



10TH INTERNATIONAL RESEARCH CONFERENCE

3rd and 4th August 2017

'Changing Dynamics in the Global Environment: Challenges and Opportunities'

ABSTRACTS

General Sir John Kotelawala Defence University Sri Lanka

Ratmalana 10390
Sri Lanka

This book contains the abstracts of papers presented at the 10th International Research Conference of General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka held on 3rd - 4th August 2017. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, without prior permission of **General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka**

Editors

Dr KMGP Premadasa
Mr WLPK Wijesinghe
Ms AMTN Adikari
Ms WB Senaratne
Ms N Sanjeevani

Published by

General Sir John Kotelawala Defence University
Ratmalana 10390
Sri Lanka

Tel : +94113370105

E-mail : chair2017@kdu.ac.lk

Website : www.kdu.ac.lk/irc2017

ISBN 978-955-0301-39-3

Published date

3rd August 2017

Design and Printed by

www.designwavesmedia.com

Abstract Editorial Committee

Prof MHJ Ariyaratna - President

Col WTWG Ihalage	Senior Professor ND Warnasuriya
Capt JU Gunaseela	Senior Professor WD Ratnasooriya
Capt HDAK Amarawardhana	Senior Professor RN Pathirana
Lt Col AMCP Wijayaratne	Senior Professor JR Lucas
Lt Col (Dr) MDAS Gunatilleke	Dr MM Jayawardana
	Dr (Mrs) WCDK Fernando
	Dr AH Lakmal
	Mr WM Amaradasa
	Mr WAAK Amaratunga
	Capt (Retired) SU Dampage
	Dr SHNP Gunawickrama
	Dr KMG Prasanna Premadasa
	Dr JMKB Jayasekara
	Mr RMPS Bandara
	Dr NK Goonasekara
	Mr WLPK Wijesinghe
	Ms AMTN Adikari
	Ms WB Senaratne
	Ms N Sanjeevani

Conference Chair

Dr KMG Prasanna Premadasa

Co – Secretaries

Mr WLPK Wijesinghe
Ms AMTN Adikari

Steering Committee

Brigadier I P Ranasinghe RWP RSP ndu psc - President

Brigadier R G U Rajapakshe	Prof MHJ Ariyaratne
Colonel WTWG Ihalage	Senior Professor ND Warnasuriya
Lt Col AHAD Ariyasena	Senior Professor RN Pathirana
Capt (S) D Perera	Senior Professor Swarna Piyasiri
Lt Col HMSI Senarath	Senior Professor Rizvi Sherif
	Senior Prof JR Lucas
	Dr (Mrs) WCDK Fernando
	Dr KMG Prasanna Premadasa
	Dr JMKB Jayasekara
	Mr WLPK Wijesinghe
	Ms AMTN Adikari

Session Coordinators

President – Brigadier R G U Rajapakshe RSP psc	Ms WB Senaratne
Colonel WTWG Ihalage RWP RSP	Ms N Sanjeevani
Lt Col AMCP Wijerathne	
Lt Col SM Athukorala	
Maj KPR Kumara	
Maj GADNP Samaranayake	
Maj UKDLK Udugama	
LCdr DGRJ Senarathna	

Content

Page

- 08 **Message from the Chief Guest**
- 09 **Message from the Secretary, Ministry of Defence**
- 10 **Message from the Vice Chancellor - KDU**
- 11 **Message from the Conference Chair**
- 12 **Message from the Session President**

Plenary Session Abstracts

- 14 **Strengthening Regional Maritime Cooperation in the Indian Ocean: The Role of Australia- Sri Lanka Bilateral Relations**
Dr Mary Ann Palma-Robles
- 15 **The Establishment of Defence Science and Technology in Sri Lanka**
Prof Martin Renilson
- 16 **Changing Dynamics in the Global Environment: The Story of Pakistan**
Major General Muhammad Shamrez Salik, HI (M)
- 17 **The Human Element in Autonomous Shipping**
Prof Margareta Lutzhoft

Defence and Strategic Studies – Plenary Session II

- 18 **Malaysia's Role in Peacebuilding in Southern Philippines and its Impact on the Region**
Major General Dato' Abdul Rahim bin Hj. Mohd Yusuff (Retired)
- 19 **Changing Dynamics in the Maritime Domain: Special Emphasis on the Indian Ocean**
Rear Admiral William C. McQuilkin (Retired)
- 20 **Changing Dynamics in the Global Environment: Challenges and Opportunities faced by Bangladesh**
Major General A K M Abdur Rahman NDC, psc
- 21 **New World Order Trends in Nuclear Politics: Challenges and Opportunities**
Professor Feroz Hassan Khan, BG (Retired)
- 22 **Changing Dynamics in the Global Environment: Challenges and Opportunities in the Chinese Perspective**
Senior Colonel Cai Jinsong
- 23 **Changing Dynamics in the Global Environment: The Story of Maldives**
Brigadier General Wais Waheed psc
- 24 **Dynamics in the Korean Peninsula and its Implications for Global Security**
Dr M Mayilvaganan

Content

Page

Technical Session Abstracts

Oral Presentations

26

Changing Dynamics in the Indian Ocean: Geostrategic Competition and Challenges for Sri Lanka
JSK Colombage

27

Strategy to Overcome Maritime Blindness: The Sri Lankan Case
R Joseph

28

Establishing a Maritime Domain Awareness Center in Sri Lanka
SACR Kulatunga

29

Strategic Importance of Blue Economy to Sri Lanka and Challenges
D Ranasignhe

30

Bottom Trawling in Palk Bay Area: Human And Environmental Implications
S Wijesundara and D Amunugama

31

Securitisation of National Borders: A Case Study of Sri Lankan Border Control Measures
A Lankadeva

32

Political Polarisation of the Indo-Lanka Fishery Dispute and Its Comprehensive Security Implications
M Adams

33

The Changing Patterns of the U.S. – Japan Security Relations in the 21st Century: Case study of Okinawa
DPH Senanayake

34

Transboundary Implications of India and Nepal Air Pollution Policy Implementation and South Asian Association for Regional Cooperation - PLS Dias

35

Sri Lanka between Geopolitical Interests of China and India
A Seneviratne, W Nalawatta and S Weeraratne

36

The Post Deployment Reintegration and Mental Health Issues of the Sri Lankan Army Soldiers
JKT Udeshika

37

Survival of Kandy Before Three European Nations
D Attapattu and P Amarasinghe

38

Entrepreneurial Aspirations And Expectations of Sri Lanka Military Veterans
MHSB Perera, WMAGHA Premarathna and L Welamedage

39

Re-Emergence of Tamil Tiger Cells in Sri Lanka: A Comparative Analysis to Terrorism Perspective
PSS Sanjeewa

40

Impact of GIS Modelling In Military Operational Planning
HWW Ranasinghe, KRP Rowel and KTRB Kodippili

Content

Page

41

Dynamics in Cybersecurity: Challenges to Sri Lanka's National Security

B Senaratne

42

Transition of Accordance: The Next Step of India - Sri Lanka Economic Strategy

S Senarath and SE Jayasekera

43

Air Power: A Response Option to Counter the Challenges of Sub-Conventional Warfare Dynamics

N Wanasinghe

44

The Influence of Global Islam Radicalisation to Sri Lanka

LCR Jayasuriya

45

Regional Hegemony and Small State Survival: Re – examining Ceylon's Foreign Policy Under Premier D.S Senanayake - S De Silva

46

Hot Pursuit on Land: Execution versus Legitimacy

KERL Fernando, R Fernando and L Fernando

47

21st Century Great Game and Its Actors: India's interests in Central Asia and its Repercussions in South Asia - P Amarasinghe, D Attapattu and P Joshi

48

Security Forces Involvement in Nation Building: Ethics and Social Responsibility

AA Rasheed

49

The Strategic Importance of Sri Lanka in Indian Ocean Region: Reference to String of Pearls Strategy

SAK Madanayaka (Deceased)

Message from the Chief Guest



I am pleased to send this message to the Abstract Book of the International Research Conference-2017 of General Sir John Kotelawala Defence University, Sri Lanka, especially on the occasion that it is held for the 10th consecutive time. Research, experiment and invention have been in existence ever since the presence of man on this planet, and it has been brought into a whole new level and caliber in the 21st century, which can be witnessed in the pro-research environments and research conferences of this nature promoted and held by universities around the world. In this milieu, KDU-IRC, I believe, has become predominant in providing a collective platform for both civil and military specialists to engage in multidisciplinary discussions while showcasing new discoveries related to multiple disciplines.

I firmly believe that, this year's conference theme Changing Dynamics in the Global Environment, is both timely and appropriate for local as well as foreign scholars to display and gain recognition for their research achievements. Also worth mentioning is the importance of such collaborative multidisciplinary research which will ultimately pave path for inculcating professionalism, boosting international relations and nation-building, which, I presume, is undoubtedly one of the aims of KDU-IRC as well.

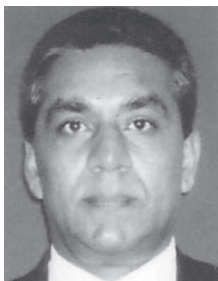
Finally, while congratulating and appreciating the work done thus far by Kotelawala Defence University in general and the conference organizers in particular, I wish all the success for the 10th International Research Conference of KDU.

HON SUSIL PREMAJAYANTHA

Minister

Ministry of Science, Technology and Research

Message from the Secretary Ministry of Defence



It is a pleasure for me to send this message to the International Research Conference 2017 of General Sir John Kotelawala Defence University (KDU) in my capacity as the Secretary to the Ministry of Defence and the Chairman of the Board of Management of KDU.

It is well-known that Kotelawala Defence University has been rendering a yeoman service in the field of defence education catering to the requirement of producing graduate officers for the tri-services in Sri Lanka, and today it has grown in strength to extend its high quality, tertiary level, English medium education for Sri Lankan youth as well as for foreign students. In this context, it is heartening to see that it is also playing a leading role in the field of multi disciplinary research, and I am

sure that the tenth anniversary research conference on the theme, “Changing Dynamics in the Global Environment: Challenges and Opportunities”, would provide a sound platform to discuss with highest intellectual and philosophical depth on diverse issues in the dynamic world we are living today, particularly with a view to opening new avenues for solving our problems.

I take this opportunity to congratulate the Vice Chancellor and KDU staff on organising this important event and also to commend the researchers who took it upon themselves to make a valuable contribution to the knowledge bases of their respective disciplines, particularly in Defence and Strategic Studies. I wish the participants of this International Research Conference an intellectually fulfilling experience.

KAPILA WAIDYARATNE PC
Secretary
Ministry of Defence

Message from the Vice Chancellor



It is with great pride and pleasure that I pen this message for the Abstract Book of the International Research Conference of General Sir John Kotelawala Defence University, Sri Lanka (KDU-IRC), especially at this symbolic moment when it is held for the 10th consecutive time. Over the past decade, KDU-IRC has made its distinct mark in the arena of multi-disciplinary research both nationally and internationally. This is certainly a matter that cannot be ignored; it gives me immense pride in reminiscence, especially as we celebrate KDU-IRC's 10th anniversary, and I am humbled to be at its helm.

Today, KDU-IRC has attracted specialists in diverse fields across the globe, enriching and encouraging its multi disciplinary space in the field of research and in the practice of knowledge dissemination. This year's conference under the theme Changing Dynamics in the Global Environment gathers experts both local and foreign under various disciplines, including defence and strategic studies. In particular, we are proud to have internationally eminent, Sri Lankan born scientists such as Prof. Chandra Wickramasinghe and Dr.

Bandula Wijay with us this time as they have made our motherland proud in the international arena as renowned experts and intellectuals in their respective domains.

KDU-IRC stands strong today with the great withstanding support of KDU staff and its well-wishers. I am especially thankful to the Ministry of Science, Technology and Research and the National Science Foundation, not forgetting the Ministry of Defence for their unfailing support in co-organising this conference.

It is my sincere wish that the plenary sessions, pre/post-conference workshops, and oral and poster presentations, which will unfold during the course of these significant days, will generate productive discussion and constructive criticism and will instigate thought for development in future. I hope that many would make KDU-IRC events an opportunity to study the changing dynamics in the socio-cultural environment in Sri Lanka, and help place our nation high, driving it towards success in the global matrix.

REAR ADMIRAL JAGATH RANASINGHE USP, psc
MSc(DS)Mgt, MMaritimePol(Aus), PG Dip in CPS, Dip in CR, AFNI(Lond)
Vice Chancellor

Message from the Conferenc Chair



It is with great pride that I write this message as the Chair of 10th International Research Conference of General Sir John Kotelawala Defence University (KDU IRC), in this exciting time in KDU history.

For a decade KDU IRC has been a platform for knowledge sharing among researchers of various backgrounds. In this special year on its 10th anniversary, KDU IRC has invited over 50 experts from world over to share their knowledge and to initiate collaborations with their local counterparts numbering well over 1000.

KDU IRC received 557 research papers this year. Out of which 365 has been selected through a double blind peer review process for presentation. I, therefore, have no doubt that the outcomes of the conference would not only bring pride to KDU, but also uplift the status-quo of research and development of the country as a whole.

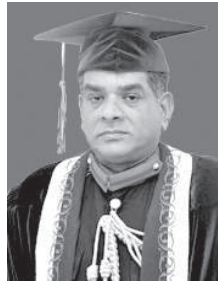
My task as the Chair this year would have been laborious, if not for the guidance, assistance and most of all the freedom given to me by the Vice Chancellor, Rear Admiral JJ Ranasinghe to mould and shape this conference to present-day requirements.

The generous assistance received from the Ministry of Science Technology and Research and the National Science Foundation is also praise worthy.

I hope both local and international participants will actively contribute in discussions, make new connections and have a productive and memorable time during the two days of the conference at KDU. I wish you all the very best.

DR PRASANNA PREMADASA
PhD(UK) MSc(UK) BSc Hons. (Perad.)
Chairperson
10th International Research Conference - 2017

Message from the Session President



The International Research Conference of General Sir John Kotelawala Defence University has been held successfully for 9 consecutive years, and this year its 10th session is to be held under the theme **“Changing Dynamics in the Global Environment: Challenges and Opportunities”**. As the President of the Defence and Strategic Studies Session of this year’s conference, I take great pride in writing this message to the Abstract Book of the conference.

Being Sri Lanka’s only defence university, KDU is currently producing graduates for the tri-services and the country in different disciplines as personnel capable of facing emerging challenges in the modern era. Education at Kotelawala Defence University offers excellent opportunities to students who benefit from world-class supervision from leading researchers in their fields.

This multidisciplinary Annual Research Conference attracts the highest quality research, and has become a preeminent venue for the presentation and discussion of contemporary issues.

The Defence and Strategic Studies Plenary Session is enriched by the presence of over 11 renowned

international Senior Military Officers/Professors/Scientists who will speak on the above theme. I am pleased to mention that we have received over 40 research papers for our Defence Technical Session from researchers attached to the tri-services, state and non-state universities, higher education institutions, research institutes, industries and other organisations. After a strict and rigorous reviewing process, only 24 papers have been selected to be presented at the conference.

This conference will provide a world class opportunity to disseminate modern-day knowledge among national and international researchers of different backgrounds. Further, this will help to build collaborations and to strengthen partnerships among professionals across the globe in diverse disciplines.

I would like to extend my best wishes to all participants of the event for a successful conference that will pave a pathway for present and future generations of the nation for a secure environment in terms of economic growth and constructive development.

Brigadier R G U Rajapakshe RSP psc
President
Defence and Strategic Studies Session

Plenary Sessions



STRENGTHENING REGIONAL MARITIME COOPERATION IN THE INDIAN OCEAN: THE ROLE OF AUSTRALIA-SRI LANKA BILATERAL RELATIONS

Dr Mary Ann Palma-Robles

Honorary Senior Fellow, University of Wollongong, Australia

E mail: mpalma@uow.edu.au

Diplomatic relations between Australia and Sri Lanka have evolved from collaborative ties involving trade and investment, sports and culture, and education to maritime cooperation in transnational security challenges. Bilateral maritime cooperation in the Indian Ocean is gradually developing but regional discussions have largely focused on key interests of major powers such as India and extra-regional powers like China. However, there is significant scope for strengthening the involvement of other littoral States such as Sri Lanka if regional maritime security issues are to be addressed in a strategic manner.

This presentation presents the need for an increasing focus on the role of middle power littoral States in the Indian Ocean to achieve regional and global maritime security objectives. The second part of the presentation highlights the role of bilateral relations in the region, particularly drawing from the example of Australia and Sri Lanka cooperation on transnational crime. It examines progress in this bilateral initiative and areas of further collaboration that will help protect the national interests of both countries and contribute towards regional security. The discussion concludes with a discussion of elements of bilateral and multilateral maritime security cooperation that empower littoral States, maintain legal order at sea, considers the strategic environment of the Indian Ocean, and addresses regional and domestic maritime security threats.

Keywords: Australia, Indian Ocean, Maritime Cooperation, Sri Lanka

THE ESTABLISHMENT OF DEFENCE SCIENCE AND TECHNOLOGY IN SRI LANKA

Professor Martin Renilson

President, The Royal Institution of Naval Architects, Australian Division

E mail: martin@renilson-marine.com

It is well understood that for a modern military to be effective it needs to have access to an advanced science and technology organisation specialising in defence related activities. This includes both project based and long term research. The balance for defence applications between the funding of project based research, and funding for long term defence research is discussed. Many countries conduct all defence related science and technology activities within government, whereas others outsource much of this activity to the commercial sector, including universities.

Some technologies which are used by the military are advancing rapidly in the civilian sector. For many of these technologies the civilian sector can generally apply larger resources to such developments than is available from military funding. For those it may well be more appropriate for defence to maintain a watching brief on such activities, rather than to attempt to conduct its own research in these fields. This is of particular importance if the resources available to defence research activities are limited.

Other technologies are specific to military applications, or involve sensitive information, and for these it is usually necessary that the science and technology research is conducted with the specific defence applications in mind. Although such research needs to be funded, and guided, by the requirements of the military, it is not always essential that it be conducted internally in a defence laboratory. Provided adequate security can be assured, such research can be carried out by organisations external to the military, including commercial companies and universities.

Even where a particular technology is for a military application, there are often considerable synergies with non-defence science and technology. These could be either software (people and know-how) or hardware (facilities and equipment) where in many cases the same expertise and facilities can be used for both military and civilian applications and it is recommended that this be applied wherever possible in the development of defence science and technology research in Sri Lanka.

Thus, two important aspects in the development of the defence science and technology capability in Sri Lanka are:

- the ability to determine what technologies are best handled in the civilian sector, and the maintenance of a watching brief on these; and
- when defence specific research is required, to determine where synergies are available, and how they can best be managed.

These aspects could well be handled by a defence orientated university such as KDU and suggestions as to how that might be done are given. Also, the benefits of much of the longer term research being conducted by a university such as KDU are discussed.

Keywords: Defence Science & Technology, KDU, Sri Lanka

CHANGING DYNAMICS IN THE GLOBAL ENVIRONMENT: THE STORY OF PAKISTAN

Major General Muhammad Shamrez Salik, HI (M)

Director General, Institute for Strategic Studies, Research and Analysis,

National Defence University, Pakistan

E mail: samrezs@hotmail.com

The paper focuses on the global and regional environment as seen from Pakistan's perspective. The prevailing strategic environment is seen as volatile, uncertain, complex and ambiguous. A significant rebalancing of power is under way, with Asian countries coming to the fore. It is believed that huge opportunities will result in terms of productivity, welfare gains and individual empowerment. Globalisation, being a stark reality, has challenged the power and autonomy of nation states.

Menace of terrorism and extremism are unlikely to disappear in the foreseeable future. Pakistan is the most affected country in the world. With the reduced possibility of large scale interstate wars, the character of conflict will continue to be dominated by the conflict of interests. Print, electronic and social media will continue to play an important role in shaping the environment to own favour. There is an increasing global acceptance to the use of Responsibility to Protect (R2P), humanitarian intervention and law-fare as intervention tools.

Pakistan, located at the confluence of South Asia, Central Asia, Middle East and the Persian Gulf,

has remained at the centre stage of global power struggles. Pakistan aspires to have good relations with neighbours based on mutual respect, trust and sovereign equality.

The National Security Policy of Pakistan is based on a comprehensive response utilising all elements of national power. To ensure our national security and territorial integrity, Pakistan is maintaining formidable and battle hardened Armed Forces. After 9/11, Pakistan spearheaded the regional fight against terror despite limited resources. Pakistan has made huge sacrifices in terms of human and economic losses.

From its humble beginning to reaching a prominent place in the comity of nations, Pakistanis have proven to be a progressive, peace-loving, enterprising and resilient nation. Pakistan has embarked upon a comprehensive framework named as Vision-2025 to steer towards prosperity and development.

Keywords: National Security Policy, Pakistan, Terrorism, Vision 2025

THE HUMAN ELEMENT IN AUTONOMOUS SHIPPING

Professor Margareta Lutzhoft

Professor of Nautical Operations, Western Norway University of Applied Sciences, Norway

E mail: margareta.lutzhoft@utas.edu.au

Recent developments in shipping regarding the initiative of autonomous shipping is gathering momentum. Funding is being put into place, collaborations forged and test beds nominated. However, most of the research and development is focused on technical solutions to an ill-defined, wicked problem. Even if the human causes accidents, we cannot remove them entirely from the system. We are at risk of shifting hazards from ship to shore with little scientific basis for the decisions. Other issues also remain largely undiscussed, such as environment, finance and insurance. This plenary talk will discuss some of the gaps.

Keywords: Autonomous Shipping, Human Element

MALAYSIA'S ROLE IN PEACEBUILDING IN SOUTHERN PHILIPPINES AND ITS IMPACT ON THE REGION

Major General Dato' Abdul Rahim bin Hj. Mohd Yusuff (Retired)

First Holder of the Leadership Chair, Leadership Chair Office,

National Defence University, Malaysia

E mail: rahim@upnm.edu.my

The insurgency in the southern Philippines is one of the world's longest-running civil conflicts. For more than 40 years, armed groups in the Muslim majority areas of Mindanao have been fighting for independence from the Catholic-majority nation and have claimed approximately 200,000 lives and resulted in a "domestic refugee" (internally displaced person) population of around 1,500,000. The underlying causes of the "Mindanao Problem" revolve around three central issues: longstanding pattern of inequality and injustice, the independent Philippine government exploiting the ancestral domains of Spanish and Americans, centuries of political and economic repression have made Muslim areas poverty-ridden. The Muslim community demands to re-establish its self-determination in its long-lost home. Malaysia is the third-party facilitator of the GPH-MILF peace negotiations and the most important international involvement in it. For the most part in the past 16 years, Malaysia has been effective, efficient and successful in this role. The common Malay culture

and temperament among the key players no doubt eased Malaysian facilitation, and its steady role may be described as the one constant in the ups and downs of the Mindanao peace process. This paper argues that Malaysia's brand of moderate Islam and a vibrant democracy based on the federal system of government could be a source of reference that could offer a solution to the issues, because solving the Mindanao Problem is vital in ensuring peace and stability in the South East Asia Region. Failure to find a solution through negotiation would fuel criminality and facilitate religious radicalisation. Global jihadist movements like Islamic State (IS) are already operating within countries in the region. The success of Mindanao will be a success for the region and for the greater security, economic and social development of the area.

Keywords: Malaysia, Mindanao, Peacebuilding, South East Asia

CHANGING DYNAMICS IN THE MARITIME DOMAIN: SPECIAL EMPHASIS ON THE INDIAN OCEAN

Rear Admiral William C. McQuilkin (Retired)

Former Director, U.S. Navy Strategy and Policy Division, U.S. Navy, USA

E mail: wm.mcquilkin@gmail.com

The Indian Ocean Region is one of the most dynamic regions in the world. The world's economic centre of gravity has shifted to the Indo-Asia-Pacific and trade is growing fastest east of the Suez Canal. The Indian Ocean sea lanes that support globalisation and its attendant large volume of trade and energy flows has become the economic lifeline of the world. The race is also on to build newer and larger port facilities throughout the Indian Ocean to support this increased trade. This same ocean area also comprises some of the world's most strategic maritime passages. All of this requires a secure enabling environment. Collectively, we need to ensure that this vital region remains peaceful and prosperous. We need to do this while also ensuring that we remain open and inclusive, and have respect for rules and norms in the maritime domain. The vastness of the Indian Ocean requires us all to work together in the maritime realm, be it for maritime security, economic security, or human security.

Keywords: Economic Security, Human Security, Indian Ocean Region, Maritime Security

CHANGING DYNAMICS IN THE GLOBAL ENVIRONMENT: CHALLENGES AND OPPORTUNITIES FACED BY BANGLADESH

Major General A K M Abdur Rahman ndc, psc

Directorate General, Bangladesh Institute of International and Strategic Studies, Bangladesh

E mail: akmrahman2429@yahoo.com

Since the turn of the 21st century, the world has been witnessing major shifts in the global political landscape. The new wave of terrorism is fundamentally different from any other non-traditional security threats. Terrorists have captured lands, formed foreign fighter mercenaries and presented a truly global threat. On the other side of the spectrum, the clash of culture has led to the rise of right-wing populism and has shaken the political establishments in the West at their core. The most remarkable examples of these profound changes are the triumph of populist US President Donald Trump and the United Kingdom's referendum in favour of Brexit. The US' retreat from the Paris climate accord, Trans-Pacific Partnership (TPP), threat to stop support for the North Atlantic Treaty Organisation (NATO) and budget cuts for United Nation Peacekeeping missions have raised serious questions as to viability of the existing international order and the role of the US as the leader of the 'free world'. The impacts of these changing dynamics have far reaching implications for the future course of human history and international order. Hence, it remains to be seen how terrorism, the rise of right-wing populism in the West, changing balance of power and global leadership, the pursuit of Sustainable Development Goals (SDGs) and tackling climate change alters the status quo in international order.

Keywords: Terrorism, World Order

NEW WORLD ORDER TRENDS IN NUCLEAR POLITICS: CHALLENGES AND OPPORTUNITIES

Professor Feroz Hassan Khan, BG (Retired)

Lecturer, Naval Postgraduate School, USA

E mail: fhkhan@nps.edu

Global trends in nuclear politics have significantly shifted in the 21st century with greater uncertainty regarding the salience and role of nuclear weapons in national security policy. Sometimes referred to as the second nuclear age, international security is challenged by the changed character of politics and war, which are characterised by asymmetric transnational threats, hybridity and technological innovation. These shifts are having a profound impact on the writ of nation-states in both urban and peripheral land and maritime spaces. In Asia, emerging power rivalries have resulted in new geopolitical balancing and strategic alliances that are generating new trends in nuclear politics and challenging the older norms of the last century. Yet new technological maturations - especially in the information age - are also creating new opportunities for economic activities and cooperative regional security issues and an era of détente and relative peace. It remains to be seen whether the new trends in nuclear politics and the uncertainty regarding the salience and role of nuclear weapons continue this era of relative peace or escalate and exacerbate regional rivalries to a crisis point.

**Keywords: Nuclear Politics, Technology,
Second Nuclear Age, South Asia**

CHANGING DYNAMICS IN THE GLOBAL ENVIRONMENT: CHALLENGES AND OPPORTUNITIES IN THE CHINESE PERSPECTIVE

Senior Colonel Cai Jinsong

Deputy Director of Teaching and Interpretation Division of the
College of Defense Studies of National Defense University, People's Liberation Army, China
E mail: nducjs@sina.com

We are living in a time of peace and development. Generally speaking we are facing more challenges than in the previous years, though opportunities are larger than challenges.

The challenges: Firstly, the protracted economic sluggishness. The world economy has yet to get on the track of full recovery and growth remains weak. Secondly, the unstable relationship between major powers. The most prominent ones are the Sino-US relationship and US-Russia relationship. Thirdly, the rising populism and extremist ideologies. There are more "black swan" incidents in the political landscape in some western countries. Fourthly, the increasing non-traditional security threats. Traditional security threats are still prominent, while non-traditional security threats, such as terrorism and climate change are becoming more serious.

Opportunities include the general world trend of peace and development, the increasing strength of developing countries, the increasing willingness of world communities to cooperate to meet the security challenges.

In order to meet the security challenge, the world

communities should pay attention to the following points:

- Make an all-out effort to build strategic mutual trust. Trust is the pre-condition for close cooperation. However it is easy to say and very hard to achieve. China wants peaceful development and does not want to threaten any countries in the world.
- Adopt a new security concept. Common security and cooperative security concept should be stressed. Absolute security and the security built on the insecurity of the others cannot last long.

Reform the world governance. China does not want to change the world order. However, China believes that developing countries should have a larger say concerning the rules in governing world security and economy. The principle of wide consultation, joint contribution and shared benefits probably is a wise choice.

Keywords: Black Swan incidents, China, Cooperative Security, Economic Growth, Non-Traditional Security Threats

CHANGING DYNAMICS IN THE GLOBAL ENVIRONMENT: THE STORY OF MALDIVES

Brigadier General Wais Waheed psc

Commanding Officer, College of Defence and Security Studies,

Maldives National Defence Force, Maldives

E mail: waiswaheed@hotmail.com

This paper analyses the paradigm shift in national security and the impacts this global change has on the Maldives and how the nation could overcome these changing dynamics. While national security has traditionally been centred on the strategies of leaders in their pursuit of national interests, the modern day threat spectrum has evolved to include interstate conflicts, civil wars marked by genocide, abuses of human rights, attacks on civilian populations by terrorist organisations, the proliferation of weapons of mass destruction, global pandemics and the catastrophic effects of global climate change. This century has presented distinct and extremely impactful global events: from evolving and increasing terrorist attacks to civil wars, democratisation movements across the Middle East and refugee crises. In the backdrop of these global conflicts and challenges, Maldives needs to adapt in order to face and overcome these security threats. The threats emanate from the polarisation of extremism and liberalism when it comes to religion, the economy's overdependence on tourism, the lack of diverse industries to support the economy and climate change. This paper looks at possible solutions to address the said issues by concerning on the rise in extremist ideologies through rehabilitation programmes and planning and developing sustainable economic projects from a holistic and inclusive approach.

**Keywords: National Security, Maldives,
Security Threats, Solutions**

DYNAMICS IN THE KOREAN PENINSULA AND ITS IMPLICATIONS FOR GLOBAL SECURITY

Dr. M. Mayilvaganan Ph.D.

Associate Professor, International Strategic and Security Studies, National Institute of Advanced Studies,
Indian Institute of Science Campus, Bangalore, India
E mail: mumayil@yahoo.com

The recent developments in the Korean Peninsula with the series of nuclear and missile test activities by the Democratic Peoples' Republic of Korea (DPRK) has drawn global attention. Particularly, the aggressive behaviour of North Korea's totalitarian regime has created a severe crisis in the peninsula where the countries in the neighbourhood face dangerous thermo-nuclear flashpoint. It has heightened tension between the United States (US) and North Korea. Pyongyang's nuclear ambitions will have important implications not only for the Korean Peninsula but for other powers, including the US and China. While the US allies Japan warned its citizens of a possible chemical or biological attack and South Korea affirmed that it would respond "mercilessly" to any Pyongyang's aggression, both expect Washington to take measures to control the 'rogue' North Korea. But the US president Donald Trump pressures Beijing, anticipating it to help solve the North Korea quandary. In this context,

the proposed paper would examine current events in the Korean Peninsula, including the responses of China and the United States and considers the implications for global security. Importantly, the crucial questions are: does China steer North Korea as its proxy against the US and its allies, part of its grand strategy? Is there a strategy to manage challenges posed by Pyongyang from the US and its allies? Will China alter North Korea's behaviour as pushed by the US? Also, the rise of Kim Jong-un, as the titular leader of North Korea and his strong push for militarisation raises a question whether he is striving to uphold his legitimacy and secure power, particularly within his entire Kim family through these measures as he depends critically on the security apparatus.

Keywords: China, Korean Peninsula, North Korea, Nuclear Flash point, United States

Technical Sessions



CHANGING DYNAMICS IN THE INDIAN OCEAN: GEOSTRATEGIC COMPETITION AND CHALLENGES FOR SRI LANKA

JSK Colombage

Pathfinder Foundation, Sri Lanka

E mail: jayanathskc@yahoo.com

The Indian Ocean has become an area for geo-strategic competition since there are strategic security groupings and contest for influence. The Uni-polar world dominated by the world's sole super power, the USA, is being challenged by emerging super powers such as China, India, Russia and Japan. The Indian Ocean plays a key role in this 'Asian Century'. This ocean is heavily militarized, nuclearized and consists of a large number of flash points, which can erupt into a conflict anytime. There is an unofficial 'cold-war' brewing up here. The Indian Ocean is also the world's economic life line in trade and is considered as the energy super highway. There are many players either in, or interested in the Indian Ocean and these include a large number of non-state actors as well. Maintaining the freedom of maritime commerce and a rule based international maritime order in this ocean is essential for peace and prosperity of the whole world. Sri Lanka, which is located in the centre of this ocean, is subjected to spheres of

influence of major players and need to chart its course very strategically in the future. Sri Lanka's destiny has always been shaped by the ocean and its location. All invasions have come across the sea. The country's future lies on how it exploits the blue ocean to her advantage. Sri Lanka cannot remain immune from what is happening in the neighbourhood and even the Western Pacific, and need to make extremely calculated choices to face the emerging realities and narratives of the ocean surrounding the country. This paper is based on an exploratory research method to understand the way forward for Sri Lanka in these turbulent waters. The data collection and analysis is based on qualitative interviews and literature review and analysis will be based on the grounded theory.

Keywords: Indian Ocean, Geo-Strategic Competition, Maritime Security, Challenges for Sri Lanka.

STRATEGY TO OVERCOME MARITIME BLINDNESS: THE SRI LANKAN CASE

R. Joseph

Sri Lanka Navy

E mail: albiongo7@gmail.com

The strategic location of Sri Lanka in the Indian Ocean not only make the island a vital connecting nod for the East-West maritime traffic, but also behaves as a centre to monitor the entire ocean space that spans to the southern tip of the globe. The importance of knowing the activities that are taking place in a country's ocean space is a very critical factor in ensuring maritime security. The vastness of the ocean space and the inability to monitor each and every inch of the ocean is a major challenge faced by many navies. Further Increased apprehensions have made impacts on drug trafficking, human smuggling, gunrunning, piracy, etc. Within this context Sri Lanka Navy has taken measures to tackle those illegal activities.

The Sri Lankan ocean space comprised of an EEZ that is seven times larger than the land, continental margin around twenty one times larger than the land and a search and rescue region around twenty seven times larger than the land area. By every means it shows that this is a huge area to conduct effective

surveillance by utilizing assets and sensors. As a consequence of that limitation there are number of illicit activities that take place in surface and subsurface water. Therefore, an effective maritime surveillance strategy is essential to minimize the strategic maritime blindness Sri Lanka is facing at present.

The prime objective of this research is to formulate a strategy to reduce the maritime blindness in the Sri Lankan ocean space with the assistance of regional as well as global partners. When formulating a strategy, it is essential to analyse existing maritime surveillance mechanisms and advanced sensors used by other navies. However, the strategy should also focus on how best the navy could use available assets as well as new acquisitions under three dimensional visibilities (Above, Surface and Subsurface) on ocean affairs.

Keywords: Maritime security, Maritime Blindness, Maritime surveillance.

ESTABLISHING A MARITIME DOMAIN AWARENESS CENTER IN SRI LANKA

SACR Kulatunga

Sri Lanka Navy

E mail: roshan_kula@yahoo.com

In this paper the researcher is interested to formulate a domestic Maritime Domain Awareness (MDA) Center in Sri Lanka. MDA is situational awareness of the maritime environment. This could be achieved by gathering of real time maritime intelligence and surveillance. Sri Lanka is situated very close to but, away from Indian subcontinent. Therefore sea born non-traditional security issues have arisen in the North and North Western coastal belt of Sri Lanka. The concept of MDA is a broader area in maritime security and Sri Lanka has to develop her own mini MDA system which suit to the context. Hence this is the high time to take initiatives to establish a MDA Center with information sharing strategy to counter maritime threats and challenges that affect to Sri Lanka. This center will be the core unit for maritime security coordination and it will collect, analysis and disseminate relevant maritime intelligence and data to conduct maritime operations

It also depicts that the inadequacy of existing inter-agency maritime security coordination leads to increase transnational security threats. This issue highlights the significance of establishing a mini MDA center in Sri Lanka. The objective of this paper is to identify the national requirement of establishing a mini MDA center and to identify the requirement of inter-agency synergy to counter sea born non-traditional security threats and challenges. Researcher has selected qualitative research method to collect data from secondary sources including scholarly articles, books, case studies, journals, etc. This mini MDA center could be a contemporary requirement of the country in order to counter existing maritime security issues. In addition, this will draw a common operational picture about the maritime domain which is relevant to maritime security.

Keywords: Intelligence, Surveillance, Synergy

STRATEGIC IMPORTANCE OF BLUE ECONOMY TO SRI LANKA AND CHALLENGES

D Ranasignhe

Institute of National Security Studies, Sri Lanka

E mail: pamodhadr@gmail.com

At the COP+21 conference, the idea of blue energy and blue economy first emerged as a component of green economy. At a time when the world is moving away from the Millennium goals towards a Sustainable Development, the emergence of sustainable blue economy seems vital. Blue economy is the sustainable use of marine resources for economic purposes. It generates an economy through the usage of marine and oceanic resources. National policies have also shifted for a greener aspect with an intention to promote a sustainable balance between economic growth and ocean health.

Sri Lanka, an island strategically positioned in the Indian Ocean amidst major commercial trade routes encompasses a sea area which is seven times larger than its land area. Having the geographical and territorial advantage, its potential in Blue economy is immense given accurate implication and strategic planning. Rising from the ashes of a thirty-year civil war, the country struggles to strengthen its economy while fostering the rehabilitation and reconciliation processes. The true potential of the nation is hindered by various state and extra territorial non-state actors. This paper intends to address potential of blue economy in the changing global challenges, strategic advantages and national prospects.

Keywords: Blue Economy, Sustainable Development Goals, Human Security

BOTTOM TRAWLING IN PALK BAY AREA: HUMAN AND ENVIRONMENTAL IMPLICATIONS

S Wijesundara¹ and D Amunugama²

Faculty of Law, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

E mail: ¹wmshakya@gmail.com

E mail: ²mahamayag3@hotmail.com

Sri Lanka is an island positioned in a geo strategically decisive point in the Indian Ocean. Palk bay is a shallow and narrow strip of water between Sri Lanka and Tamil Nadu, Palk Bay has a rich ecosystem which is being progressive environmental attenuation due to bottom trawling. Elimination of bottom trawling in fishing is needed to save that rich ecosystem in Palk bay. It is important to suggest environmental healthy fishing practices and to inspire the dependent families of bottom trawling to enter into substitute job opportunities. Bottom trawling leads to many problems in whole ecological structure and life below water. Since a large number of people in Sri Lanka are committed in this fishing practice, this directly affects moreover the whole Sri Lankan Northern livelihood. This research will debate on seriousness of banning bottom trawling and explore lasting solutions that would aid environment as well as livelihood of people in Sri Lanka. The research design to be carried out by analysing existing literature subjective to qualitative analysis. Empirical studies carried out by the statistics and data published by recognized institutions. Qualitative data would be collected from individuals such as academics and policy makers. Data collection would be semi-structured interviews done informally.

Keywords: Geo - Strategy, Bottom Trawling, Ecosystem, Marine life, Environment

SECURITIZATION OF NATIONAL BORDERS: A CASE STUDY OF SRI LANKAN BORDER CONTROL MEASURES

A Lankadeva

E mail: athulal@mobitel.lk

A National border is vital for survival of a state and protecting its National security. Paying lip service to security of National borders will maintain the threat level as it is which in turn will impact on National security, Economic security and Societal security. The objective of this research is to expand the concept of securitisation and identify methods to increase the levels or intensity of securitisation taking national border as a referent object. Sri Lanka's border security was studied where increase in drug trafficking was seen post 2009. One aspect of increase in the level of securitisation is strengthening of capabilities of organisations tasked with National border security which will result in effective border protection.

Keywords: National Security, National Border, Border Security, Securitisation, Existential Threat

POLITICAL POLARIZATION OF THE INDO-LANKA FISHERY DISPUTE AND ITS COMPREHENSIVE SECURITY IMPLICATIONS

M Adams

E mail: manjugadams@gmail.com

Sri Lanka and India are two neighbouring states in the Indian Ocean, separated by the narrow strip of water that consists of the Palk Bay, and the Gulf of Mannar. The fishery dispute between the two states is a persistent problem of which the Indian fishermen crossing into Sri Lankan waters for illegal fishing and using illegal fishing methods such as bottom trawling is persistent to date. Even though demarcation of territorial waters is not as easy as land demarcation, the territorial waters between India and Sri Lanka was demarcated and designated in 1974 and 1976 by a bilateral agreement between India and Sri Lanka to establish the International Maritime Boundary Line (IMBL). Accordingly, transgressing the IMBL into Sri Lankan waters and to fish illegally and use illegal methods of fishing are recognized as violation of these agreements between the two states which is governed by the United Nations Convention on the Law of Sea (UNCLOS). However, India – Sri Lanka friendly relations have been governed by geo-strategic relations, international politics, diplomatic relations, and ethnicities. Yet, Political

polarization and colouring is a contributory factor to this fishery conflict. For political gains and vested political interests of politicians who are even stake holders to the fishery dispute between India and Sri Lanka at various levels have influenced this dispute, and is evident that it bears negative influence on sourcing a lasting solution to this problem. As a result of this persistent fishery problem and the political influence have created serious comprehensive security implications on traditional and non-traditional to both states. The objective of this study is to analyse and critically evaluate this Indo - Lanka fishery dispute in the back drop of its political polarization and colouring and its implications to security. This study would be guided by the exploratory research methodology and data collection through qualitative interviews of stake holders to the problem and available literature, and Grounded theory to be used for data analysis.

Keywords: Fishery Dispute, Political Polarization, Security

THE CHANGING PATTERNS OF THE U.S – JAPAN SECURITY RELATIONS IN THE 21ST CENTURY: CASE STUDY OF OKINAWA

DPH Senanayake

University of Colombo, Sri Lanka

E mail: harsha.senanayake92@gmail.com

The U.S - Japan security relations were started in 1945 aftermath of the World War II. The post surrender conditions in Japan authorized the Supreme Commander for Allied Nations to take charge over the Japanese administrative organs. Since 1945, the U.S security interests in East Asia- Pacific region heavily attaches with Japan and Okinawa Island. Democratic values and the liberal market system were adopted by Japan under the terms of the Marshal Plan and Truman doctrine. To counter the communist expansion and to deter the regional security uncertainties, the U.S initiated military based relations with Okinawa, Japan. The collapse of the Soviet Union changed the international order and the U.S – Japan security relations.

This research primarily concerns about the changing patterns of the U.S - Japan security relations in the 21st century. Security requirements and new world order influenced to redesign the

U.S – Japan security relations. The Cold War mentality and containment policy shaped the post-World War II security relations between the U.S and Japan. Yet, the Cold War security concerns influenced to the post-Cold War security relations whilst several newly emerging security threats and regional security concerns changed the post-Cold War security relations between the U.S – Japan security relations. The primary objective of the research is to examine the changing patterns of the U.S – Japan security relations in the 21st century in East Asia – Pacific Further This study highlights communist China and implications of the Korean crisis to U.S – Japan security relationship. Thus this research was carried out using security theories of Barry Buzan and case studies revolving with Okinawa Island basing facility by using and presents a new knowledge to the academia.

Keywords: Security, East Asia, Classical Security Complex, Balance of Power

TRANSBOUNDARY IMPLICATIONS OF INDIA AND NEPAL AIR POLLUTION POLICY IMPLEMENTATION AND SOUTH ASIAN ASSOCIATION FOR REGIONAL COOPERATION

PLS Dias

Department of International Relations, University of Colombo, Sri Lanka

E mail: lakpani@yahoo.com

The expansion of environmental politics is a major revolution which was expanded as a form of political activity in international relations. Particularly smog with particulates can be recognised as a transboundary air pollution in the South Asia region. Environmental issue like smog is not appeared frequently on the international agenda even within the banner of some regional cooperation that negotiate some binding environmental agreements. Smog with particulates are generally acknowledged as a threat to the region as well. It means that the South Asian countries are steadily experiencing various grievance of smog with particulates for the last few years. It has also formed health and environment effects to the region. India and Nepal are prominent contributors to smog with particulate air pollution in the region due to industrialization, population growth, and weak implementation of air pollution policies.

Main objective of this paper was to examine the response of SAARC with regard to the problem of smog with particulates in the region. It is true that smog with particulate pollution is a transboundary difficulty to the region where none of the countries can maintain it alone. Further there are inter-governmental agreements to tackle regional air pollution problems such as The Male Declaration on Control and Prevention of Air Pollution which was signed in 1998. SAARC can also play a vital role in regional environment management by establishing regional environment quality standards.

Keywords: Transboundary Air Pollution, Environmental Politics, Regional Cooperation, Policy

SRI LANKA BETWEEN GEOPOLITICAL INTERESTS OF CHINA AND INDIA

A Seneviratne¹, W Nalawatta², S Weeraratne³

¹Lecturer, Department of Strategic Studies, General Sir John Kotelawala Defence University, Sri Lanka

²Undergraduate, Faculty of Law, General Sir John Kotelawala Defence University, Sri Lanka

³Undergraduate, Faculty of Law, General Sir John Kotelawala Defence University, Sri Lanka

E mail: shaliniweeraratne@gmail.com

Sri Lanka has become a point of interest in the Indian Ocean in the 21st century due to her geo-strategically attractive position. Precisely, the pearl of the Indian Ocean is now in dilemma due to the conflicting interests of rising powers of Asia; India and China. India is the mighty neighbour lying nearest to Sri Lanka. Both countries have had crucial relationships from the past days. For India, Sri Lanka can impact on India's strategic and security interests. Thus India is reluctant to the presence of another major power like China in Sri Lanka. On the contrary, Sri Lanka lying on one of the busiest sea routes has attained the economic companionship of China. As a result eventually Sri Lanka had to encompass into the power politics within these countries.

India and China are the largest countries in the world when it comes to population. According to Revision of World Population Prospects (2015),

India with approximately 1.24 billion people in 2014, and China 1.39 billion of people in 2014 covers together 36.41% of total population of the world. Even when it comes to global power politics both these countries are considered great powers in global politics.

The paper will provide a discussion on Sri Lanka approach to balance good ties between these two regional superpowers. The objective of this study is to assess the importance of support given by both India and China. Information in this regard will be derived from secondary sources i.e. reference of text books, electronic data bases, journals, etc. Most importantly the paper will propose that this location of Sri Lanka has a great advantage towards the country's successful development if professionally used.

Keywords: India, China, Geopolitics, Sri Lanka

THE POST DEPLOYMENT REINTEGRATION AND MENTAL HEALTH ISSUES OF THE SRI LANKAN ARMY SOLDIERS

JKT Udeshika

Department of Psychiatry, Faculty of Medicine, University of Colombo, Sri Lanka.

E mail: thilakshi.u@gmail.com

This study examines the phenomenon of mental health status of the Sri Lankan Army Soldiers in the Post Deployment Reintegration stage and how their mental health status affects the self-development, professional life, family life, social life and functional level of the Army Soldier. Further, the researcher explores the existing and prevailing Post Deployment Reintegration Programs and the mental health services being adopted in the Sri Lankan Army. Also, the researcher assesses and evaluates how negative perceptions and pressures emanated from the general civil society affect the mental health status of the aforementioned Army Soldiers. The experimental design adopted for the study is Cross Sectional Research design which is of descriptive in nature. The Sri Lankan Army, being the main study area, is the population of this study. Out of such population, the researcher selected a sample of 40 soldiers with bitter experience of war from three Army Camps where purposive sampling method was applied. Primary data were gathered mainly through qualitative means including four case studies targeting lower rank Army officers.

Although the Sri Lankan Army Soldiers had faced with very strenuous, cumbersome, life threatening and tragic situations during 30 year war time, the mental health status of the Sri Lankan Army Soldiers was found to be satisfactory. Moreover, being the employer organization, the guardian and the closest relative of the soldiers and their family members, Sri Lankan Army implements a host of medical and non-medical welfare programmes to safeguard and uplift the mental health status of the Army Soldiers. On the other hand, It was evident that the civil society's positive perception towards one time martyrs is fading away gradually due to various negative behavioural patterns of some of the absent and in-service soldiers which reflect very badly on the entire civil society. In addition, labelling and stigma were also proved to be in existence among soldier community.

Keywords: Post Deployment Reintegration, Mental Health Issues, Sri Lankan Army Soldiers

SURVIVAL OF KANDY BEFORE THREE EUROPEAN NATIONS

D Attapattu¹ and P Amarasinghe²

¹Royal Asiatic Society, Sri Lanka

²South Asian University, New Delhi

Email: punsaraprintro@gmail.com

This paper intends to trace the secret of survival of Knadyan kingdom till it fell down to the British in 1815. The innovational methods used by Kandyan since the day Kandy was attacked by Portuguese in later part of 16th century till the British period and more importantly how Kandyans adopted themselves to the novel aspects of gun powder and other military technology of the west would be deeply examined in this research paper. As Prof. Lorna Devaraja pointed out in her most notable paper “Survival of Kandyan Kingdom and its secret” to Royal Asiatic Society, there were few crucial factors that made impacts on the survival of Kandyan kingdom. This paper examines how traditional knowledge factors and the intrinsic ability of surviving in Kandy with its geography caused to sustain its territory from any debacle. Furthermore this paper will trace the strategic actions laid down by Sinhalese soldiers in Kandyan kingdom against European invaders and how western technology was assimilated into the practice of native military as method of resistance will be questioned in this paper. The historical narratives written by European soldiers during the invasion and other historiographical literature will be used as the research method to carry out this paper work and this paper is based on a doctrinal research methodology to the research question.

Keywords: Technology, Warfare, Invasion, Kandy, Military

ENTREPRENEURIAL ASPIRATIONS AND EXPECTATIONS OF SRI LANKA MILITARY VETERANS

MHSB Perera¹, WMAGHA Premarathna², L Welamedage³

¹Sri Lanka Army Volunteer Force, Sri Lanka

²Department of Social Sciences, Faculty of Management, Social Sciences & Humanities,

General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

³Disaster and Development Network, Northumbria University, Newcastle-upon-Tyne, United Kingdom

Email: ¹sirimalb@hotmail.com, ²hemanthahekass@gmail.com, ³lalith.welamedage@gmail.com

In Sri Lanka Army, there are soldiers retiring in the active age group of 40-45 and most of them are with lots of experience, skills, knowledge and potentials which could be utilized to enhance the country's economy whilst providing them with meaningful employment opportunities or converting them as successful entrepreneurs. However, there is no realistic and scientifically drawn up mechanism in Sri Lanka to properly absorb them into the active labour force with maximum utilization. In this backdrop, their skills, knowledge and potentials will be underutilized and it will be a loss for the country's economy in the long-run.

Unlike in developed countries, in Sri Lanka, this issue of veterans' transition into successful civilian life has not yet been addressed by both researchers and policy makers. Moreover, many researches undertaken by defence establishments rarely come into public domain. This paper examines the entrepreneurial aspirations and the expectations of retired military personnel of the Sri Lanka Army in successful transition from military life to civilian life and preparing them for entrepreneurship as a post military career choice.

Keywords: Aspirations, Expectations, Transition, Entrepreneurship, Post Military Career

RE-EMERGENCE OF TAMIL TIGER CELLS IN SRI LANKA: A COMPARATIVE ANALYSIS TO TERRORISM PERSPECTIVE

PSS Sanjeewa

E mail: subathsanjeewa@yahoo.com

Ethnic conflict had created political, economic, and security influences in Sri Lanka. From the late 1970s until 2009, the Liberation Tigers of Tamil Eelam known as LTTE conducted a massive violent campaign against the government of Sri Lanka due to decades of political disparity and the policies of central government, political and economic disparity and repression. Brutal territorial struggle expanded over 30 years, which made the country a war zone due to suicide bombings and other deadly attacks. In 2006, the Sri Lankan military launched a major offensive against the LTTE, bringing the entire country under their control and defeating the LTTE militarily. However, it is indicated that there could be a possible re-emergence of the LTTE cells in Sri Lanka. This study identifies causes and effects of re-emergence of the LTTE cells in Sri Lanka and how does terrorism re-emergence as cells, a comparative analysis of terrorism perspectives. Further, an analysis of these perspectives demonstrates that due to long standing unsolved socio-economic and political issues augmented with external factors such as Tamil diaspora and Indian Tamil Nadu influence, could contribute to re-emergence of LTTE cells in Sri Lanka. The author will adopt mix method to gather data relevant to the subject matter.

Keywords: LTTE Cells, Re-Emergence, Repression, Socio-Economic, Brutal

IMPACT OF GIS MODELLING IN MILITARY OPERATIONAL PLANNING

HWW Ranasinghe¹, KRP Poewel² and KTRB Kodippili³

¹23 Division, Punani, Sri Lanka

² RHQ, Sri Lanka Signal Corps, Sri Lanka

³DSCSC, Sapugaskanda, Sri Lanka

E mail: wasanthahwr@gmail.com

It is a globally accepted fact that sound planning and preparation well before an operation gives an immense advantage to the success of any battle. The operation planning process takes considerable time and requires sound intelligence regarding the battlefield in preparing a successful operation plan. The Intelligence Preparation of the Battlefield (IPB) process is an important aspect in the operation planning process in the modern battlefield. Speed of the output, flexibility, timeliness, accuracy and future usage are essential parameters in this process. The IPB process is conducted using manual overlay drawing methods in Sri Lanka at present. The research proposes a Geographic Information System (GIS) model in conducting the IPB process using GIS software. It was found that the proposed GIS model has the advantages of time saving, easiness, accuracy, flexibility and future usage than the manual method which is used in carrying out the IPB process in the country. However, defence authorities in Sri Lanka are still lagging behind in introducing GIS to the operational planning process. The research also focused in finding the reasons for not using GIS and identified that lack of training on GIS, lack of knowledge on GIS application and lack of Information Technology (IT) resources are the reasons for the limited usage of GIS in the military. Finally the research recommends to introduce GIS based platform not only for conducting IPB process but also other operational planning processes.

Keywords: GIS, IPB, Battlefield

DYNAMICS IN CYBERSECURITY: CHALLENGES TO SRI LANKA'S NATIONAL SECURITY

B Senaratne

Lecturer, Department of Strategic Studies, General Sir John Kotelawala Defence University, Sri Lanka

E mail: bhagya.senaratne@kdu.ac.lk

Technological developments in today's world which take place annually, make technology accessible to individuals and communities that were previously not able to access it. The advent of mobile technology, its accessibility and affordability has enabled its penetration to all walks of society. This has therefore even empowered non-state actors and terrorist groups, which increases the threat individuals and states face.

The objectives of this study are to examine whether Sri Lanka is prepared to face threats that could penetrate the country via the cyber domain and to illustrate what mechanisms the country needs to take to overcome these threats to national security. The methodology undertaken for this research is qualitative in nature, with primary data constituting of government policy documents, agreements and legal documents. A series of in-depth interviews too were conducted with professionals in the cybersecurity and legal spheres. Secondary data

such as news clippings from newspaper articles, reputed web articles, journal articles and statistics from both the Department of Census and Statistics, Sri Lanka and the International Telecommunication Union too were utilised for this research. The study thus provides an assessment of the country's cyber security preparedness.

In conclusion, Sri Lanka needs to improve its legislature to implement the international treaties its signatory to, as well as, empower its Armed Forces so that they are capable of assessing threats in the cyber domain and countering them. Furthermore, the country which is in the process of drafting a cybersecurity policy for the country, needs to identify mechanisms for implementation or a body that will monitor it.

Keywords: Cybersecurity, National Security, Sri Lanka

TRANSITION OF ACCORDANCE: THE NEXT STEP OF INDIA - SRI LANKA ECONOMIC STRATEGY

S Senarath¹ and SE Jayasekera²

¹ Faculty of Law, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

² Faculty of Law, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

E mail: Sakunthala.senarath@gmail.com

Bilateral relationships of Sri Lanka with its' big brother, India was old as the literal history of both countries. Each time the foreign policy cogency, external influence and the domestic political forces of both countries played a vital role in implementing and lashing these agreements. The efficiency of these economic partnerships affected to the development of each other in either good or bad means, but these fluctuations hadn't affected to enduring further agreements. With Prime Minister Modi's neighbourhood first policy, best example was the very recent framework agreement, Economic and Technology Cooperation Agreement (ETCA) which was in the process of finalizing, came out as a result of the discussion of Prime Ministers of both countries. The approval of the framework by both countries had arose the ill-acceptance of the public; specially the working sector of Sri Lanka. However, a separate chapter in Comprehensive Economic Partnership Agreement (CEPA) touches the grounds of intellectual property, high technological innovations, technicians and guidance, exchange of technology of both countries was the most

significant point that changes this agreement from. Therefore, Sri Lanka's target should be achieving a fair share through this agreement. The aim of this study was to examine whether the content of this ETCA was favourable especially to the Sri Lanka's economy; how it was favourable to upsurge the economy and strategies and mechanisms proposed by both countries. This is an explorative qualitative study done by interviewing bureaucrats, diplomats and field experts of economy and using previously analysed data gathered from Indian High Commission of Sri Lanka. By reviewing and comparing the above collected data this essay has come up with the conclusion that the proposed system must be based on significant, on the rates of foreign direct investments in Sri Lanka. Since, it was in nature that the bigger country always achieved the highest advantage, but in any agreement both parties should be satisfied.

Keywords: Bilateral Relationships, Economic Partnership, Mechanism, Transparency, Intellectual Property

AIR POWER: A RESPONSE OPTION TO COUNTER THE CHALLENGES OF SUB-CONVENTIONAL WARFARE DYNAMICS

N Wanasinghe

Sri Lanka Air Force

E mail: niroshwanasinghe@yahoo.com

Sub-conventional warfare refers to the grey region of the spectrum of conflict. From inception the face of the sub-conventional warfare remains in a continuous transition due to the changing dynamics of technology, interests of state/non state actors, global/regional political status etc. The unique characteristics of airpower such as height speed and reach empowered by flexibility, mobility and precision enables Air Forces to counter sub-conventional elements with asymmetric advantage. Hence it requires timely reviews of roles and missions ultimately lead to techniques and tactics with differing capabilities in dissimilar situations. Air power is offensive in nature. Conventional applications of air power can be improvised in dealing with sub-conventional elements such as surveillance and reconnaissance, bird eye view for decision makers, tactical air mobility and air strikes.

Naturally sub-conventional elements emerge as a small group of insurgents usually untrained and inexperienced, which later develops and expands

up to near conventional forces by winning the popular support where they dominate. Nipping it in the bud is the best approach to eliminate such armed elements. Paralyzing militarily where their roots are not deepened enough to withstand longer and heftier military encounters. For the betterment of the safety and security of the nation, at times command elements might need to take crucial decisions to launch kinetic air operations even with inevitable minute un-intentional damages. Air power strategy should be in line with overall strategy. Triumph of airpower against sub-conventional elements depends upon three main rudiments. They are Intelligence, technology and joint operational effort. This study proposes an option in designing airpower strategy in countering sub-conventional warfare challenges.

Keywords: Airpower, Intelligence, Technology, Joint Operations

THE INFLUENCE OF GLOBAL ISLAM RADICALISATION TO SRI LANKA

LCR Jayasuriya

E mail: robinjayasuriya@yahoo.com

This paper examines the background to conflicts in countries where Islam is followed as a religion and gives a historical perspective to the current conflicts in the Middle East. The Introduction identifies that the historical divide between the Sunni and Shia Islam sects have led to create deep rooted sectarian divide among the two Islam schools of thought. It also brings out the present beginning of this sectarian divide when the paper identifies four major contributory factors to the rise of present day conflicts in the Middle East and its spill over effects to other parts of the world. This is the problem that faces Sri Lanka. The paper hopes to inspire public servants and policy makers to gain more knowledge on the subject in order to be able to formulate effective counter mechanisms. This brings the reader to the research objective to find if Sri Lanka has a suitable national security framework and necessary knowhow to face this challenge. The research methodology is qualitative and mainly based on secondary sources related to

Islam radicalisation and best practices as counter measures. The global and regional influence of extremist Islam ideology has seeped into the Muslim social fabric during the past seven years and resulted in an ongoing 'tug of war' between orthodox Muslims and more radicalised followers. The Sri Lankan perspective gives insight to Islam radicalisation in Sri Lanka and the problems faced within the Muslim community. Radicalisation first and foremost directly affects the orthodox Muslims of Sri Lanka. The paper also talks about the necessity for regional and global cooperation to counter this menace. The whole of government approach or adoption of the concept of homeland security by strengthening cooperation between Government Departments and the Intelligence and Security Sector appear to be the key to deter this dangerous phenomenon.

Keywords: Radicalisation, Islam, Sunni/Shia, Orthodox

REGIONAL HEGEMONY AND SMALL STATE SURVIVAL: RE – EXAMINING CEYLON'S FOREIGN POLICY UNDER PREMIER D.S. SENANAYAKE

SD Silva

University of Colombo, Sri Lanka

Literature that deals with Ceylon's foreign policy during the D.S Senanayake administration (1948-1952) evinces a general hypothesis regarding the close relationship between the Ceylonese administration and the British government. This paper argues that Ceylon adopted an 'inclination' to an extra-regional power with the intention of mitigating the threat stemming from India. It argues that Ceylon's relationship with the British was intended to balance the threat from India. The paper evaluates the threat perceptions from India at the time of Ceylon's independence and the rationale behind the close relationship between Ceylon and its former colonizer. I have utilized a descriptive, analytical and historical methodology based on existing literature on Ceylon and India to demonstrate the threat perception that Ceylon faced from the latter as well as the underlying reasons behind an 'inclined' foreign policy towards the British. The paper examines the security challenges that the small state faced from its incipient regional hegemon and the reasons. Under such circumstances Ceylon chose to be inclined towards the British - thereby balance the threat of India - so as to ensure her survival.

Keywords: Ceylon, India, Small State Security, D.S. Senanayake

HOT PURSUIT ON LAND: EXECUTION VERSUS LEGITIMACY

KERL Fernando¹, R Fernando², L Fernando³

¹ Sri Lanka Law College, Sri Lanka

² Sri Lanka Police, Sri Lanka

³ Lanka World Link Chem (Pvt) Limited, Sri Lanka

E mail: elisharadini.fernando@yahoo.com

Principle of hot pursuit generally pertains to the law of the seas and its applicability on land is controversial. Hot pursuit on land can be defined as right to pursue and apprehend an opposing force on another state's land. However, principle of hot pursuit on land is being enforced by many states wrapped as a 'right' by giving out several reasons such as self-defence and moreover it is evident that this principle has been used as a defence to veil military actions. Thus, according to legal perspective, right to hot pursuit on land contributes in violation of state sovereignty and territorial integrity of another state. In this backdrop, research problem is focused on evaluating the legality of the principle of hot pursuit on land versus the execution of the principle by world powers. Eventually, in finding possible solutions to redress the issue it would also lead to identify the gaps in international law which has become an obstacle to counter the enforcement

of the practice of hot pursuit on land. Further, the research arena of this paper is confined to hot pursuit on land by U.S. forces. The conceptual framework of this study is designed to evaluate prime world examples of hot pursuit on land in comparison with its legality and enforcement. In order to achieve this objective, this study will rely on qualitative legal research methodology which mainly based on primary sources of applicable legal rules and case laws and secondary sources of media and internet. Ultimately, research outcomes would lead to identify the principle of hot pursuit on land as a challenge for changing dynamics in the global environment.

Keywords: Hot pursuit, Land, Legitimacy, Execution

21ST CENTURY GREAT GAME AND ITS ACTORS: INDIA'S INTERESTS IN CENTRAL ASIA AND ITS REPERCUSSIONS IN SOUTH ASIA

P Amarasinghe¹, D Attapttu², P Joshi³

¹Faculty of Law, South Asian University, New Delhi

²Royal Asiatic Society, Sri Lanka

³Research Observer Institute, New Delhi

E mail: punsaraprintro@gmail.com

In 2012 June India launched a “Connect Central Asia” policy which embodies India’s ardent concern over Central Asian states. This paper will show how this policy would undermine the regional stability of South Asia since Pakistan’s natural fear on Indian involvement in Central Asian region. Robert D. Kaplan points out that India’s history is the story of invasions from a north-westerly direction. Under these circumstances troubled in Central Asia, Afghanistan has become a crucial strategic point for New Delhi. The literature review of the papers is based on the subject matter and this paper will ultimately trace a comprehensive analysis on the repercussion of rising Indian role in Central Asia and how it would create a new “Great Game” in the region.

Keywords: Central Asia, Great Game, India, Pakistan

SECURITY FORCES INVOLVEMENT IN NATION BUILDING: ETHICS AND SOCIAL RESPONSIBILITY

AA Rasheed

Maldives National Defence Force
E mail: amanu.rasheed@gmail.com

The aim of this study is to identify how the civil-military cooperation (CIMIC) will enhance through ethics and social responsibility of security forces (SF) during nation-building. Objectives of this study are to identify the relationship between military ethics and civilian values, to identify the social responsibility roles of security forces during nation-building and to identify how civil-military cooperation enhances through ethics and social responsibility as a result of security forces involvement in nation-building. The study uses a descriptive research using quantitative and qualitative methods. This study focuses on the extent of military ethics against positive effects on the civil community during nation-building, and how CIMIC affects on social responsibility of SF for the improvement of socio-economic conditions of civil community. To enable the above-mentioned areas, this study defines nation-building as any program, project, or activity undertaken by a nation's SF in ensuring not only the survival of the nation-states but likewise its development. Military Ethics and social responsibility of security forces

is further discussed in relation to examples from the United States military, Sri Lankan post-conflict re-integration of internally displaced people and reconciliation programs conducted by the SF. Moreover, the importance of CIMIC is identified as a vital role of SF during nation-building in order to enhance social and economic conditions of the society. Hence, the security forces are an important property of nation-building, with their military ethics and social responsibility values in up bringing the nation with the fullest cooperation of the civilian society of the country. The results of this study show that there is a positive effect to the civilian society by the SF. Further nation-building enhances civil-military cooperation. This study can be a critique for other researches to clarify the benefits and other implications of SF involvement in nation-building.

Keywords: Nation-building, Security forces, Ethics and Social Responsibility, Civil-Military Cooperation.

THE STRATEGIC IMPORTANCE OF SRI LANKA IN INDIAN OCEAN REGION: REFERENCE TO STRING OF PEARLS STRATEGY

SAK Madanayaka (Deceased)

Department of Strategic Studies, Faculty of Defence and Strategic Studies, General Sir John Kotelawala Defence University,
Ratmalana, Sri Lanka
E mail: madanayakas@kdu.ac.lk

China's interest in maritime silk route and continues energy flow to the country has resulted as "String of Pearls" across the Indian Ocean Region (IOR). In the 21st century, China came into the scenario of balancing the power of South Asia which generates a rivalry among India and China in Indian Ocean. Sri Lanka sits at the heart of the Indian Ocean, and holds one of the pearls of that string of pearls. The study focused on 'to identify of the strategic importance of Sri Lanka within the Chinese String of Pearls Strategy in Indian Ocean Region'. The methodology that followed for this study is qualitative in nature by using only secondary data with descriptive analysis. The theoretical approach of the study is based on the small states theory and China's peaceful rise theory. As per the study, the findings are elaborated in the following sectors; 'String of Pearls' in Indian Ocean, Sri

Lanka and the rivalry between the Elephant and the Dragon, Strategic importance of Sri Lanka 'the Diamond' and losing the pearl from our hands. In the conclusion of the study, it reveals that the strategic importance of Sri Lanka in Indian Ocean has attracted the world's big powers. The China's presence in Sri Lanka has been mutually benefited to Sri Lanka as well as China and the regime change of Sri Lanka has resulted in leasing the Hambantota port in order to meet the short term requirements of the country. Besides the political debates, Sri Lanka could use the pearl for the sustainability of the country and enhancing relations with the big powers of the world rather than accomplishing short term requirements.

Keywords: Strategic Importance, Sri Lanka, String of Pearls, Indian Ocean Region

