper delivered at Sea Power Symposium Africa , South Africa.
22. Ochoga,J.A.O.,2011, Brief for the Chief of Army Staff on the Activities of OP-PULO SHIELD, Yenegoa: Nigeria on 7March.
23. OS Ibrahim,O.S.,2011, Challenges to Maritime Security: Nigerian Navy Perspective, A paper delivered to the panel on Perspective Challenges to Maritime at the 20th International Sea Power Symposium, Rhodes Island, USA, October.

24. ZP Akpobolokemi,Z.P.,2011, National Maritime Security Challenges and Responses, A paper delivered at the occasion of the Maritime Reporters Congress Annual Conference, Uyo, Nigeria, 29 November.

Internet

25. Baldrige National Quality Program at the National Institute of Standard and Technology. Available at http://www.baldrige.nist.gov/PDF/files/2009_2010_Business_Nonprofit_Criteria.pdf. [Accessed 4 March 2012].
26. Brown, H.,1983, *Thinking about national security: defense and foreign policy in a dangerous world*. As quoted in Watson, Cynthia Ann.,2008. *U.S. national security: a reference handbook*. Contemporary world issues (2 (revised) ed.).ABC-CLIO.p. 281. ISBN 978-1-59884-041-4. <http://books.google.co.in/books?id=KnlIR4YO2vsC>. [Accessed 24 March 2012]
27. Nimasa. Available at <http://nimasa.gov.ng>. [Accessed 25 May 2012]
28. Solarin,B.B.,2012, Head of Department, Fishery Resources Department, Nigerian Institute of Oceanography and Marine Research, Records of Reports – *Operations Room Manual* 16 April, p.3.

Interviews

29. Ojeyemi,O.,2012. Director of Operations, PICOMMS. Unstructured Interview granted Researcher 17 April.
30. Adewusi,A.B.,2012, Operations Manager, Container Terminal , Nigerian Ports Authority, Apapa, Lagos, Nigeria, Interview granted Researcher on 16 April.
31. Interview with Obadina.S.O, on 16 April 2012 at NNS DELTA, Warri, Nigeria.
32. Solarin,B.,2012. Director Fishery Department, Nigerian Institute for Oceanography and Marine Research, Lagos, Nigeria, Interview granted Researcher on 16 April.

Author

Captain Williams Onovuhe Kayoda is a Course Member of NDC 2012. He was born on 10 Feb 1966 in Kokori, Delta State, Nigeria. The Senior Officer was a member of 36 Regular Course, Nigerian Defence Academy and graduated in 1988. He had served in various professional capacity, both ashore and afloat.

His working experiences amongst others include, Watchkeeping duties onboard several NN ships, Navigating Officer; NNS AYAM, NSS EKPE and NNS EKUN, Commanding Officer NNS MAKURDI, Staff Officer grade 1 Training (AFRC) and Command Administrative Officer WNC. He was also the First Lieutenant NNS PATHFINDER, Senior Instructor NDA (Naval Wing) and Opposing Force Commander, AFSC, Jaji. Furthermore, he was the Deputy Director Plans and the Deputy Director Training at the Naval Headquarters.

Capt Kayoda participated in Peace Support Operations; ECOMOG in Liberia, Ops LIBERTY and Ops SANDSTORM in Sierra-Leone. He was participant, Multinational Naval Exercise AMAN 11 in Karachi, Pakistan. Member, CNS Staff Team Training Tour, United States Navy and Marine Corp Facility 2011 – the United States of America. Participant, Naval Africa Forces (NAVAF) AFRICOM, Main Planning Conference, Stuttgart in Germany and a member, Sovereignty Conflict Resolution, Naval Postgraduate School, Monterey, California.

The Senior Officer holds a Bachelor of Science (Hons) degree in Chemistry and a Master of Science (MSc) degree in Operations Research. He attended number of courses both at home and abroad. His awards and decoration include Forces Service Staff (FSS), Meritorious Service Star (MSS), Passed Staff Course (psc) and he is a Member, Royal Institute of Navigation (MRIN). He has visited many countries across the globe.

Capt Kayoda is happily married with 4 children, a boy and 3 girls. His hobbies include travelling, reading, Playing football and listening to gospel music.

LONG TERM ENERGY SECURITY FOR BANGLADESH – FEASIBILITY OF NUCLEAR POWER

Lieutenant Colonel Abu Mohammad Sarwar Farid, afwc, psc

INTRODUCTION

Energy and environment security are the two most soaring problems in the world today. The accessibility and affordability of energy have been significantly impacted in recent times due to increasing instability in the supply and also the fluctuating prices.¹ Since 1980, the global consumption of primary energy has doubled² and in future, consumption is projected to rise rapidly. According to an estimate, the world energy consumption will increase 53 percent from 2008 to 2035 in a business-as-usual-scenario, if no additional policy actions are taken to address energy and environmental issues.³ Bangladesh as a developing state has been gradually falling short of its economic potential because of inadequate infrastructure, particularly in the energy sector. There is a strong need for sufficient supply of energy in order to achieve the goal of poverty reduction and social development through National Strategy for Accelerated Poverty Reduction (NSAPR-II).⁴

Nuclear energy emerged with lot of promises in the 1960s. It expanded rapidly in the 1970s amongst the developed countries. When it was expected to be spreading more specially among the second ranked countries, few accidents and their impacts held the world back. Towards the end of the last century nuclear power again got momentum. It is specially because the fossil fuels are decreasing gradually and they are less environment friendly than nuclear energy. Despite, huge initial cost, nuclear energy is cheap in the long run.

Energy security by and large is an association between national security and the availability of natural resources for energy consumption. Bangladesh has limited indigenous natural energy resources. Natural gas, coal, renewable energy

1. Col A K M Nazrul Islam, “Bangladesh: Mitigating Energy Insecurity and Environmental Vulnerability”, in *Energy Security and Environmental Security: A Cooperative Approach in South Asia*, Ed D. Suba Chandran and J. Jegannathan, Institute of Peace and Conflict Studies (IPCS), New Delhi, India, October, 2011, p-1.
2. Economic and Social Commission for the Asia and Pacific (ESCAP), “Energy Security and Sustainable Development in Asia and the Pacific”, Bangkok: United Nations, 2008.
3. Kensuke Kanekiyo, “Energy Outlook of East Asia and Challenges for Sustainable Development”, Paper presented in the *Regional Workshop on Dealing with Energy Vulnerabilities: Case Studies of Cooperation and Collaboration in East Asia*, organized by RSIS Centre for Non Traditional Security (NTS) Studies on 09-10 December 2010 at Singapore.
4. General Economics Division, “Steps Towards Change: National Strategy for Accelerated Poverty Reduction (II) Revised: FY 2009-II”, Planning Commission, Government of Bangladesh, *The Key thrust of macroeconomic policy is to ensure higher growth and generate employment*, p-xv.

including traditional biomass are the principal indigenous energy resources of Bangladesh. The country's energy and power sector are currently relying very heavily on indigenous natural gas. But the supply of these resources is not enough to meet the ever-growing energy demand of the country. The need for nuclear power plants is therefore a call of the time.

Nuclear power infrastructure in Rooppur was established primarily in the 1960s which was later never materialised. Now Bangladesh is approaching to acquire nuclear power by establishing its first nuclear power plant by 2018 with the cooperation of Russia. There are many advantages of nuclear power, while there are many challenges too. The challenges will have to be mitigated before the projects can give dividend. It is by far the biggest challenge in the power sector for Bangladesh and she will need her absolute professionalism in handling it.

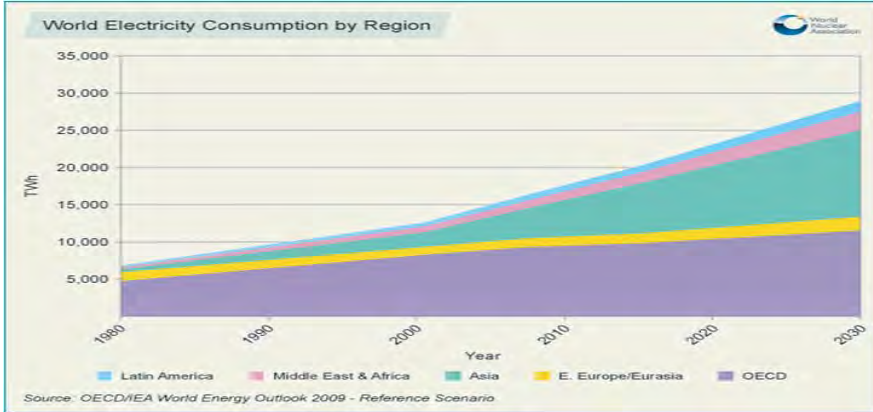
This paper, therefore, analyses the feasibility of nuclear power plant in Bangladesh to ensure long term energy security. In doing that, the paper will highlight the energy resources available in Bangladesh and their prospects in rendering long term energy security in Bangladesh. The paper will also analyse the nuclear power projects and its effect in some other countries as examples to draw lessons from. Last but not the least the paper will put forward some recommendations based on the critical analysis of the nuclear plant in Bangladesh.

NUCLEAR ENERGY IN GLOBAL PERSPECTIVE

Global Energy Scenario

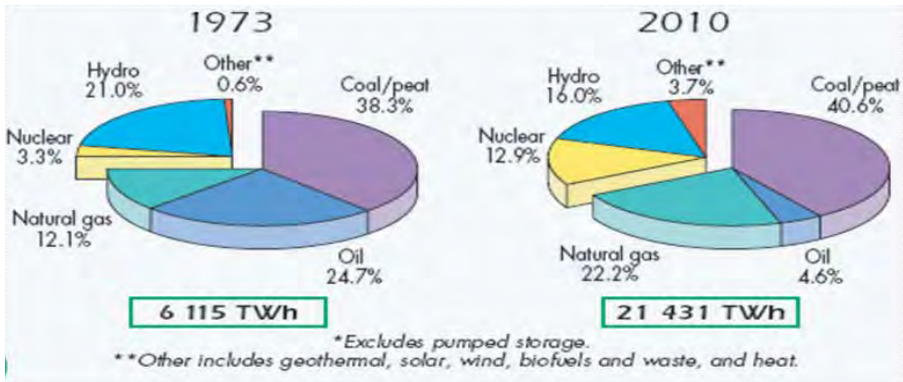
The United Nations predicts the world population growth from 6.6 billion in 2007 to 8.2 billion by 2030, with an ever increasing demand for energy substantially over that period. Both population growth and increasing standards of living for many people in developing countries will cause strong growth in energy demand. Over 70% of the increased energy demand is from developing countries, led by China and India. World Electricity consumption rate by region is given at **Figure 1**.

Figure 1: World Electricity Consumption by Region



Source: OECD/IEA World Energy Outlook 2009⁵

Figure 2: World Electricity Consumption Rate for Electricity Consumption



Source: IAEA, Energy Statistics Division

World energy consumption rate for electricity generation in 1973 and 2010 is given in **Figure 2**. What is noticeable in the statistics is that the consumption of oil has reduced over the years whereas consumption of natural gas and nuclear has increased and consumption of coal remains as the highest used energy resource.

5. OECD/IEA World Energy Outlook 2009, retrieved from World Nuclear Association (WNA) Website, <http://world-nuclear.org/info/inf16.html>, entered on 07 August 2012.

6. IEA, Energy Statistics Division, "Key World Energy Statistics 2012".

Global Scenario of Nuclear Energy

The global nuclear industry has evolved through three main stages. The first period, between 1954 and 1974 saw an upsurge of nuclear plans especially in the early 70s. The second period extends from the late 1970s to the mid-2000s, and is marked by a downturn in the 80s since the 1979 Three Mile Island accident and the 1986 Chernobyl disaster. The third period extends from the mid-2000s until the beginning of 2011, and is commonly called the “nuclear renaissance”. The global nuclear sector enjoyed an upward trend, largely because of rapid development in non-Organisation for Economic Cooperation and Development (OECD) countries (mainly China).

Despite the downturn of the second period, overall, these three periods saw a constant increase in nuclear production. However, the present revival of this upward trend of nuclear energy took a blow following the worst effects of the accident occurred at Japan’s Fukushima NPP in 2011.

Fukushima NPP Accident in Japan and its Impact

Fukushima Accident. Japan’s several nuclear power facilities including Fukushima Dai-ichi and Dai-ni were severely affected by a series of tsunami waves estimated to be over 14 m high. The Fukushima Dai-ichi facility was only designed to withstand tsunami waves of a maximum of 5.7 m high.⁷The tsunami meant that the emergency cooling system was flooded which caused continued lack of cooling resulting fuel meltdown and radioactive materials being released into the atmosphere. The International Atomic Energy Agency (IAEA) assessed the severity of the Fukushima accident as Level 7, based on the International Nuclear and Radiological Event Scale (INES).

Impact of Fukushima Accident. The Fukushima accident prompted an immediate review of the safety of nuclear energy in most countries with nuclear programmes.⁸However, the Fukushima accident has not so far led to a significant retraction in nuclear power programmes in countries outside Europe, except Japan itself. In Europe, changes in nuclear policies have only taken place in Germany, Switzerland, and Italy.⁹There are almost 50 countries that are operating, building, or simply considering nuclear generation as a viable solution for electricity generation. Half of them are “newcomers”, including Bangladesh. These numbers suffice to indicate that nuclear power will continue to grow.

7. Mission Report, “IAEA International Fact Finding Expert Mission of the Fukushima Dai-ichi NPP accident following the Great East Japan Earthquake and Tsunami”, 24 May – 02 June 2011.

8. World Energy Council (WEC) report, “World Energy Perspective: Nuclear Energy one year after Fukushima”, 2012.

9. Ibid.

AN OVERVIEW OF ENERGY AND POWER SUPPLY SCENARIO IN BANGLADESH

Energy Security and Bangladesh

The International Energy Agency (IEA) has described energy security as ‘the uninterrupted physical availability at a price which is affordable, while respecting environment concerns’¹⁰. Long term energy security is mainly linked to timely investment to supply energy in line with economic developments and environmental needs. On the other hand short term energy security is basically the ability of the energy system to react promptly to sudden changes in supply and demand.¹¹

At hindsight it can be said that Bangladesh has failed to attain short term energy security. It is, therefore, a long shot to attain long term energy security. To ensure guaranteed and uninterrupted supply of energy for next about 50 years, with the limited indigenous energy that it has, Bangladesh needs to plan and take necessary actions right from now.

Energy Consumption Pattern in Bangladesh

There are two distinct energy sectors in Bangladesh – the urban/industrial/commercial sector and the rural/household/non-commercial sector each with different primary energy sources.¹² **Table 1** shows the share of primary energy consumption in Bangladesh.

Table 1: Share of Primary Energy Consumption		
	1994	2008
Commercial	46%	68% ¹
Biomass	54%	32%
Source: Dr Mohammad Shawkat Akbar. ¹³		

10. Retrieved from http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4103 on 05 June 2012.

11. Ibid.

12. Col AKM Nazrul Islam, “Bangladesh: Mitigating Energy Insecurity and Environmental Vulnerability,” op cit, p-5.

13. Dr Mohammad Shawkat Akbar, “Energy sector development strategies in the context of Climate change to face the challenges of the sustainable Development”, presentation given at National Seminar on Solar Energy – 2008, 24-25 March 2008.

The per capita availability of energy infrastructures and resources are very low in Bangladesh. Only 45% of the population has access to electricity and such access in the rural areas is only 25%.¹⁴ The per capita electricity consumption in Bangladesh is 148.048 kWh which is the lowest among the South Asian countries.¹⁵

Present State of Supply and Demand of Power in Bangladesh

Though, the demand for power has been rising in Bangladesh almost by 10% every year, efforts of successive governments in the past for the development of this sector has been inadequate. As a result of that, the country today suffers from chronic deficit and unreliable supply of electricity which is the natural consequence of years of negligence.

Only 15% of the population have direct access to natural gas.¹⁶ Diversification of energy supply sources is the starting point of energy security.¹⁷ Bangladesh has a generation capacity of maximum 4,000 MW of power against a demand for 6,000 MW.¹⁸

Projected Growing Power Demand in Bangladesh

The demand in the country is increasing gradually. But the supply is not increasing in the same way. The existing power crisis and load shedding are interrupting the domestic life and severely affecting the national economy.

The future demand for energy is given in the **Table2**.

-
14. Ijaz Hossain, “Present and Future of Bangladesh Energy Policy and possible areas of cooperation between Korea and Bangladesh”, paper presented in the Roundtable on *Energy-Future of Korea-Bangladesh Energy and Power*, December 2009, p.4.
 15. Retrieved from http://www.nationmaster.com/graph/ene_ele_percap-energy-electricity-consumption-per-capita accessed on 10 June 2012.
 16. Dr Abdullah Al Faruque, “A Right Step for Energy Security”, *The Daily Star*, Nov 28, 2011.
 17. World Economic Forum, “The New Energy Security Paradigm”, Spring 2006, p.5.
 18. The New Age, 06 April 2010, p 15.

Table 2: Future Energy Demand (in MTOE)

Energy Sources	2000	2010	2020	2030	2040	2050
Natural Gas	7.7	14.2	22.9	33.6	45.6	57.1
Oil	3.2	5.9	8.9	12.1	15.4	20.1
Coal	0.3	0.6	1.3	3.0	4.7	5.1
Renewable	0.1	0.2	0.5	0.7	1.3	1.7
Total	11.3	20.9	33.6	49.4	67.	84.0

Source: Razia Sultana, *Quest for Energy Security in Bangladesh: Challenges and Prospects*.¹⁹

Present Energy Scenario of Bangladesh

21. **Natural Gas Scenario.** Natural gas is the principle energy resource of Bangladesh. Approximately, (4-5)% households of the country have natural gas supply.²⁰

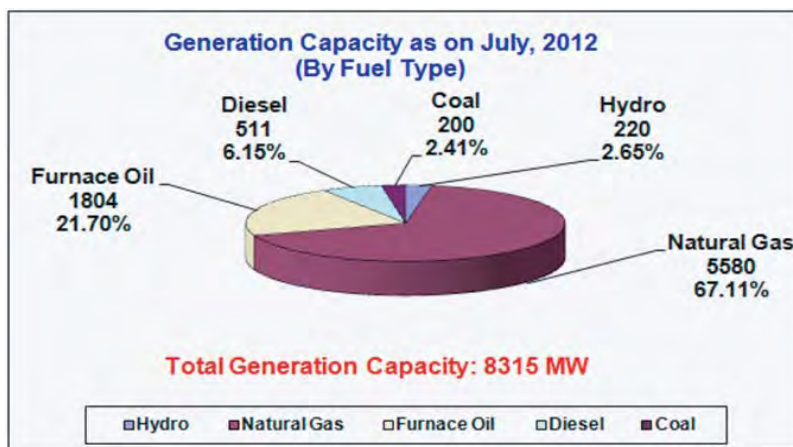
a. Present Utilization of Gas is to meet Power Needs. Over 80% of Bangladesh’s power plants are now running by natural gas and the remaining 20% by hydro, coal and liquid fuel. Currently, per day about 2000 million cubic feet (mmcf) of gas is produced in the country against a demand of 2500 mmcf.²¹ Present use of Gas vis-a-vis other energy resources for electricity production is given at Figure 3.

19. Razia Sultana, *Quest for Energy Security in Bangladesh: Challenges and Prospects*, BISS Journal, Vol 29, No 1, January 2008.

20. IjazHossain, op cit.

21. PetrobanglaAnnual Report, 2009.

Figure-3: Present use of Energy for Power Generation



Source: Bangladesh Power Development Board (BPDB²²)

- b. The gas initially in place (GIIP) has been estimated as 28.856 trillion cubic feet (tcf) out of which estimated proven recoverable reserve is estimated at 20.605tcf. Up to December 2011, as much as 10.132tcf gas has been produced, leaving only 10.473tcf of recoverable gas as on January 2012.²³ So the remaining possible reserve is likely to be 7.69tcf which is expected to last up to 2019.²⁴

Coal Scenario.

- a. **Present Utilization of Coal to meet Power Needs.** At present there is one underground coal mine in Barapukuria in operation with a production capacity of 1MT/per year²⁵. This mine is being used to fuel the 250-MW Coal-Fired Power Plant at Barapukuria in Parbotipur since January 2006. At present it is continuing with actual production of only 0.5 MT per year which is half of its designed capacity.²⁶

22. Retrieved from website https://energypedia.info/index.php/Bangladesh_Country_Situation.accessed on 16 August 2012.

23. Prof M Nurul Islam, “Energy Resources and Governance Issues: Bangladesh Perspective”, presentation given at the National Seminar organized by the department of Chemical Engineering and the chemical Engineering Alumni Association at BUET, 06 April 2012.

24. Professor M Nurul Islam, “Energy Resources & Governance Issues: Bangladesh Perspective”, presentation given to 52nd Senior Staff Course at BPATC on 25 February, 2010.

25. Professor M Nurul Islam, “Energy Resources & Governance Issues: Bangladesh Perspective”, 25 February 2010.

26. Professor M Nurul Islam, “Energy Resources & Governance Issues: Bangladesh Perspective”, 06 April 2012.

- b. **How Long the available Coal is likely to last.** Bangladesh has around 12 identified coal basins and 5 depositors²⁷. According to expert estimate total extractable coal from the discovered coal fields may vary 234 MT (Underground mining method) to 660 MT (Open cut and underground mining method) which are insufficient to meet requirement up to 2030.²⁸
- c. **Possibilities/Difficulties of exploring the Coal Mines.** Coal extraction is one of the most difficult, controversial and environmentally hazardous issues of Bangladesh. The price for open pit mining may be too heavy and it may not be plausible for the Government to embark on that till it can satisfy its people about its harmlessness through some test and trial mining in lower scale.

Renewable Energy Scenario. Hydropower, solar energy, wind turbines and bio-mass are the available Renewable Energy resources of Bangladesh. The clean and renewable energy technologies are yet to be developed for large scale commercial applications as the investment cost in it is generally higher as compared to fossil fuel alternatives.

Petroleum Products. Bangladesh has insignificant domestic production of petroleum products. Petroleum products constitute approximately 23% of the commercial energy used in the country.²⁹ The transport sector accounts for about 50% of the consumption of oil and irrigation makes about 16%. Dependence on imported oil for energy makes the country vulnerable to increases in oil price.

FEASIBILITY OF NUCLEAR POWER PLANT IN BANGLADESH

History of Bangladesh's Nuclear Power

Nuclear power in Bangladesh may be termed as a story of missed opportunities. Not long after the first nuclear power station was built in UK, the then government started feasibility studies for possible nuclear power in Bangladesh in 1961. The IAEA supported such a possibility in 1962 and a site measuring 262 acres of land in Rooppur were acquired. After liberation, Bangladesh government decided to go for a 125 MW French power reactor with

27. "Asia sustainable and alternative energy program, Hydroelectricity potential, A world Bank study report", retrieved from <http://web.worldbank.org>, accessed on 06 July 2012.

28. Professor M Nurul Islam, "Energy Resources & Governance Issues: Bangladesh Perspective", 06 April 2012.

29. NazmulAhsanKalimullah et al., "Bangladesh-India Energy Security Cooperation: Prospects and Challenges", *BISS journal*, Vol 31, No.3, July 2010.

a Japanese turbo-generator³⁰. Although the project was approved by Executive Committee of National Economic Council (ECNEC) in 1980 at a cost of Taka 603 crore, it could not be taken up for want of necessary funds. Instead, a 3 MW research reactor was set up in Atomic Energy Research Establishment (AERE) at Savar.³¹

More recently, in 2001 Bangladesh adopted a national Nuclear Power Action Plan (BANPAP). On 24 June 2007, Bangladesh's government announced it will build a nuclear power plant to meet electricity shortages.

Existing Infrastructure and Current Use

Existing infrastructure. Nuclear research in the country actually began back in 1965 with the establishment of Atomic Energy Centre at Dhaka. After the independence, Bangladesh Atomic Energy Commission (BAEC) was formed in Dhaka in February 1973 as an autonomous organization with a view to undertaking the research and development programmes for peaceful use of nuclear energy³². Some of its important establishments are:

- a. Atomic Energy Centre, Dhaka (AECD).
- b. AERE, Savar.
- c. Nuclear Medical institute (NMI).
- d. Institute of Nuclear Agriculture (INA).
- e. Rooppur Nuclear Power Project (RNPP).
1. Institute of Nuclear Medicine at Bangabandhu Sheikh Mujib Medical University

Current use. Though Bangladesh could not set up a nuclear reactor for generation of power but in the field of nuclear science and research a significant progress took place over the years. Some of these important uses are stated below³³:

- a. Medicine and medical treatment.
- b. Food Preservation.

30. Dr Anwar Hossain, Chairman Bangladesh Atomic Energy Commission, "Nuclear power for Bangladesh", *The Daily Star*, July 28, 2006.

31. Ibid.

32. Retrieved from Bangladesh Atomic Energy Commission website, www.baec.gov.org, accessed on 04 August 2012.

33. Ibid.

- c. Isotope Application in Industry and Hydrology.
- d. Tissue Banking.
- e. Health Physics and Radiation Control.

Nuclear Energy Development Plan

The present and past Governments have recognized over the years that Bangladesh needs nuclear energy for its long term energy security. In the Draft National Energy Policy (NEP) 2006, Nuclear energy was identified as a component of energy mix. The Revised Draft NEP of Bangladesh (2008) has outlined the nuclear power program as given in Table 3 below:

Table 3: Government Plan of Nuclear Power Plant	
PERIOD	PLAN ON NPP
By 2015 and 2017	Implementation of 2 units of medium sized (~600 MW) NPP
By 2025	Addition of more 2 units each of 1000 MW to ensure 10% of total generation from NPP
Beyond 2025	Nuclear share should be 15 - 20% in overall generation mix
Reference: Draft National Energy Policy of Bangladesh, 2008. ³⁴	

The present Government of Bangladesh, on assuming power, laid out its “Vision 2021: Energy Security and Electricity for all by 2021”. The salient aspects of the Vision 2021 are:

- a. Making electricity available for all by 2021.
- b. Ensuring reliable and quality supply of electricity.
- c. Providing electricity at a reasonable and affordable price.
- d. Addition of 20,000 MW of generating capacity by 2021 as follows:
 - (1) By the year 2013: 7,000 MW.
 - (2) By the year 2015: 8,000 MW.
 - (3) By the year 2021: 20,000 MW.

34. Draft NEP, 2008, cited in Dr Mohammad Shawkat Akbar, “A holistic approach for establishing Nuclear power infrastructure in Bangladesh”, a presentation given on *Topical Issues on Infrastructure Development: Management and Evaluation of a National Infrastructure*, 8 – 11 February 2011, Vienna, Austria.

Bangladesh's Preparation For Nuclear Plant

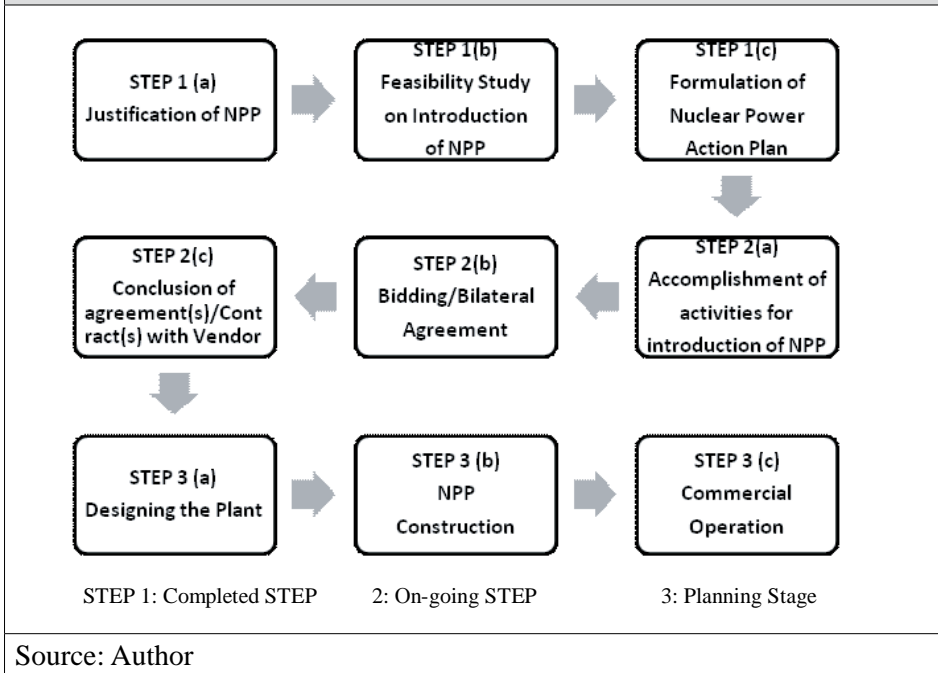
Endorsement of IAEA. Bangladesh requested the IAEA for cooperation regarding the development of nuclear power infrastructure for implementation of Rooppur Nuclear Power Project (RNPP) during 51st IAEA GC (17-21 Sep 2007) at Vienna, Austria. A three member IAEA Mission for Bangladesh formed of Agency staff and international experts conducted their mission from 17 – 21 November, 2008 with the aim for “A holistic approach for the establishing nuclear infrastructure in Bangladesh”.

Recommendations of IAEA Mission. The IAEA Mission recommended that a ‘road map’ to establish a nuclear power infrastructure should be developed. This road map should include the following:

- a. The ratification of the remaining international instruments; Civil liability, Joint Convention.
- b. The finalization of the Nuclear Law and derived regulations.
- c. Completion of site safety report.
- d. Communication with the International community and the completion of the national energy plan.
- e. The decision on recruitment and the development of human resources for the operation of RNPP, regulatory body and technical supports organization.
- f. The finalization of a funding and financing strategy.

Bangladesh's Roadmap for RNPP. A road map to implement RNPP has been formulated in line with the IAEA Mission's Recommendations. The stepwise implementation process of the Road map is given at **Figure 4**. It is to be mentioned here that Step 1 is completed, Step 2 is ongoing and Step 3 is in the planning stage.

Figure 4: Stepwise Implementation Approach For RNPP



The Feasibility of the Site

The RNPP Site is located at Rooppur, Ishwardi, 160 Km North East from the Capital City Dhaka. The site area is about 260 acres. The land area of the Project Site is large enough for accommodation of two or more reactor power units. The communication network through roads, railway and waterway is excellent. The Site is located by the Padma River that ensures water use for transporting materials and disposal of hazardous waste. A combination of river water and cooling tower could be considered as for the cooling system. RNPP is located almost in the center of the western zone of National Power Grid and is just about 5 km from Ishwardi sub-station. This will facilitate RNPP to feed into the Ishwardi Sub-station which is very important for a NPP site.

A recent IAEA mission from July 2011 confirmed that on site selection and survey activities conducted are in accordance with IAEA applicable requirements. Based on the recent financial agreement a Russian funded technical feasibility study will soon be started on as many as 62 aspects including geo-technical, geomorphological, hydrological and river morphology aspects.

Challenges and Prospects

Economic Feasibility- A Cost – Return Assessment. The first and foremost challenge that a country comprehends about establishing a NPP is the cost. Definitely, the initial establishment cost is very huge for any country, especially a third world poor country like Bangladesh. But the matter of fact is that nuclear power is very much cost competitive with other forms of electricity generation, except where there is direct access to low-cost fossil fuels. For instance, in Spain the nuclear electricity cost was reduced by 29% over 1995-2001.³⁵The quantities of uranium needed are very much less than for coal or oil. The comparative costs of power generation from different types of energy in different developed countries in the world are given at **Table 4**.

Ser	Country	Nuclear	Coal	Gas
1	France	2.54	3.33	3.92
2	Germany	2.86	3.52	4.90
3	Czech Rep	2.30	2.94	4.97
4	Slovakia	3.13	4.78	5.59
5	Japan	4.80	4.95	5.21
6	Korea	2.34	2.16	4.65
7	USA	3.01	2.71	4.67
8	Canada	2.60	3.11	4.00

Source: The Economics of Nuclear Power

35. “The Economics of Nuclear Power”, retrieved from www.wikipedia.org, accessed on 16 August 2012.

Based on the basic agreements, a financial deal has been signed between Russia and Bangladesh on 13 August 2012. Under the deal Bangladesh would borrow \$500 million for the technical study with an interest rate of not less than 4 per cent from Russia.³⁶ It takes about \$1.5 billion to \$2 billion to set up 1000-megawatt (MW) power plant depending on security features and technology standards. Bangladesh is planning for Government ownership based on equity and debt funding. Government own source/funding for local Currency requirement to be 15% mainly from the state credit and Debt funding for Foreign Currency to be 85% as loan on soft terms from the vendor source(s). However, a comprehensive financing and funding strategy for the evaluated costs should be revised and updated before Bangladesh makes the final financial agreement with Russia.

Management of RNPP. The management of a NPP is important as it is challenging for a country like Bangladesh. In 2010, Bangladesh government formed a Cabinet Committee Headed by the Honourable Prime Minister. A Technical Committee headed by the Honourable Minister of the State, Ministry of Science and Technology (MoST) was also formed.³⁷ Bangladesh Atomic Energy Regulatory (BAER) Act-2012 has been enacted on 31 May 2012 and passed in the Parliament on 01 June 2012.³⁸ This law calls for an independent regulatory body to handle all matters related to RNPP. This Independent Regulatory Body has not yet been formed. IAEA defines it as Nuclear Energy Programme Implementation Organisation (NEPIO).³⁹ So the biggest challenge is forming all the legal bodies required to be formed with qualified personnel. It is also very important that all the different committees work with efficiency and their works are coordinated by the regulatory body. The government has to take necessary actions in this regard.

Safety vis-à-vis Risk Factors. Possibility of the potential hazard of both nuclear criticality and release of radioactive materials from generating electricity with nuclear power is one of the major causes of concern for any country having or planning to have NPP. However, in over 14,500 cumulative reactor-years of commercial operation in 32 countries, there have been only three major accidents to nuclear power plants - Three Mile Island, Chernobyl, and Fukushima. The

-
36. "Bangladesh-Russia nuclear power plant deal finalized", *Energy Bangla*, 13 August 2012, retrieved from website http://energybangla.com/201=82/08/13/2275.html#.UC03bKA_m9s, accessed on 15 August 2012.
 37. Dr Mohammad Shawkat Akbar, "Experience Of INIR Mission For Phase 1 And Phase 2", Presentation given at Workshop on *Topical Issues on Infrastructure Development – Managing the Development of National Infrastructure for Nuclear Power Plants*, 24 – 27 January 2012, Vienna, Austria.
 38. Daily ManabJamin, 01 June 2012.
 39. "Responsibilities and Capabilities of A nuclear energy programme implementing organization", *IAEA Nuclear Energy Series* No. NG-T-3.6, Vienna 2009.

cumulative reactor years vis-a-vis nuclear accidents is given at Figure 5. It should be emphasised that a commercial-type power reactor simply cannot under any circumstances explode like a nuclear bomb - the fuel is not enriched beyond about 5%.

Figure 5: Cumulative Reactor Years vis-à-vis Nuclear Accidents



Source: Website, <http://www.world-nuclear.org/>

Sergey V Kirienko, director general of ROSATOM said, “We will build the plant with a new design in which five new safety measures have been included.”⁴⁰ Bangladesh has signed a bilateral agreement with the Russian Nuclear Regulatory Body on 27 February 2012 for cooperation in establishing nuclear safety regulation and training and technical support. BAEC has created a separate Division, “Nuclear Safeguard and Security Division”. However, a Radiation Protection Program is necessary which is still in process. Nuclear Power Plants and associated facilities are considered as the very Special Type of establishment namely KPI – A1 in the security system of the Government (highest level of security).⁴¹ The security of such a strategic Key Point Installation (KPI) demands a separate security arrangement to ensure its security.⁴² A separate study should be conducted to decide on the physical security of the installation by the Armed Forces.

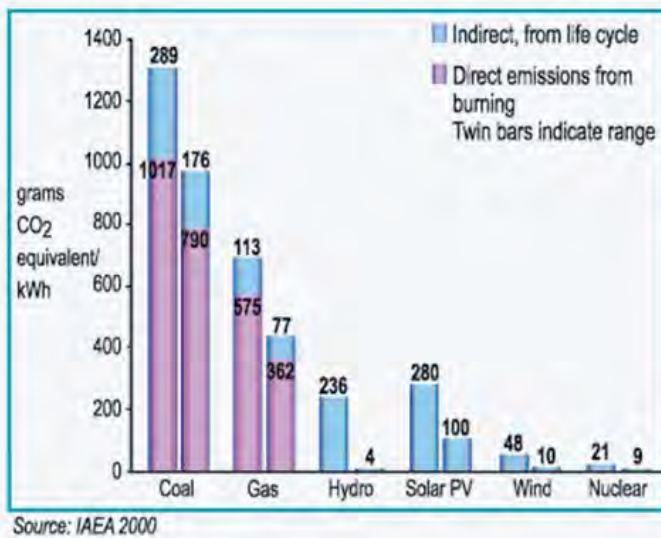
40. Staff Reporter, “Nuclear Plant Agreement signed with Russia”, *bdnews24.com*, Nov 02, 2011.

41. K M Rezaur Rahman, “Bangladesh Experience in Self-Evaluation of Nuclear Infrastructure”, a presentation given on *Technical Meeting on Evaluation Methodology of the Status of National Nuclear Infrastructure Development and Integrated Nuclear Infrastructure Review (INIR)*, 18 - 20 June 2012, Vienna, Austria.

42. Consultation with Dr Mohammad Shawkat Akbar, Director Nuclear Power and Energy Division, BAEC on 06 September 2012.

Environmental Aspect of Nuclear Energy. Nuclear power plant does not emit any green house gases under normal operation. Environmental effect on different types of energy is shown at **Figure 6**. Recently, the nuclear industry is hoping that concern over climate change will result in support for nuclear power. In Bangladesh, there is no Environmental Impact Assessment (EIA) yet. The EIA is being prepared by the Bureau of Research, Testing and Consultation, BUET on behalf of BAEC. The EIA, on preparation, will be submitted to the Ministry of Environment (MoE) for the clearance process.

Figure 6: Environmental effect of different types of Energy



Nuclear Fuel Cycle (NFC) and Management of Nuclear Waste. Management of nuclear fuel is a challenge for running a NPP. Bangladesh has no intentions to develop any enrichment or reprocessing capacities. Guarantee for life-time fuel supply for RNPP and Spent Fuel (SF) take-back are required from the vendor. The Inter-governmental agreement with Russia has been done accordingly. According to the agreements, Russia will take away all the nuclear wastes from the plants from Bangladesh safely. In Bangladesh, interim storage for waste from research reactor already exists at the AERE, Savar. BAEC shall also operate and manage Central Waste Processing and Storage facility (CWPSF) that will be established on-site or close to the RNPP. NFC However, NFC Policy and RW Policy have not been finalized yet in Bangladesh. A comprehensive policy and strategy document on RWM and SF management should be drafted by BAEC.

Human Resource Development (HRD). HRD specific to nuclear power plant will be a great challenge for Bangladesh.⁴³ Based on a review of operating plants in Hungary and Russia and considering guidance of IAEA,BAEC has identified total 1635 personnel for the RNPP (2xunit) to perform different work functions and 75 personnel have been identified for the Project Management Team.⁴⁴ Government has taken initiatives to strengthen infrastructure for education and research in nuclear science and technology. The agreement signed between Russia and Bangladesh on 04 June 2012 on HRD outlines the development of human resources in nuclear power sector in Bangladesh, covering different tiers of managerial, technical and operational personnel, and eventually developing broad-based academic and training capabilities in Bangladesh.⁴⁵ However, though appreciable the steps taken so far are not adequate. Hence, a comprehensive HRD plan should be developed for the long term sustenance of the RNPP.

Public Information and Public Acceptance. Public acceptance of nuclear power is one of the most important factors for which intensive public information campaign should be launched. According to the agreement signed between Russia and Bangladesh on 04 June 2012, the Russian Government will establish an Information Centre on Nuclear Energy aimed at generating awareness among people, especially the younger generation, on various aspects of nuclear energy and nuclear power plants, including functioning, maintenance and safety measures in the nuclear plants. An interagency plan for public information involving the Government, future owner-operator and regulatory body should be developed.

Electric Grid Infrastructure. Incorporation of the RNPP into the National Grid system is a big challenge. The RNPP is planned to be fed into the Ishwardi Sub-station where the high voltage 230 KV East-West inter-connector, Khulna–Ishwardi; Ishwardi-Baghabari-Sirajgang-Bogra Transmission lines tie in. In addition, construction of Ishwardi - Rajshahi transmission line is under consideration. Current grid capacity of 8 GW is not sufficient to introduce two new 1000 MWe units. A detailed analysis for mid-term and long-term expansion of the electrical power system was carried out by Power Grid Company of Bangladesh (PGCB) and Japan International Cooperation Agency (JICA) in 2010. A separate arrangement will have to be made between BPDB and PGCB with vendor source to carry out necessary study and modification/adaptation/improvements of the associated sub-station and grid system to incorporate the RNPP.⁴⁶

43. Interview with Professor M. Nurul Islam, Institute of Appropriate Technology, BUET, 01 September 2012.

44. Dr Mohammad Shawkat Akbar, “Experience of INIR Mission For Phase 1 And Phase 2”.

45. “Bangladesh, Russia further cooperation on nuclear power development”, *Asian Power*; 04 June 2012.

46. Uddipan Das, “Overview of Nuclear Power Programme in Bangladesh”, a presentation given at The IAEA Nuclear Energy Management School in Japan on 11-29 June 2012, Tokai-Mura. Japan.

RECOMMENDATIONS

After analysing the need and feasibility of the use of nuclear power in Bangladesh, following recommendations are made:

- a. Based on the Bangladesh Atomic Energy Regulatory Bill-2012, an independent Regulatory body should be established immediately.
- b. A comprehensive financing and funding strategy for the evaluated costs should be revised and updated.
- c. BAEC should develop a comprehensive Radiation Protection Program. For safety, a separate study should be conducted to determine the forces required for the security and protection of RNPP.
- d. For environmental aspects, the EIA should be formulated as soon as possible and get approved from the MoE.
- e. NFC Policy document should be finalized by BAEC which should specify the RW management, supply of fuel and disposal of SF.
- f. A comprehensive HRD plan should be developed for the long term sustenance of the RNPP.
- h. An inter-agency plan for public information involving the Government, future owner-operator and regulatory body should be developed.
- j. Necessary study and modification/adaptation/ improvements of the associated substation and grid system should be carried out to incorporate the RNPP by 2017 and 2018.

CONCLUSION

Energy consumption worldwide is likely to double between 2000 and 2050 and nuclear energy will remain a key element in future low-carbon energy systems. In respect of Bangladesh, energy consumption is very low compared to other nations. Only 35% people are under power supply coverage. The power sector is hardly capable of meeting its energy requirement with existing infrastructure. Bangladesh depends on natural gas, liquid fuel and hydro power for generation of electricity. According to the projections of Petrobangla, with the present rate of consumption, the reserve of natural gas (10.4 TCF) will be exhausted by 2021. Off late limited use of coal has taken place. There is great humane, environmental, ecological and political challenge for open pit mining. Prospect of hydroelectric

and other renewable energy projects are also not substantial enough. This limits us to go for nuclear energy.

Introducing NPP is a challenge for any country, especially for a third world country like Bangladesh. The main problems of establishing nuclear power reactor are high cost, skilled manpower, assured supply of raw materials, waste disposal and risk of accident. The initial cost of establishing a nuclear power generating unit is very high. But over the time the cost can be recovered as it involves less operating cost. The difficulties related to skilled manpower, supply of raw material and waste disposal can be overcome by engaging into long term agreement with the manufacturer for training of manpower, long term supply of raw materials and management of waste. A project to establish a nuclear power plant at Rooppur was taken long before. Now it is time we must be bold and decisive to implement it. Bangladesh aspires to become a middle income country by 2021. For that, the main factor is energy security,attaining which is not possible with the available energy resources in the country. Therefore, considering all the feasibilities, Bangladesh should pursue to attain the nuclear power capability as planned and take Bangladesh to a new height of progress and development.

BIBLIOGRAPHY

Books

1. Daniel Moran and James A. Russell, ed. *Energy Security and Global Politics: The militarization of Resource Management*, 1st Edition, (New York, USA, Routledge, 2009).
2. D. SubaChandran and J. Jegannathan, ed.*Energy and Environmental Security: A Cooperative Approach in South Asia*, 1st Edition, (New Delhi, India, Institute of Peace and Conflict Studies, October, 2011).
3. DrSingh,BhupendraKumar,*India'sEnergy Security: The Changing Dynamics*, 1st Edition, (New Delhi, India, Simran Printers, 2010).
4. Findlay, Trevor,*Nuclear Energy and Global Governance: ensuring safety, security and non-proliferation*,1st Edition, (New York, USA, Routledge, 2011).
5. Jones, P.M.S, ed. *Nuclear Power: Policy and Prospects*, 1st Edition, (London, England, John Wiley & Sons Ltd, 1987).
6. Nersesian, Roy L,*Energy for the 21st Century - A comprehensive Guide to Conventional and Alternative Sources*, 1st Indian Edition, (New Delhi, India, Pentagon Energy Press, 2009).

7. Openshaw, Stan, *Nuclear Power: Siting and Safety*, 1st Edition, (London, England, Routledge&Kegan Paul, 1986).
8. Siddayao, Corazon M., ed. *Energy Investments and the Environment, Selected Topics*, 1st Edition, (Washington D.C., USA, The World Bank, 1997).
9. Youngs, Richard, *Energy Security: Europe's New Foreign Policy Challenge*, 1st Edition, (New York, USA, Routledge, 2009).

Articles/Papers/Presentations

10. ADB Technical Assistance Consultant's Report, "People's Republic of Bangladesh: Preparing the Gas Sector Development Program (Financed by the Japan Special Fund)", Project Number: 38164, April 2009.
11. Barton, B. et al. (eds) "Energy Security; Managing Risk in a Dynamic Legal and Regulatory Environment", London, Oxford University Press, 2004, cited in GawdatBahgat, *Energy Security: An Interdisciplinary Approach*, John Wiley and Sons, Ltd, 2011.
12. "Bangladesh-Russia nuclear power plant deal finalized", *Energy Bangla*, 13 August 2012, at website http://energybangla.com/2012/08/13/2275.html#UC03bKA_m9s.
13. *BP Statistical Review of World Energy June 2012*.
14. *Bangladesh Economic Review 2008*.
15. "Bangladesh, Russia further cooperation on nuclear power development", *Asian Power*, 04 June 2012.
16. Col A K M Nazrul Islam, " Bangladesh:Mitigating Energy Insecurity and Environmental Vulnerability", in *Energy Security and Environmental Security: A Cooperative Approach in South Asia*, Ed D. SubaChandran and J. Jegannathan, Institute of Peace and Conflict Studies (IPCS), New Delhi, India, October, 2011.
17. *CIA-The World Fact Book*.
18. Dr Anwar Hossain, Chairman Bangladesh Atomic Energy Commission, "Nuclear power for Bangladesh", *The Daily Star*, July 28, 2006.
19. Dr Mohammad Shawkat Akbar, "Energy sector development strategies in the context of Climate change to face the challenges of the sustainable Development", presentation given at National Seminar on Solar Energy – 2008, 24-25 March 2008.

20. Dr Mohammad Shawkat Akbar, “A holistic approach for establishing Nuclear power infrastructure in Bangladesh”, a presentation given on *Topical Issues on Infrastructure Development: Management and Evaluation of a National Infrastructure*, 8 – 11 February 2011, Vienna, Austria.
21. Dr Mohammad Shawkat Akbar, “Experience Of INIR Mission For Phase 1 And Phase 2”, Presentation given at Workshop on *Topical Issues on Infrastructure Development – Managing the Development of National Infrastructure for Nuclear Power Plants*, 24 – 27 January 2012, Vienna, Austria.
22. Dr Abdullah Al Faruque, “A Right Step for Energy Security”, *The Daily Star*, Nov 28, 2011.
23. Economic and Social Commission for the Asia and Pacific (ESCAF), “Energy Security and Sustainable Development in Asia and the Pacific”, Bangkok: United Nations, 2008.
24. “Energy in Iran”, retrieved from http://en.wikipedia.org/wiki/Energy_in_Iran.
25. KhondkarAbdusSaleque, “Coal Mining Challenges in Bangladesh”, in *energybangla.com* on 26 April 2009.
26. IAEA, Energy Statistics Division, “Key Energy Statistics”, published during *Energy Training Week*, Paris, April 4-5, 2011.
27. IEA, *World Energy Outlook*, 2011.
28. Maitra, Ramtanu, “Thorium: Preferred nuclear fuel of the future”, *World Affairs*, 10(1), 2006, Spring:99.
29. Mission Report, “IAEA International Fact Finding Expert Mission of the Fukushima Dai-ichi NPP accident following the Great East Japan Earthquake and Tsunami”, 24 May – 02 June 2011.
30. “Nuclear Plant Agreement signed with Russia”, *bdnews24.com*, Nov 02, 2011.
31. ParvezIqbalCheema and MaqsudulHasanNuri, (ed.), “Quest for Energy Security in Asia”, Islamabad: Islamabad Policy Research Institute, 2007.
32. *Petrobangla Annual Report, 2009*.
33. Professor M Nurul Islam, “Energy Resources & Governance Issues: Bangladesh Perspective”, presentation given to 52nd Senior Staff Course at BPATC on 25 February, 2010.

34. Razia Sultana, “Quest for Energy Security in Bangladesh: Challenges and Prospects”, *BISS Journal*, Vol 29, No 1, January 2008.
35. “Responsibilities and Capabilities of A nuclear energy programme Implementing organization”, *IAEA Nuclear Energy Series* No. NG-T-3.6, Vienna 2009.
36. Saleque Sufi, “All about Gas Sector Master Plan”, *Energy and Power*, 15-31 January 2006.
37. “The Economics of Nuclear Power”, at website www.wikipedia.org.
38. Uddipan Das, “Overview of Nuclear Power Programme in Bangladesh”, a presentation given at *The IAEA Nuclear Energy Management School in Japan* on 11-29 June 2012, Tokai-Mura. Japan.
39. World Economic Forum, “The New Energy Security Paradigm”, Spring 2006.
40. “World Energy Outlook 2009”, at World Nuclear Association (WNA) website, <http://world-nuclear.org/info/inf16.html>.
41. World Energy Council (WEC) report, “World Energy Perspective: Nuclear Energy one year after Fukushima”, 2012.

Interview

42. Professor M Nurul Islam, Institute of Appropriate Technology, Bangladesh University of Engineering and Technology on 01 September 2012.
43. Dr Mohammad Shawkat Akbar, Director Nuclear Power and Energy Division, BAEC on 06 September 2012.

Internet Websites

44. www.unescf.org/.
45. World Nuclear Association (WNA) Website, <http://world-nuclear.org/>.
46. <http://en.wikipedia.org/>.
47. <http://www.iea.org>.
48. <http://www.nationmaster.com/>.
49. World Development Indicators Online. <http://data.worldbank.org/indicator/>.
50. Power Sector Master Plan document, www.ti-bangladesh.org/research/ES_Power_071120.pdf.

51. Bangladesh Atomic energy Commission website, www.baec.gov.org.
52. International Atomic Energy Commission website <http://www.iaea.org/Publications/Reports/index.html>.
53. <http://energybangla.com/>.
54. <http://bdnews24.com/>

Author

Lieutenant Colonel Abu Mohammad Sarwar Farid was commissioned with 27 BMA Long Course on 20 December 1992 in the Armoured Corps. He attended a number of courses at home and abroad. He is a graduate on Armed Forces War Course from National Defence College. He is also a graduate from Defence Services Command and Staff College Mirpur. He got his Masters in Defence Studies from National University. Lieutenant Colonel Farid was the Commanding Officer of 9 Bengal Lancer. Besides serving in various Armoured regiments he also served as a platoon commander and adjutant in Bangladesh Military Academy, as Brigade Major in 93 Armoured Brigade, as instructor in Armoured Corps Centre and School and as Personal Secretary to Principal Staff Officer, Armed Forces Division. Lieutenant Colonel Farid has participated in the United Nations peace keeping missions at Sierra Leone (UNAMSIL) and Democratic Republic of Congo (MONUC). Lieutenant Colonel Farid visited few countries including USA, UK, France, Germany, Belgium, Netherlands, Thailand, Pakistan, Singapore, Malaysia, Sri Lanka etc. He is presently serving as a General Staff Officer – 1 at Army Training and Doctrine Command.

Notes for Contributors

Manuscripts Submission on 'Floppy Diskette'

Authors are requested to submit 2 (two) hard copies of their manuscript in English. The length of manuscripts should not normally exceed 5,000 words (including footnotes) within 15-20 double-spaced A4 size papers. Manuscripts are accepted subject to editorial revision. The manuscripts should be typed on one side of white A4 paper.

The submitted manuscripts should contain: name(s) of the author(s) including complete mailing address, an abstract of approximate 150-200 words and acknowledgements (if any) should appear after the abstract.

Once a manuscript is accepted for publication, the author(s) should submit a copy of the manuscript on a computer floppy diskette labelled with the title of the article, the name(s) of the author(s) and the word processing software used. The preferred word processing software is Microsoft Word 2007.

Footnotes and Quotations

Footnotes should be numbered consecutively with superscript Arabic numerals. They should be typed single-spaced and should be placed at the foot of each page. Footnotes should not be used solely for citing references. They may cover illustration/ explanation of a point the author thinks the readers should be made aware of.

Tables & Figures

All tables should be numbered consecutively with Arabic numerals. Full source(s) should appear below the table followed by notes, if any, in lower letters.

All figures should be numbered consecutively. Figures should be planned to fit the proportions of the printed page. Full source(s) should be provided below each figure.

All maps should be numbered consecutively. Full sources should be provided below each map.

NDC JOURNAL



NDC Journal is a professional journal of the National Defence College, Bangladesh. It is published twice a year by the College.

Its goal is to provide a platform for exchange of knowledge, experience, ideas, information and data on all aspects related to National Security and Development. The primary emphasis of the journal is the publication of empirically based, policy-oriented articles which can attract the attention of policy-makers both at government and private level, security and development experts, academicians, researchers and the members of public in general.

The Editorial Board welcomes original works analyzing, development and security issues. The articles, as desired, should have a strong emphasis on the policy implications flowing from the research.

National Defence College, Mirpur Cantonment, Dhaka-1221

Tel : 88 02 9014922, Fax : 88 02 8034715,

e-mail : ndcbangladesh@gmail.com

Website : <http://www.ndc.gov.bd>