

CONFERENCE
BOOKLET

asian
security
conference
2012

Non-Traditional Security
Challenges – Today and Tomorrow

14th *Asian Security Conference*

Non-Traditional Security
Challenges – Today and Tomorrow

(February 13-15, 2012)

Organised by



INSTITUTE FOR DEFENCE
STUDIES & ANALYSES

CONTENTS

Concept Note	5-11
Conference Programme	12-15
Profiles of Participants & Abstracts	19-87
Conference Team	91-94
Help Line	95

Concept Note

Over the last few decades, the global security setting has undergone a vast change with the emergence of new threats. Challenges such as the devastating environmental shocks of climate change and its impact on food, water and energy resources, which in turn has implications on the economy of nations, migration, threat of pandemic diseases that cut across political boundaries, transnational crime, regional and global financial crises were recognised as critical issues with repercussions on national, regional and global security having immediate and long term impacts. Given their potential to exacerbate existing tensions, they have the potential to contribute to traditional security threats. Hence, a blurring of the lines between what constitutes traditional security issues as represented by military concepts and those that are non-military by definition. With emerging challenges to the very survival and well-being of people, groups and states have taken place. Non-traditional security issues are being perceived as critical to national and global security as are war and armed conflict; WMD proliferation and arms race and are being accorded increasing prominence on the policy and research agendas of governments, NGOs, academicians as well as business and international organisations. They are often transnational in scope, defy unilateral remedies and require comprehensive political, economic and social responses.

The Institute for Defence Studies and Analyses' (IDSA) 14th Asian Security Conference will address the above issues in their political, social and economic dimensions. The sessions are:

- I. Traditional Vs Non-Traditional Security Issues: Conceptual Framework
- II. Financial and Economic Security

III. Climate Change and Natural Disasters

IV. Trans-national Crime

V. Energy Security

VI. Water Security

I. Traditional Vs Non-Traditional Security Issues: Conceptual Framework

The following sub-themes have been identified wherein experts will debate and discuss issues in these emerging security challenges in the non-traditional security area

1. What constitutes Non-Traditional Threats?
2. How different are they from the traditional challenges?
3. How should they be addressed?
4. Should the approach templates be different and if so how?
5. Will these new threats evolve into a traditional conventional nature?

II. Financial and Economic Security

The advent of globalization has ushered in global interdependence where all major powers and their economies are integrated as never before. Unlike the past, every major economy today is dependent on economic and political engagement with the outside world for its continued development and prosperity. However, individual nations may have very different priorities such as; what regulations are needed to monitor and stabilise the current Western-dominated financial system and what is the role of global institutions in creating these regulations? Given that, it is mainly the Asian economies that are increasingly seen as invaluable for sustaining global economic growth, and for the management of regional and global economic and security challenges. The current global climate presents an opportunity

for Asian nations to work together with the rest of the world and have a greater say in institutions like the IMF and the World Bank. Therefore, time has also come for forums such as the G20 economies to play a greater role rather than mere exclusive groupings like the G8, whose share of the world economy is in decline. The questions for the session are:

1. Is it time for the old order to pass the baton to emerging nations? (G8 vs G20; Asian leadership for FIIs)
2. How can the global financial system prevent new crises from occurring?
- 3 . How can a new and more just roadmap for a new global financial order/system be ushered in?

III. Climate Change and Natural Disasters

Over the last decade, climate change has emerged from scientific or academic ivory towers and is now being accepted as the single greatest challenge related to human security, energy, economics, health and safety, food production and other security issues. Besides, the vulnerability to disasters from both natural and man-made has increased considerably all over the world. Due to rapid climate change, earthquakes and forest fires, tsunamis, oil spills, droughts or hurricanes, with accompanying devastation to both human life and infrastructure, disastrous catastrophes are a recurring phenomenon having direct impact on the economies of nations. Moreover, rapid urbanization along with population growth over the world has increased risks from hazardous industrial accidents, leakages of radio-active material and outbreak of pandemics. Despite nations taking cognizance of such disasters, the making of effective disaster management policies which encompass relief, prompt response measures as well as prevention of the same have been slow and require urgent planning and implementation. The session will attempt to answer the following questions:

1. What are the climate-induced drivers of conflict and security?
2. What factors has contributed to the escalation of natural disasters?
3. In climate diplomacy and negotiations, what will the future of the climate change regime be?
4. Are the nations prepared for the emerging challenges arising out of natural disasters?
5. Is there any collective response at the regional level and what needs to be done in securing the nations?

IV. Trans-national Crime

Prior to the Cold War, transnational crime was not considered a threat to national security and was seen largely as a law and order problem. However, current trends indicate that transnational crime has undergone transformation. Globalization and its associated processes of connectivity have resulted in significant changes in the business of transnational crime with criminal syndicates adopting more sophisticated methods in conducting their illicit activities, which comprises of money laundering, drug trafficking, illegal migration, international terrorism, piracy and smuggling. Today, no country is exempted from the threat of transnational crimes and it is posing a serious threat to national and international security and stability, challenging the authority of states by undermining development and victimizing the entire population. The session will focus on the following questions:

1. Has globalization impacted on the transformation in the nature of transnational crimes?
2. What are the impacts of the transnational crimes on regional and national security?
3. Is an inclusive policy to facilitate involvement of all the

stakeholders/key actors in curbing transnational crimes essential?

4. How a cooperative approach by the Asian Countries will facilitate in addressing the transnational issues?

V. Energy and Food Security

Energy Security

Over the past few years, the world has been rocked by a series of international and regional events that challenge nations' energy security. The earthquake/tsunami in Japan and its resultant impact on the Fukushima power complex, the popular protests in the Middle East-North African region which have seen several well entrenched regimes being toppled; oil spills in the Gulf of Mexico; lack of timely investment in supply augmentation and massive growth in demand in developing countries along with the threat of resource nationalism have all increased concerns about the long-term security of supply for energy-importing states dependent on volatile energy-producing states. Without adequate and affordable supplies of energy resources, the economic growth of nations will be affected; it will also impede attempts to re-emerge quickly from the recent economic recession. It is therefore imperative that long-lasting solutions, including access to new and emerging technology across the board, are sought and implemented, be it individually or collectively to address the current challenges in the global energy sector. The session will examine to explore the answers of the following questions:

1. What are the new and emerging challenges in energy security, particularly with reference to the Asian countries?
2. Can technology resolve energy dilemma or will it throw up new challenges/competition for resources/RE

technology?

3. How can Asian countries cooperate in ensuring energy security for the region?

Food security

In the face of climate change, rapid increasing populations, water scarcity, soil erosion and the search for energy independence which is converting land hitherto used for the production of food grains to growing fuels are increasing the stresses on the global food system. Though there have been some rather exceptional success stories in Asia and the Asian experience is held up as an example of food security progress from which other regions can gain lessons, some pervasive conditions of under-nourishment continue to plague individuals and communities in pockets throughout the region. Unless governments urgently shift expenditures from military uses to tackling climate change, increasing water efficiency and soil conservation, and population stabilization measures; the world will in all likelihood be facing a future with greater food instability and price volatility. The session will focus on the following question:

1. Is food instability a threat to security in Asia?
2. What are the determining factors of food insecurity vis-à-vis economic instability?
3. Is a multilateral approach viable to address food security issues?
4. How should the Asian nations address the challenges of food security?

VI. Water Security

Through the centuries, the mighty rivers have sustained the lives and livelihood of people in Asia. Mighty rivers like the Yangtze, Tigris, Euphrates, Indus, Ganges, Brahmaputra,

Irrawady, Salween, Mekong, Amu Darya and Syr Darya flow through different countries making riparian relations equally conflicting and converging. The combined effects of global warming and weather patterns are expected to lead to set of global warming and weather patters are expected to lead to a set of interconnected calamities. Asia will be particularly vulnerable due to the “exponential function” of rapidly increasing population, growing food demand and dependency on water for irrigation and energy. With the increasing importance of transboundary rivers, hydro-diplomacy can be seen as a new framework for regional cooperation, with opportunities for dialogue, consultation and data-sharing both between and within states. On the other hand, control of water can also lead to hydro-hegemony and dominance. The session will explore the following questions:

1. What are the dynamics of upstream-downstream rivalry?
2. Can upstream riparian assert hydro-hegemony?
3. How can a comprehensive transboundary river water dialogue be structured?

CONFERENCE PROGRAMME

Day One
Monday, February 13, 2012

0930h-1000h: Registration

1000h-1030h: Inaugural Session

Opening Remarks by Director General, IDSA

Address by Hon'ble Raksha Mantri

Release of IDSA Publication

Vote of Thanks by Deputy Director General, IDSA

1030h-1045h: Tea Break

1045h-1300h: Session I: Traditional Vs Non-Traditional Security Issues: Conceptual Framework

Chair: T K Oommen

Rear Admiral Neil – *Traditional and Non-traditional Security Issues*
Morisetti

John Jackson Ewing– *Traditional and Non-traditional Security: Exploring Conceptual and Practical Challenges*

Cleo Paskal – *Environmental Change – A Very Traditional Threat*

Col (Retd) P K Gautam – *Traditional and Non-traditional Issues: Conceptual Framework*

1300h-1400h: Lunch

1400h–1600h: Session II: Climate Change and Natural Disasters

Chair: Rear Admiral Neil Morisetti

- Takeshi Takama- *Food Security and Climate Change Vulnerability in Indonesia/Bali*
- T Jayaraman -
- Dennis Taenzler- *Climate Change: Adaptation as a Mean of Crisis Prevention*
- Zheng Xiaoming- *Significance and Influence Factors of Climate Change Cooperation Between China and Brazil of BASIC –from the Perspective of International Relations*

1600h–1615h: Tea Break

1615h–1815 h: Session III: Water Security

Chair: Leela K Ponappa

- Tinh Dinh Le- *Water Security Issues in Southeast Asia*
- Robert Wirsing- *River Diplomacy in Himalayan Asia: On the Way to Calamity?*
- Uttam Kumar Sinha- *Prospects and Challenges of Hydro-diplomacy in Water-scarce Regions*

Day Two
Tuesday, February 14, 2012

**1000h–1030h: Keynote Address by Shiv Shankar Menon,
National Security Adviser**

1030h– 1100h: Tea Break

1100h–1300h: Session IV: Energy Security

Chair: Girjesh Pant

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| Yiorghos Leventis– | <i>Energy Security</i> |
| Zhao Hongtu– | <i>Energy Security: Challenges and China's Strategy</i> |
| Samir Pradhan– | <i>Gulf's Role in India's Energy Security</i> |
| Vivek Mathur– | <i>India's Role in the International Oil Market</i> |
| Amitav Mallik– | <i>Energy & Environment Dilemma: Impact on National Security</i> |

1300h–1430h: Lunch

1430h–1630h: Session V: Trans-national Crime

Chair: D P Dash

- | | |
|-------------------|--|
| Ali Jalali– | <i>Transnational Crime</i> |
| Arabinda Acharya– | <i>Crime and Terrorism in Comparative Perspective: Impact on National Security and Development</i> |
| Ely Karmon– | <i>Are We Nearer to a Major CBRN Terrorism Threat?</i> |
| Molly Charles– | <i>Transnational Organised Crime – Role of Silent Violence and Social Engineering</i> |

Day Three
Wednesday, February 15, 2012

1000h–1030h: Special Address by Roza Otunbayeva, Former President, Republic of Kyrgyzstan

1030h–1100h: Tea Break

1100h–1300h: Session VI: Financial and Economic Security

Chair: N S Sisodia

Sanjaya Baru–

The Geo-economics of Financial Stability

Meibo Huang–

Reform the International Monetary System – An East Asian Perspective

Pradumna Bickram Rana –

The Evolving Multi-layered Global Financial Safety Net: Asia's and India's Role

1300h: Vote of Thanks

1310h: Lunch

PROFILES OF PARTICIPANTS

&

ABSTRACTS

Inaugural Address

A K Antony

Hon'ble Defence Minister



Shri A K Antony, Union Minister of Defence of India and President, Institute for Defence Studies and Analyses, has held several important positions. An Advocate by profession, Mr. Antony started his political career as a Student Activist of the Kerala Students Union. He has held many important political assignments: President, Kerala Pradesh Youth Congress Committee, President and General Secretary of Kerala Pradesh Congress Committee, General Secretary of All India Congress Committee and Member, Congress Working Committee. He was first elected to the Kerala Legislative Assembly in 1970 and was the Chief Minister of Kerala thrice during 1977-78, 1995-96 and 2001-2004. He was also Leader of the Opposition in Kerala Legislative Assembly during 1996-2001. Mr. Anthony was Member Rajya Sabha twice from 1985-1991 and 1991-1995. He was Union Minister for Civil Supplies, Consumer Affairs and Public Distribution during 1994-1995. He was elected to the Rajya Sabha in May 2005 from Kerala.

Shri Antony edited a Malayalam Weekly Kalasala during 1964-66 and later a Malayalam Daily Veekshanam from 1978-1982.

Welcome Address

ARVIND GUPTA

Director General, IDSA



Dr. Arvind Gupta is an officer of the Indian Foreign Service. He took charge as a Director General of Institute for Defence Studies and Analyses (IDSA) on 5th January 2012. Prior to this assignment he was holding the Lal Bahadur Shastri Chair in Strategic and Defence Studies at the IDSA. Dr. Gupta was Joint Secretary at the National Security Council Secretariat (NSCS) from 1999 to 2007. During his tenure at the NSCS, he dealt with a wide spectrum of national security issues.

Dr Arvind Gupta has wide-ranging diplomatic experience gained while working at Indian missions abroad. He has handled a number of assignments in the Ministry of External Affairs in different capacities. His current interests include: the impact of globalisation on India's security; the security, foreign policy and diplomatic challenges before India; energy security, climate change, institutional reform, India's neighbours, internal security, and technology & security.

He has several books, articles and papers to his credit.

RUMEL DAHIYA

Deputy Director General, IDSA



Brigadier Rumel Dahiya, SM (Retd.) is Deputy Director General at IDSA. He also heads the Military Affairs Cluster and is Managing Editor of the *Journal of Defence Studies*.

Brig. Dahiya is an Indian Army veteran with extensive command and staff experience spanning 32 years, including in counter-insurgency operations. He previously served as Defence Attache to Turkey, Syria and Lebanon, and with the Indian Military Training Team in Bhutan. He also served with the Military Operations Directorate of the Indian Army and the Net Assessment Directorate at the Integrated Defence Staff. Brig. Dahiya is a graduate of the National Defence College and Defence Services Staff College. He was awarded the Sword of Honour and Gold Medal at the Indian Military Academy at his commissioning.

Session I

*Traditional Vs Non-Traditional
Security Issues: Conceptual Framework*

*Monday, February 13, 2012
1045h–1300h*

T K OOMMEN



Prof. T.K Oommen is a sociologist. At present he is Professor Emeritus at the Jawaharlal Nehru University (JNU), New Delhi. During his distinguished career Dr. Oommen has been visiting professor at the University of California, Berkeley, U.S.A; the Maison des Sciences de l' Homme, Paris; the Wissenschaftszentrum, Berlin; and Senior Fellow at the Australian National University, Canberra; the Institute of Advanced Studies, Budapest and the Institute of Advanced Studies, Uppsala among other institutions.

Professor Oommen is the author / co-author of twenty books and editor/co-editor of ten books on a wide variety of themes. His book *Understanding Security: A New Perspective*, (Macmillan, 2006) is a bestseller. He was the first Ford Foundation Chair on Non-traditional Security, attached to the Delhi Policy Group during 2003-5. He was a member of the Prime Minister's High Level Committee (2004-6) to study the Socio-economic status of Muslim community in India. He was conferred the Padma Bhushan by the Government of India in 2008 for his contributions to the field of higher education.

JOHN JACKSON EWING



Dr J. Jackson Ewing is Research Fellow and Coordinator of the Environmental Security, Climate Change and Food Security Programmes at the Centre for Non-Traditional Security (NTS) Studies in the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University. Prior to joining the Centre for NTS Studies, Dr Ewing taught on a range of security issues while serving as Teaching Fellow and attaining a PhD in the International Relations Department at Bond University in Queensland, Australia. His research interests include a range of both traditional and non-traditional security issues throughout Asia, and his past work has focused on the capacity for environmental factors and processes to contribute to the causes of instability and civil conflict in Southeast Asia. Dr Ewing's most extensive Asian experience has been in the Philippines, where he spent a large part of 2008 as Visiting Researcher in the Ateneo Center for Asian Studies (ACAS) at Ateneo de Manila University and as Fellow at the Institute for Strategic and Development Studies (ISDS). Dr Ewing has presented and published multiple works on environmental and climate security in the Philippines as a result of this research, and continues to work on environmental security issues in the Philippines' southern maritime regions. He is currently working on multiple projects, including the mapping of environmental and food insecurities throughout Southeast Asia, connections between climate change and migration in Bangladesh and the relationships between identity, natural resource development and autonomy movements in Indonesia.

Traditional and Non-Traditional Security: Exploring Conceptual and Practical Challenges

John Jackson Ewing

The expansion of security discourse that accelerated after the fall of the Soviet Union has proven to be more than a passing fad. Contemporary trends and events in environmental, food, development, health and other sectors that have traditionally fallen outside the purview of 'security' have propelled these issue areas up the policy stratum of many states, international organisations and civil society agendas. In some cases, these shifts have led to the language and conceptual underpinnings of 'security' being applied in new ways and in new areas as tools for understanding and addressing emergent challenges. Such 'securitisation' is on one level unsurprising, as trends and events in 'non-traditional' sectors have a clear capacity to affect the lives of individuals and progress of societies, and have shown the capacity in certain cases to foment geopolitical competition, instability and violent conflict. However, despite the maturation of scholarship on 'non-traditional security' (NTS) issues, pervasive questions remain concerning the relationship between non-traditional and traditional security sectors, what or whom should be the referent object of security, and the conceptual and practical value of 'securitising' more generally. NTS discourse should avoid shirking these questions for the sake of promoting wide-ranging agendas, and instead continually engage with securitization problematics in order to enhance the subfield's analytical coherence and further clarify its value for policy making and international peace and stability. Only by doing so will NTS be able to transcend the polemic debates that have often mired traditional and expansionary security thinking, and elaborate upon security frameworks that are suited to 21st century challenges.

P K GAUTAM



Col. P.K. Gautam is Research Fellow at IDSA. He has held the Defence Research and Development Organisation (DRDO) DS Kothari Chair on environmental security at the United Service Institution of India (USI), New Delhi in 2002-2003. Research carried out as DS Kothari Chair was published as the book, *Environmental Security: Internal and External Dimensions and Response* (2003). He joined IDSA in 2005. At IDSA, he has been member of the Task Force on Climate Change (2009) and the Task Force on Water Security (2010). He has researched extensively on the military and the environment as well as on trends in warfare. He is the author of *Composition and Regimental System of the Indian Army: Continuity and Change* (2008), *Environmental Security: New Challenges and Role of Military* (2010), and *The Need for Renaissance of Military History and Modern War Studies in India* (IDSA Occasional Paper No. 21, 2011). He has also coordinated the Task Force on "Tibet and India's Security: Himalayan Region, Refugees and Sino-Indian Relations", the findings of which are to be published in the form of a Task Force Report.

Traditional and Non-Traditional Issues: Conceptual Framework

P K Gautam

The concept of non-traditional security has emerged as a discourse to be reckoned with. Non-traditional security in varied forms is now prominent in the security discourse of policy makers, scholars and the public at large. The original idea that led to considering non-military issues was that militaries by themselves were both incapable and inadequate to provide security. Why was this? Because threats were no longer to the military by the enemy's military. Rather the agenda has broadened to include environment including climate change, pandemics, economic, social issues etc. Courtesy the UN, the referent object from being just the state forked out to include individuals/human security. Now another strand in the international system is the global commons. Led by an energetic worldwide scholarly community mostly from the West, besides widening, there is also deepening of the issues on how security needs to be understood. In parallel, geopolitics has not gone away. Power will still matter. National sovereign interests still remain paramount. But it has now been realized that a clash of arms or wars can not solve the disputes over the non-traditional security issues.

The paper will show how 'non-traditionalisation' is affecting all endeavours in security studies. It will take help of policy focus as being done by the UN including the issue of human security. Absence of theories of international relations for non-traditional security region will also be flagged as the new challenge to be met. It will conclude with opportunities, and give answers to the research questions of the concept note.

CLEO PASKAL



Prof. Cleo Paskal is an Associate Fellow at the Royal Institute of International Affairs, Chatham House, London, as well as Adjunct Faculty in the Department of Geopolitics, Manipal University, and at SCMS, Kochi. She has consulted for or briefed a wide range of stakeholders including the US Department of State, US Department of Energy, US Army War College, UK Ministry of Defence, UK Foreign and Commonwealth Office, UK Defense Academy, German Foreign Office, EU, NATO, OSCE, the heads of many major corporations, and security professionals from over 30 countries.

Prof. Paskal has also won over two dozen awards for her writing and has contributed to, among others, the *Sunday Times*, *Telegraph*, and *The Economist*. She has hosted BBC radio shows and wrote an Emmy-winning documentary TV series. Her book *Global Warring: How Environmental, Economic, and Political Crises Will Redraw the World Map* (2010) won multiple awards, including the Grantham Prize Award of Special Merit. She is currently a columnist for the Huffington Post.

Environmental Change – A Very Traditional Threat

Cleo Paskal

While environmental change is currently considered a non-traditional threat, classical strategists knew that understanding and anticipating changes in the physical operating environment was a fundamental part of strategic thought.

For example, considering only the narrow parameters of military engagements, in *The Arthashastra*, Kautilya wrote that the three elements to assess when planning a campaign were power (including intellectual power of the leadership, military power, enthusiasm and morale), place (terrain), and time (season and length of battle). All three can be affected by unexpected environmental change.

Similarly, in *The Art of War*, Sun Tzu wrote that there are five factors that must be considered before any military action: politics, weather, terrain, leadership, and discipline (including supply lines). Environmental change can directly alter four of those factors. Apart from the effects on weather, terrain, and supply lines noted above, there can also be a destabilization of political structures caused by environmental crises (or the perceived mishandling of environmental crises).

While, in the recent past, the environment and climate may have been stable enough to largely consider them a constant in strategic planning, the situation has now changed. Due to increasing environmental change, that former constant is now an erratic variable. And while environmental conditions are currently considered a non-traditional threat, they are, historically, some of the most traditional core components of strategic analyses. Kautilya considered power, place, and time to be interdependent, and inextricably linked. We ignore those interlinkages at our own peril. When it comes to assessing the strategic implications of environmental change, it is time to go back to tradition.

Session II

Climate Change and Natural Disasters

Monday, February 13, 2012

1400h–1600h

REAR ADMIRAL NEIL MORISETTI



Rear Admiral Neil Morisetti joined the Royal Navy in 1976. After initial training and university (Environmental Sciences), he held various appointments at sea before, in 1986 assuming command of HMS CYGNET, a member of the Northern Ireland Squadron. Subsequent commands have included HMS CARDIFF (twice, firstly in 1993-1994 and again for eighteen months from December 1999, as the Captain Fifth Destroyer Squadron) and the aircraft carrier HMS INVINCIBLE. During his fifteen months in this ship, she deployed in the Maritime Strike role and acted as the Flagship to the Trafalgar 200 Fleet Review, before paying-off in August 2005. His staff appointments include three Ministry of Defence tours, in the Resources and Plans area, and as Director TOPMAST he was responsible for developing the manpower system for the Future Navy.

Promoted to Rear Admiral in November 2005 he was appointed Commander UK Maritime Force, the Royal Navy's standing Maritime Component Commander, a position he held until July 2007. During this period he spent much of his time in the Middle East and acted as the NATO High Readiness Force Maritime Commander. Between September 2007 and August 2009 he was the Commandant of the Joint Services Command and Staff College, responsible for providing post graduate education to officers from 60 nations. In September 2009 he took up a new cross government post as the UK Climate and Energy Security Envoy, working for the Ministry of Defence, the Foreign and Commonwealth Office, and the Department for Energy and Climate Change.

A Companion of the Most Honourable Order of the Bath and a Freeman of the City of London, Admiral Morisetti lives in Dorset with his wife, Jennifer, and two children (Charlotte and Hugo). When they allow him, his interests include watching rugby (too old and too broken to play nowadays), literature, good food and wine, whilst hindering his wife in the running of their farm.

TAKESHI TAKAMA



Dr. Takeshi Takama has been involved as researcher and project manager in complex environment and development projects including climate change adaptation/vulnerability assessment and the demand assessment of clean energy/stoves.

He earned 4 degrees (one double major) within 7.5 years of his tertiary education including PhD from Oxford University, which was fully supported by prestigious Oxford Kobe Scholarship.

He has traveled extensively across the world for work and private purposes including inperson meeting with the President of Ethiopia on clean energy, participatory research in 4 African countries, and a 18,000kms bicycle journey around Australia.

Currently, he is working for Japan International Cooperation Agency (JICA) to support climate change strategy in Indonesia while still pursuing his academic carrier at Stockholm Environment Institute.

Food Security and Climate Change Vulnerability in Indonesia/Bali

Takeshi Takama

Extensive climatic and socio-economic vulnerability challenges the wellbeing and livelihoods of low-income agriculturalists that make up the majority of rural populations in developing nations. Indonesia is the largest and widest archipelago country in the world and known as a tropical maritime continent country. Indonesia is among the countries that will be significantly affected from accelerated global climatic change. Food security is the most vulnerable issue to climate change. The droughts and floods that will accompany climate change will cause serious problems in the agriculture sector, with food production being the most susceptible aspect.

The paper assessed previous vulnerability and found that 48 adaptation measures related to agriculture were mentioned in these reports. This indicates a huge demand to work vulnerability and adaptation in the sector. The self-sustainability on paddy in Bali is concerned because of decrease in paddy fields, population increase, and climate change. A preliminary study on soil-climate suitability confirmed that land suitability for paddy has been declined 20% in last 20 years. The 1st set of interview at the subaks of Bali backup the trend. For example, a farmer in Subak Belaluan, Bali said: "My downstream does not have enough water, so farmers changed from paddy to cacao plantation". Also, the strong policy relevance and supports confirm that Bali Island is an appropriate area to carry out the vulnerability assessments for food security and climate change. It is necessary to consider multiple factors to understand the sustainable food security in Bali in the climate change era.

DENNIS TÄNZLER



Dennis Tänzler is Head of Climate and Energy Policies at adelphi. His research focuses on climate and energy policies as well as on peace and conflict studies. In 2007 and 2008 he served the Policy Planning Unit of the German Foreign Office as an expert on climate and energy policies. Dennis Tänzler has ten years of experience in international environmental policy, European environmental policy and policy integration, climate change and institutional aspects of environment, conflict and cooperation. In the course of more than 50 projects, he has undertaken research on climate protection and energy policies in the European Union, the United States and a number of developing and transition countries. Furthermore he provided in-depth analysis on the security implications of climate change and contributed to interdisciplinary research on new methodologies for vulnerability assessments. Dennis Tänzler has published widely on international affairs and environmental policy and is the program director on the environment, conflict and cooperation platform (www.ecc-platform.org). He holds master degrees in political science as well as in North American Studies and Cultural Sciences.

Climate Change: Adaptation as a Mean of Crisis Prevention

Dennis Tänzler

Climate change is likely to multiply tensions of increasingly scarce resources around the world. To prevent further destabilisation of already fragile contexts, possibly leading to the outbreak of violent conflict, it will be necessary to introduce conflict sensitive adaptation processes. But how can we design such processes? To answer this question, this paper analyses the interrelationship between climate change, conflict and adaptation. First, the analytical tool - the Water, Climate Change, and Crisis Assessment Framework (WACCAF) - will be introduced and discussed what the contribution can be to the conceptualization of conflict sensitive adaptation regimes. The WACCAF is based on the assumption that conflicts over natural resources and the environment are always embedded in a broader setting, where socio-political, environmental and economic factors create potential crisis situations and offer entry points for cooperation. In the second part of the paper we discuss how the insights of the WACCAF can inspire the design of conflict sensitive adaptation regimes with a focus on climate change impacts on water resources. Ideally, adaptation approaches allow decision-makers to address current vulnerabilities and development priorities, while trying to ensure long-term sustainability and peace through a basic understanding of future projections - also in conflict prone areas. The paper closes with a discussion how this conceptual approach may apply to the India context.

ZHENG XIAOMING



Zheng Xiaoming, teaches History of International Relations and Southeast Asian and South Asian Studies at University of International Relations. She earned her Masters Degree of Law in International Relations from University of International Relations in the year 1997. She also earned her BA Degree in Chinese Studies from the Department of Chinese Studies, University of International Relations in 1993. Her area of expertise include History of International Relations, Southeast Asian and South Asian Studies.

Significance and Influence Factors of Climate Change Cooperation Between China and Brazil of BASIC - from the Perspective of International Relations

Zheng Xiaoming

Sino-Brazil cooperation in the field of climate change is of great significance. It is conducive not only to enriching the connotations of bilateral strategic partnership, but also to promoting the development of South-South cooperation, strengthening solidarity among developing countries and jointly safeguarding the rights and interests of developing countries. Five favorable factors contribute to Sino-Brazil climate cooperation. First, Sino-Brazil relations are at the best in history, which bring historical opportunities to the climate cooperation. Second, the two governments have attached great importance to dialogue and cooperation, so Sino-Brazil cooperation has been promoted in the field of energy, science and technology, which is much related to climate change. Third, both China and Brazil have strong political will on the issue of climate change, and they have released national policies, plans or action plans on climate change. It not only shows the two countries' political commitment of addressing climate change, but also leads to better mutual understanding between the two countries in terms of principle, requirement and measures of climate change. Fourth, China and Brazil have common interests and views on climate change, and have established relevant bilateral research and dialogue mechanism. Fifth, the BRICS mechanism is also conducive to pushing forward Sino-Brazil cooperation on climate change. Three main factors may possibly be adverse to Sino-Brazil climate cooperation. First, the United States has attempted to divide the united front of the developing countries on climate issue. At the same time, the United States will increase strategic investment to Latin America, which may give the climate cooperation variables. Second, China and Brazil are in different economic situation and under different mitigation pressure, also they are in different status in international climate politics. Third, the two nations are lacking in mutual understanding. In conclusion, since favorable factors outweigh possible adverse factors, Sino-Brazil climate cooperation has good prospects.

Session III

Water Security

Monday, February 13, 2012

1615h–1815h

LEELA K PONAPPA



A career diplomat from 1970 to 2006, Ambassador Ponappa retired as Ambassador (Grade I) at the level of Secretary to the Government of India. Amb. Leela Ponappa has been Deputy National Security Adviser and Secretary, National Security Council Secretariat between May 2007 and October 2009. She was Vice Chairperson of the Governing Council of the RIS (Research & Information System for Developing Countries, New Delhi), an economic think tank with a focus on international trade and investment (September 2006 - May 2010). She was earlier India's Ambassador to the Netherlands, Permanent Representative to the OPCW (January 2005- June 2006) and Ambassador to Thailand and Permanent Representative to UNESCAP (August 2001 -December 2004). She has held several senior positions at the Ministry of External Affairs including Joint/Additional Secretary for Bangladesh, Sri Lanka, Myanmar and Maldives (1998-2001) with interim charge of territorial divisions dealing with India's relations with Pakistan and Afghanistan, China and East Asia, and Nepal and Bhutan, Joint Secretary in charge of the Consular, Passport, Visa and Overseas Indians Division (1992-1994) and Joint Secretary for the South Asian Association for Regional Cooperation (SAARC) from 1986-1990. As Under Secretary in the Ministry of External Affairs, she served as the desk officer dealing with India's bilateral relations with Pakistan and Afghanistan from 1975-78. She was in the faculty of the National Defence College, New Delhi, from 1995-1998 and has been a Research Associate at the Centre for South & South-East Asia, University of California, Berkeley ('83-'84).

She continues to be actively involved with think tanks dealing with international, security and strategic affairs in India and elsewhere and lectures regularly at senior Indian defence training institutions. She took over as Chairperson of the CSCAP-India committee in October 2010. (The Council for Security Cooperation in the Asia Pacific is a Track II organization which produces studies and recommendations for the ARF).

TINH DINH LE



Tinh Dinh Le is Deputy Director General of the Institute of Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam (DAV). Prior to his current post, he was Deputy Chief of the Executive Office of Vietnam Ministry of Foreign Affairs and secretary to a Vice Minister.

Tinh holds his MPA at the University of Hawaii and was a degree research fellow at the East West Center, USA during 2002-2004 and his BA in international politics at the DAV in 1999. Since 2000, he has written extensively on security issues facing the Asia-Pacific region and has been a regular contributor to various newspapers in Vietnam, including *Nhan Dan* (the People's Daily) and *Tien phong* (Vanguard). He has recently completed an over 100-page research project on US-Lower Mekong Cooperation Initiative (the LMI), based on which he published an article, namely "US-Lower Mekong Cooperation Initiative: Beyond Traditional Balance of Power?" *International Studies Journal*, No. 2, 85, June 2011.

Water Security Issues in Southeast Asia

Tinh Dinh Le

Water security will soon be a major security challenge of South East Asia, because the region's relatively low water reserve per capita, yet water consumption is rapidly increasing due to increasing population and economic development. What is happening in the Lower Mekong are is striking example in point. Regional awareness and cooperation on water security have been limited. At least, six possible themes for regional cooperation on water security should be further explored. First, enhancing the effectiveness and efficiency of regional institutions addressing water security issues, first and foremost the Mekong River Commission, being the most prominent and legitimate institution dealing with the issue in the region. Second, enhancing the role of regional security institutions and mechanisms to promote dialogue and cooperation on water as a source of several regional security problems. There is the need to immediately elevate water security to the agenda of regional institutions such as ASEAN, the ARF etc. Third, promoting cooperation with other international mechanisms to advance the exchange of experience among regions and facilitate the sharing of information and best practices about water management. Forth, establish and strengthen the normative and legal environment in order to facilitate the collective management of water security issues in an appropriate manner and in conformity with generally accepted international standards. Fifth, engaging the various stakeholders who might play important but different roles in different context in different countries in a joint regional effort to ensure water security and other related matters. Particular attention should be given to the private sector, civil society organizations and how these players interact with one another and with the state. Sixth, promoting education and the role of the media to raise public awareness and generate support to national and regional water policies.

UTTAM KUMAR SINHA



Dr Uttam Kumar Sinha is a Fellow at IDSA and member of the non-traditional security (NTS) cluster. He is also an adjunct professor at the Malaviya Centre for Peace Research, Benares Hindu University. His research areas focus on non-traditional aspects of security with particularly attention on climate change and transboundary water issues.

He is a visiting fellow to the International Peace Research Institute Oslo and was a Chevening 'Gurukul' Scholar to the London School of Economics and Political Science in 2008. Currently he is CSCAP-India representative (Council for Security Cooperation in Asia Pacific, a Track 2 dialogue forum of ASEAN) of the study group on water resources security. He simultaneously is co-chair of the Near East and South Asia Regional Network on Water Security, National Defense University, Washington.

He holds a doctorate from Jawaharlal Nehru University and had earlier worked with the daily *The Pioneer*. He frequently lectures at the Indian Foreign Service Institute and the National Defence College in New Delhi; the Indian Foreign Policy Studies, Calcutta University and the Indian Army War College in Mhow.

He co-authored the IDSA Report on India and Water Security: External Dynamics (2010) and also the IDSA Report on Security Implications of Climate Change for India (2009).

Prospects and Challenges of Hydro-diplomacy

Uttam Kumar Sinha

Water is largely a transboundary resource with approximately 45 per cent of the world population living in transboundary river basins shared by more than one nation. Controversies and contestation surround the availability and distribution of water and geopolitical and strategic concerns dominate over the management of water resources. While the political dimensions are critical in determining water relations between states; an emphasis on 'Hydrodiplomacy' under the framework of sustainable development and the principles of 'efficiency, equality, equivalence and equity' cannot be discounted or disregarded from bilateral and regional dynamics. This opens up scope for wider stakeholder participation and opportunities for integrating science and techniques. Using water as a diplomatic tool will need to overcome several challenges: competitive politics; power asymmetry; misunderstanding and lack of communication. Since the sources of water tensions will be more diverse stemming from combinations of internal and external considerations and of broader conditions of environmental change; any hydro-diplomatic framework will thus have to be harmonized simultaneously at the national, regional, and local level. Hydro-diplomacy provides a compelling tool to organizational processes at all levels, foremost in reducing the demand of water through rational management and increasing the supply by diversification of uses and reuses. Importantly it emphasizes that peaceful coexistence with cooperation is more rational and effective than a conflictive approach to water allocation.

ROBERT WIRSING



DR. ROBERT G. WIRSING. Dr. Wirsing is a Professor at the School of Foreign Service at Qatar (SFS-Q), Georgetown University. Earlier he was a member of the faculty of the Asia-Pacific Center for Security Studies, Honolulu, Hawaii (2000-2008) and of the Department of Government & International Studies, University of South Carolina (1971-2000). A specialist on South Asian politics and international relations, he has made over forty research trips to the South Asian region since 1965. His publications include: *Pakistan's Security Under Zia, 1977-1988* (St. Martin's Press, 1991); *India, Pakistan, and the Kashmir Dispute* (St. Martin's Press, 1994); *Kashmir in the Shadow of War* (M. E. Sharpe, 2002); *Religious Radicalism & Security in South Asia*, co-editor (Asia-Pacific Center for Security Studies, 2004); *Ethnic Diasporas & Great Power Strategies in Asia*, co-editor (India Research Press, 2007); and *Baloch Nationalism and the Geopolitics of Energy Resources: The Changing Context of Separatism in Pakistan* (Carlisle: Strategic Studies Institute, U.S. Army War College, April 2008). His recent research focuses primarily on the politics and diplomacy of natural resources (water and energy) in South Asia.

River Diplomacy in Himalayan Asia: On the Way to Calamity?

Robert Wirsing

Based on research for my just completed co-authored book *International River Rivalry in Himalayan Asia*, this paper examines the implications for interstate relations in the Himalayan region, the South Asian region in particular, of mounting river resource rivalry. The rivalry stems, on the one hand, from increasing water scarcity and, on the other, from increasing demand for hydro-electric power. Pivotal in these two inexorable trends in water supply and demand are the waters of three major trans-boundary rivers – the Indus, the Ganges, and the Brahmaputra. The possibility of serious water conflict, even warfare, developing in the region over these waters has been argued by numerous analysts, most recently by Centre for Policy Research senior scholar Brahma Chellaney in *Water: Asia's New Battleground*. In this book, he mounts a persuasive argument that China's relentless efforts to relieve the country's huge problem of water scarcity is driving it to consider exploiting the waters of the Tsarlung Yangpo (Brahmaputra) River not only for hydro-electric power but also, and more menacingly, for massive diversion to China's parched north. This poses an obvious threat to both India and Bangladesh, both with major stakes in the Brahmaputra. The Himalayan region is also currently witnessing major diplomatic wrangling between India and Bangladesh, most recently over both the Teesta River and the Tipaimukh dam on the Barak River, and between India and Pakistan over India's Kishenganga hydro-electric project on a tributary of the Jhelum – a matter presently in the hands of the International Court of Arbitration. How these and other interstate water resource issues are ultimately resolved by these demographic giants and traditional rivals holds enormous importance for the future of Himalayan Asia.

Session IV

Energy Security

Tuesday, February 14, 2012

1100h–1300h

GIRJESH PANT



Prof. Girijesh Pant, is Economist by training. Having done his MA in Economics from Allahabad University with rank, he joined Jawaharlal Nehru University for his doctorate. He began his career with Federation of Indian Chambers of Commerce and Industry New Delhi but moved to academics. Currently he is Professor in JNU and is on deputation as Vice Chancellor to Doon University since January 2009.

He has been Director of Gulf Studies programme and Chairman Centre for West Asian African Studies. Travelled extensively he has been Senior Fulbright Visiting Scholar, University of Illinois, USA. His other assignment include, Member UGC Standing Committee Area Studies.UGC nominee in Managing Committee of Third World Academy Jamia Milia Islamia Member, Editorial Board; Indian Foreign Affairs Journal. New Delhi. He was Vice Chancellor GGD University Bilaspur. India, Associate Dean Students Jawaharlal Nehru University, Vice-President, India Academy Of Social Sciences. India, President, JNU Alumni Association. He has been Member, India International Center New Delhi. Member, The International Institute of Strategic Studies London. President, Indian Academy Social Sciences Delhi Chapter. Member Board of Director in Centre for Public Affairs, People's Education Council etc

Currently working on , India's Energy Security, Globalisation and Changing Frontiers of Conflict in West Asia and Globalising India and Corporate Social Responsibility. He is regular commentator on West Asian Affairs in print and electronic media.

YIORGHOS LEVENTIS



Yiorghos Leventis, Ph.D., is the Director of the International Security Forum think tank. Dr Leventis studied in the U.K, where he made extensive research in The National Archives (TNA). He read B.A. in Economic & Social Studies, University of Manchester (1990), M.A. in Peace Studies and Ph.D. in European Studies, University of Bradford (1992, 1998). He had been a Visiting Research Associate, King's College, University of London (1999-2000) and an External Research Associate of the Hellenic Foundation for European & Foreign Policy (1999-2000). In 2004-06 he was based in Tokyo sponsored by the Japanese Society for the Promotion of Science (JSPS) for a Visiting Scholarship at the National Graduate Institute for Policy Studies (GRIPS). At the same time he held the South East Europe research portfolio within the Peace & Governance Programme, United Nations University, Headquarters, Tokyo. In 2006-08 he was Associate Professor, Faculty of International Relations, Politics and European Studies, New York University Skopje, FYROM. Dr Leventis has lectured and published widely on power sharing arrangements, geopolitical and security issues. Since the start of the current phase of negotiations for a comprehensive settlement of the Cyprus problem (March 2008) he has been serving honoris causa as a member of the Working Group on Security & Guarantees appointed by the President of the Republic of Cyprus.

In March 2010, Dr Leventis was appointed Professor of International Relations & Geopolitics, The University for Graduate Studies in Management - Monarch Business School (www.ugsm-monarch.com) accredited in Zug, Switzerland. He was also elected by large majority a Council Member of the World Federalist Movement (WFM) at the Annual Council Meeting in Buenos Aires (October, 2010).

ZHAO HONGTU



Zhao Hongtu is Associate Research Professor and Deputy Director in Institute of World Economic Studies, China Institute of Contemporary International Relations (CICIR)

Dr. Hongtu Zhao is Associate Research Professor and Deputy Director at the Institute of World Economic Studies, China Institute of Contemporary International Relations (CICIR). His research interests are energy security, energy diplomacy, and environmental politics. His recent publications include: *Global Energy Structure* (Co-editor and Co-author, Shishi Press, Beijing, China ,2005); *Reshaping of the Global Energy Landscape* (*International Petroleum Economics*, No.10,2006); *Global Energy Security Dialogue and Cooperation—Strategic Alternatives in the Age of Energy Interdependence* (*Contemporary International Relations*, No.5, 2006); *Some Thoughts on Sino-U.S. Energy Cooperation* (*Contemporary International Relations*, No.1, 2006); *New Features of International Energy Security Situation* (*Contemporary International Relations*, No.7,2005); and *Prospects of Northeast Asia Energy Cooperation* (*China's National Geography*, No.12, 2004).

Energy Security: challenges and China's Strategy

Zhao Hongtu

Energy security is a widespread but poorly understood concept, there is no agreement on challenges we are facing and policies we should have, each country has its own concern and priorities. Anyway, it's still imperative to reach some kind of agreement on what common challenges are facing to strengthen international energy security and cooperation. Regarding world energy resource potential, we are not running out of energy resource, sayings like energy scarcity or war for energy resource are to some extent overstated, the real challenges are related to technology, cost and environment. With the development of globalization and interdependence of consumers and exporters, energy independence is becoming more and more unrealistic. The growing environment concern especially the climate change makes one nation more difficult to balance the supply, economy and environment. International dialogue and cooperation especially the multilateral international energy mechanism becomes more important to deal with energy related security issues and to decrease the misperceptions. For some countries, market liberalization and decentralization are also crucial to address the demand side management and clean energy development. In case of China, the energy security challenges and risks are more from inside than outside. In the face of rapid growing of energy demand and energy related environment challenges, China is paying more attention to the demand side management and pushing forward the energy market reformation and transition while encouraging the diversity of energy mixture and imports. In addition to domestic emergency response scheme including SPR construction, China is also getting more active in international and regional energy dialogue and cooperation both with consumers and exporters.

SAMIR PRADHAN



Samir Pradhan is a senior consultant, macroeconomics research at a leading consultancy in Qatar. Prior to this, he was senior researcher, GCC economics and Gulf-Asia programmes at the Gulf Research Center, Dubai/ UAE, the leading think tank of the Gulf region. He has extensive research and consultancy experience in GCC and emerging Asia. His research interests include the political economy of the Gulf, GCC-Asia interdependence, GCC-India relations, energy security, and regional economic integration. Dr. Pradhan is a regular contributor and commentator to major international and regional newspapers in the Gulf region. He has also several peer-reviewed publications to his credit which includes two books among others. He holds an MA in Economics and a Ph.D. in West Asian Studies from the School of International Studies, Jawaharlal Nehru University, where he conducted research about emerging energy interdependence between the GCC and India from the perspective of international economic relations.

Gulf's Role in India's Energy Security

Samir Pradhan

The Gulf region and India constitute the two strategic building-blocks of the current global energy regime. While the Gulf region having lost its niche export market share in the industrialized west is poised to regain global market salience on the basis of sheer low-cost reserve profligacy; India on the other hand has become the global demand hotspot due to its growth-induced spiraling consumption of almost every form of energy and oil and gas in particular. India's skyrocketing energy consumption coupled with overwhelming import dependence on the strategically located Gulf region and simultaneously Gulf region's vital long-term export dependence on the dynamic Indian market, has become one of the crucial elements in the contemporary discourse on the geopolitics of energy security.

Energy is the lifeline of booming GCC-India ties. Centering on this aspect, the main objective of the paper is to analyze Gulf's role in India's energy security. Given the fact that India's dependence on Gulf is set to increase manifold and India is becoming a niche export destination for Gulf energy, this paper will explore how this emerging energy interdependence could be strengthened in the future.

Moreover, the Gulf-India energy interdependence is becoming multifaceted in clear contrast to the traditional perception of Gulf countries as exporters and India as importer. This is due to the fact that Gulf countries are second to Asian region in terms of incremental growth in world energy consumption and India is increasingly becoming an exporter of petroleum products in recent years. Moreover, with increasing regional consumption, Gulf's spare export capacity will decline in the future, which could affect oil supply for India. Simultaneously, with booming downstream sector, India needs export market and Gulf could be the one. This aspect would be the key point of analysis in the proposed paper. Importantly, given the increasing import dependence of other Asian majors on the Gulf oil, can India afford to maintain its business-as-usual approach in dealing with the Gulf region?

VIVEK MATHUR



Vivek S. Mathur is an associate at ESAI Energy LLC, an energy consulting firm based outside Boston, USA, where he specializes in Asian oil and petrochemical feedstock markets. He also leads ESAI's analysis of the Indian energy market. Mr. Mathur graduated with a M.A. from The Fletcher School, Tufts University, specializing in Energy Studies and Strategic Business Management, and received a M.A. in Politics from the School of International Studies, Jawaharlal Nehru University, India. At ESAI, Mr. Mathur has completed in depth studies focusing on demand, trade and pricing of Asian diesel, naphtha, condensate and LPG markets, and consults to ESAI's global clients on key issues facing the Asian downstream sector.

India's Role in the International Oil Market

Vivek Mathur

Structural shifts in the nature of global oil demand and evolution of spare production capacity have changed global oil fundamentals; contributing to a dramatic increase in oil prices in recent years.

Part I of this paper provides a brief description of these fundamentals, and their likely progression in the coming years. Part II examines the impact of these fundamentals on net importing countries like India. The analysis focuses on India's evolving oil market, and suggests key policy measures to improve the country's energy security.

AMITAV MALLIK



Prof Amitav Mallik has been a research scientist in the Ministry of Defence from 1966 to 2002. He was the founder Director of Laser Science & Technology Centre (LASTEC), Delhi that achieved many path-breaking results in High Power Laser technology, making India the 4th nation in the world to have Laser weapon capability. Amitav Mallik was awarded 'Padmashri' in 2002 for his pioneering contribution to Defence R&D in the country.

Prof Mallik was appointed the first 'Adviser, Defence Technology' at the Embassy of India in Washington DC from 1988 to 1994, where he established the foundation for Indo-US cooperation in dual-use high-technology areas, results of which can be seen in the present-day technology cooperation with USA.

From Jan 2003 to June 2006, Prof Mallik served as Member, National Security Advisory Board, (NSAB) Delhi, where he not only brought special focus on Self-reliance in defence technologies but also initiated special discussions on Energy & Environmental Security issues that are now critical for India's National Security.

Prof Mallik has authored four books and over 100 technical papers & strategic analysis reports. His first book, 'Technology & Security in the 21st Century' - published by OUP in 2004 under the aegis of SIPRI, Sweden is still in good demand world-wide. Prof Mallik continues to contribute to journals and books on technology and strategic issues and is often invited to talk on strategic technology issues in India and abroad.

Energy & Environment Dilemma: Impact on National Security

Amitav Mallik

Our world has now entered an 'Age of Consequences' where the aspirations of development and progress are getting in to conflict with the urgent need to mitigate global warming to avert climate changes that can threaten the very survival of mankind in the future. The dilemma is more acute for India as it struggles to carry its billion plus population to participate in the quest for being the third largest economy in the world in the next few years. The process is likely to require six times more energy by the year 2030 than what India consumes today.

The imminent consequences of hotter earth will be more severe in highly populated developing countries than other advanced nations. On one hand the world energy shortages can trigger major conflicts and on the other hand unprecedented climate changes can cause clear danger to regional stability. The resultant consequences could pose grave threat to India's national security.

India thus faces the unique challenge on how best to meet its increasing energy demands to support its economic development goals without significantly increasing its carbon footprint. The paper examines possible policy options for India to achieve this double objective - without compromising its energy security priorities, even as it takes-on the responsibility of being an active partner in the international efforts in mitigating global warming. A technological perspective of Solar, Wind and Nuclear energy options is presented to suggest a possible action plan for India to stay on course of rapid development with as little carbon penalty as possible, while also protecting its larger national interests.

Session V

Trans-national Crime

Tuesday, February 14, 2012

1430h–1630h

D P DASH



Mr Debi Prasad Dash is a professional with over 29 years of experience. He worked in Legal, Customs, Police and Banking Departments of the Government of India, the Commonwealth Secretariat and the UN. He served as SP and DIG of Police in CBI; worked as Consultant Counter-Terrorism in the Commonwealth Secretariat, London. The Commonwealth Training Manual on Counter-Terrorism, drafted by him, was highly appreciated by the Secretary-General of the INTERPOL. He was twice appointed by Kofi Annan and most recently by Ban Ki Moon, the Secretary-General of the UN to head a five member International Panel of Experts of the Security Council on Darfur. He served as an Expert Member in the INTERPOL Working Group on Terrorist Financing and has been a guest faculty in many national and international training institutions including the Cambridge University and the Organisation for Security and Co-operation in Europe, Vienna. As a Member of the Multi-organizational Group (IMF, World Bank, UNODC), he drafted Model Laws on Money Laundering and CFT. Was a Member of the UN Counter-Terrorism Executive Directorate Mission to Kenya to monitor compliance of UN Security Council Resolution 1373; Represented Commonwealth in the fourth special meeting of the UN-Counter-Terrorism Committee held in Almaty, Kazakhstan; Invited by the Secretary-General of the INTERPOL to participate in the 1st INTERPOL Global conference on Bio-Terrorism in Lyon, France in 2005.

An Additional Director-General with Indian Customs, Mr Dash was conferred with the prestigious Presidential Award for 'Specially Distinguished Record of Service' in 2011.

ARABINDA ACHARYA



Arabinda Acharya is Research Fellow and Head of Strategic Projects at the International Centre for Political Violence and Terrorism Research in the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore. He is an Adjunct Professor, Department of Geo-Politics, Manipal University, India.

Arabinda is listed in the United Nations Alliance of Civilizations' Roster of Experts for expertise on regionalism, human security and terrorism.

Arabinda has worked with the National Terrorism Financial Investigative Unit (NTFIU), New Scotland Yard Special Branch, United Kingdom and Australian Transaction Reports and Analysis Centre (AUSTRAC) in running workshops and training programs on AML/CFT. He was a consultant to the US Defence Intelligence Agency project on terrorist financing at the University of Pittsburg and is consultant for the Anti-Money Laundering / Counter-Terrorism Financing research program of The Australian Institute of Criminology. Arabinda also worked with the Motion Picture Association of America (MPAA) on a project that analyzed the nexus between organized crime and terrorism in Indonesia, the Philippines, Thailand, India and Pakistan.

Arabinda is an author/coauthor of a number of books including *Targeting Terrorist Financing: International Cooperation and New Regimes*, (Routledge, 2009); *Ethnic Identity and National Conflict in China*, (Palgrave Macmillan, 2010); *The Terrorist Threat in Southern Thailand: Jihad or Quest for Justice*, (Potomac Books Inc, 2012). He has also published a number of articles and reviews in book chapters and journals.

Crime and Terrorism in Comparative Perspective: Impact on National Security and Development

Arabinda Acharya

How extensive is terrorism's impact on public life, governance and development and the overall security of a given country or the international community at large? Has preoccupation with countering terrorism especially after 9/11 undermined states' ability to provide other public goods such as human security or protection of human rights? Such questions draw their strength both from indiscriminate acts of terror happening almost on a daily basis and from the public reactions and governments' response to these attacks. Coping with the terrorist threat has become a measure of state strength and a determinant of a particular government's legitimacy to rule. However, a different perception comes from the fact that a comparison of impact of terrorism and various forms of crime including organized crime and domestic violence would inform that the latter's potential to cause death and destruction and undermine state stability could be as much pervasive or even more than that of the former. According to this argument moreover, often deeper social, political and economic malaises could underlie criminality in a given society than the core conditions in which conflicts involving terrorism are embedded.

India provides an interesting case study for a comprehensive examination of the tradeoffs involving security and liberty and security of the state vis-a-vis the security of the individual. The terrorist threat in India is complex and multifaceted. The sheer number of groups engaged in political violence as well as the debilitating effect of terrorism and insurgency on the populace, the economy and development means that the nation cannot afford to consider the issue as a trivial one. This also means that New Delhi would commit money and other resources into its counter-terrorism efforts, a necessity which has become more important after the November 2008 attacks in Mumbai. At the same time, given resource constraints, it is possible that priorities and resource allocation would shift – from alleviating poverty and unemployment and fighting crime, to name a few, to countering terrorism.

ELY KARMON



Dr. Ely Karmon is Senior Research Scholar at The International Institute for Counter-Terrorism (ICT) and Senior Research Fellow at the Institute for Policy and Strategy at The Interdisciplinary Center (IDC) in Herzliya, Israel. He lectures on Terrorism and Guerrilla in Modern Times and CBRN terrorism at the M.A. Counterterrorism Studies at IDC.

Associate Fellow, International Centre for the Study of Radicalisation and Political Violence (ICSR), London, a global centre dedicated to bringing together knowledge and leadership in order to counter the growth of radicalisation and political violence. He is a member of the International Permanent Observatory (IPO) on Security Measures during Majors Events at the United Nations Interregional Crime and Justice Research Institute (UNICRI), Turin, Italy. Was fellow at the Proteus Management Group (PMG), at the Center for Strategic Leadership, U.S. Army War College (2006-2007). Visiting fellow (2002) at The Washington Institute for Near East Policy.

Dr. Karmon is member of the Atlantic Forum of Israel, and is involved in NATO workshops on terrorism and on the Mediterranean Dialogue. Served as advisor to the Israeli Ministry of Defense and the Anti-Semitism Monitoring Forum of the Israeli Government Secretariat.

His fields of research include international terrorism, WMD terrorism, political violence and extremism and the strategic influence of terrorism and subversion in the Middle East and worldwide.

Are We Nearer to a Major CBRN Terrorism Threat?

Ely Karmon

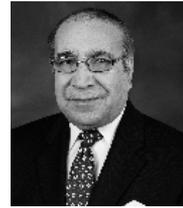
Since the chemical attacks by the Japanese Aum Shinrikyo cult in 1994-1995, the anthrax attack in the United States in October 2001 and the chlorine attack by al-Qaeda elements in Iraq in 2006-2007, there was no serious CBRN incident worldwide.

Although limited in their scope and lethal results, these attacks materialized, albeit tardy, the potential CBRN threat perceived since the early 1970s. Events in the Middle East and Pakistan have raised the specter of a far greater and present danger. After the fall of the Qaddafi regime it became known that he kept secret some of his chemical weapons arsenal, in spite of his international obligations. No one is sure such agents could not be disseminated to terrorist elements, as heavy weapons, ground to air and anti-tank missiles have found their way to jihadists in the Gaza Strip and possibly to AQIM elements in the Sahara region.

The same could happen with the chemical, biological and even radiological weapons and agents found in the hands of the beleaguered Assad regime in Syria. There are already rumors such weapons were passed to Hezbollah in Lebanon. Pakistan has been known for a long time as the main proliferator of nuclear know-how and hardware to rogue countries. But lately, and in spite of some successes of its armed forces, the terrorist Islamist radical groups and the Pakistani Taliban have acted near facilities and attacked personnel of the country's nuclear infrastructure.

There is renewed and more serious talk in United States establishment and academic circles about the need to prepare for the neutralization of the Pakistani nuclear arsenal in case of a terrorist takeover of some of these facilities, with all the tremendous political and military implications involved. In this very sensitive field we must also monitor the possible involvement of organized criminal elements, as those in Chechnya or Mexico for instance, which could be attracted by the possible financial gains of such transactions with terrorist groups or rogue states.

ALI JALALI



Ali Ahmad Jalali, former Interior Minister of Afghanistan (Jan. 2003-Sept. 2005), is currently serving as a Distinguished Professor at the Near East South Asia Center for Strategic Studies (NESA) at the National Defense University in Washington D.C. His areas of interest include reconstruction/stabilization and peacekeeping operations in Afghanistan and regional political and security issues affecting Afghanistan, Central and South Asia. Prior to assuming the ministerial post in Kabul, Mr. Jalali served as the Director of Afghanistan National Radio Network Initiative and Chief of the Pashto and Persian Services at the Voice of America in Washington D.C. A reputed multi-lingual military and political analyst, Ali Ahmad Jalali has extensive academic, managerial, journalistic and writing experience.

During his VOA employment from 1982 to 2003, Mr. Jalali has directed broadcasts in Pashto, Dari and Farsi (Persian) languages to Afghanistan, Iran and Central Asia. As a journalist, he has covered the war in Afghanistan (1982-1993) and the former Soviet Central Asia (1993-2000). He has extensively traveled in the former Soviet Central Asian republic and has written hundreds of analytical reports for VOA on political, economic and social developments in the region. A published writer in three languages (English, Pashto, Dari/Farsi), Ali A. Jalali is the author of numerous books and articles on political, military and security issues in Afghanistan, Iran and Central Asia including topics related to Islamic movements in the region.

Transnational Crime

Ali Jalali

Transnational crime has gained an unprecedented dynamism and worldwide reach in the new globalized environment. It is no longer solely a law enforcement issue but is becoming an extremely serious security threat that challenges the international system in the 21st century. Global advances in communication, and freedom of movement coupled with the rise in regional conflicts and decline in border controls have contributed to the creation of an environment in which transnational crime groups not only expand their operations but also become more sophisticated, diversified and closely collaborative. Meanwhile, interaction between international terrorists and criminals is constantly growing. Terrorist organizations increasingly get involved in criminal activities such as drug trafficking, extortion, kidnapping and smuggling to fund their operations. This situation inevitably shifts the focus of national security to transnational threats posed by non-state actors. Transnational crime involves criminal groups and networks from many nations operating across countries and continents. They operate in multiple countries simultaneously in order to leverage global criminal and licit markets. Individual nations are hardly able to fight them domestically. Nor do they have the resources to deal with a menace that transcend national borders. Consequently, organized crime is no longer only a domestic concern but it is an international problem. Only through international collaboration can nations develop effective means and policies for countering these crimes and mount a serious opposition. As threats span borders, the response needs to become transnational. However international cooperation to fight transnational crime often gets mired in the problems of geopolitical complexities, political turmoil and armed conflicts, weaknesses of state institutions and official corruption. Therefore fighting transnational crime requires a comprehensive international approach leveraging a wide range of political, legal, law enforcement, military and diplomatic means.

MOLLY CHARLES



Molly Charles is founding member and adjunct Director of National Addiction Research Centre till 1999. Consultant to different international and national agencies for undertaking research and monitoring and evaluation. Area of work has been Drug use, Drug Trade and Management of Drug Use, Organized Crime and HIV management. At present consultant with JSI for AIDSTAR-One Project.

Two of the relevant publication:

2010. "United Nations Drug Demand Reduction A Success or Biased Perception". Juan Gabriel Tokatlian (ed), *Drugs and Prohibition, An Old War, a new debate* (53-96), Libros Del Zorzal

The Bombay Underworld: a Descriptive Account and Its Role in Drug Trade, by Molly Charles, K.S Nair, Gabriel Britto and A. A. Das, in *Globalisation, Drugs and Criminalisation, Part 2: Drug Trafficking, Criminal Organisations and Money Laundering*, Unesco: 2002 www.unesco.org/most/globalisation/drugs_vol2.pdf

Transnational Organised Crime – Role of Silent Violence and Social Engineering

Molly Charles

Global policy and strategy for control over of organized crime is undertaken largely in line with United Nations Convention against Transnational Organized Crime. Given the diversity in political, socio-cultural and development dynamics of the member States; creating uniform norms is cumbersome and implementing the same a difficult uphill task. Despite the various specifics on intervention addressing transnational acts of terror can be fraught with differences in approach while addressing acts of terror. Especially, those that leave room for diverse perceptions, with specific acts of terror, based on historical experience, political reality and identity, socio-cultural situation and development concerns. Under such circumstances the only scope for intervention available is to that state acts of terror are apolitical and then come up with narratives as disconnect with the political and socio-cultural reality and belief system.

Is this a realistic approach?

Security interventions that focus on technology to deploy surveillance of area/s at risk, carry out link analysis to identify support/factions/networks across member states truly attempt a process of isolation or disconnect with “mainstream” groups of diverse ethnic and religious identities. Attempts to create a uniform global world view on peace is bound to fail, for the only way forward towards peace is an acceptance of diversity and a desire to address issues of contention that emerge from but diverse perceptions of contextual realities. It is against this background that the paper attempts to explore the role of silent violence in widening the gap between groups to look at the role of social engineering in strengthening or hindering steps towards peaceful coexistence. This paper is but an exploratory attempt to present the diversity and implications of the same.

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N S SISODIA



Shri Narendra Sisodia was Director General, IDSA from September 2005 to November 2011. Prior to this, he was Secretary in the Ministry of Finance in January 2005; Secretary, Defence Production and Supplies, Ministry of Defence. Born in 1945, Mr. Sisodia graduated from St. Stephens' College Delhi and obtained a Master's Degree from Harvard University, USA, where he was a Mason Fellow. Mr. Sisodia joined the Indian Administrative Service in 1968 and served as District Magistrate in four districts of Rajasthan. He was later Principal Secretary, Industries & Commerce, Chairman and Managing Director of the State Industrial Development & Infrastructure Corporation and Chairman, State Electricity Board, Rajasthan. In Government of India, he served as Joint Secretary, Ministry of Defence from 1988-94. As Additional Secretary in the National Security Council Secretariat, he was closely associated with the work of the Kargil Review Committee. Subsequently, he was appointed as a member of the Task Force set up to recommend measures for Reforming the Management of Defence. He was also responsible for providing resource support to the Group of Ministers on Reforming the National Security System. As the first Additional Secretary of the newly constituted National Security Council Secretariat, he was closely associated with the nascent NSCS and other support structures of the National Security Council like the Strategic Policy Group & the National Security Advisory Board. He has also been Vice Chancellor of Mohan Lal Sukhadia University, Udaipur. He is a member of the National Security Advisory Board.

SANJAYA BARU



Dr Sanjaya Baru is Director for Geo-economics and Strategy, International Institute for Strategi Studies, (IISS). Dr Baru previously served as Editor of the leading Indian financial newspaper *The Business Standard*. From May 2004 until August 2008 he was the Official Spokesman and Media Advisor to the Prime Minister of India. Prior to his official appointment, he was the Chief Editor of *The Financial Express*. He has also been the Associate Editor of *The Economic Times* and *The Times of India*. He served as a Consulting Senior fellow of the IISS from September 2008. He is one of India's most respected and influential commentators on political and economic issues.

Dr Sanjaya Baru has been a Professor at the Indian Council for Research on International Economic Relations in New Delhi, and a Member of India's National Security Advisory Board in the Prime Minister's Office. He is the author of *Strategic Consequences of India's Economic Performance*, which was launched in the UK at the IISS in April 2007, and *The Political Economy of Indian Sugar* (1990). He has also published extensively on economic and strategic policy in India and abroad.

The Geo-economics of Financial Stability

Sanjaya Baru

A country's economic performance and potential has always underpinned its political power and military capability. While long term shifts in economic performance across countries have long term consequences for geo-politics, short term economic and financial disruptions can also have profound geopolitical consequences. The Asian Financial Crisis and the Trans-Atlantic Financial Crisis have had the effect of speeding up the processes of post Cold War evolution of geopolitics, contributing to the rise of China and the decline of Europe.

This paper will examine the geo-economic consequences of the Asian and Trans-Atlantic financial crises. It will suggest that power shifts that follow such crises are reversible. Countries have the ability to repair the damage and rebuild. Hence, the geopolitical impact of financial crises need not be long term.

MEIBO HUANG



Huang Meibo, Ph.D of Economics, has been associated with the Economics School, Xiamen University since 1991. She is now the economics professor and the director of China Institute for International Development, and the deputy director of World Economy Research Center of Xiamen University. She is a deputy Secretary General of China Society of World Economics. She is also a member of UNCTAD's "Promoting Responsible Sovereign Lending and Borrowing" expert group. Ms Huang Meibo has received provincial and municipal Social Science Award several times. She was also one of the ten provincial outstanding young social science experts in 2009.

Ms Huang Meibo was a visiting scholar in Economics Department of Cornell University (USA) from Jan 1999 to Feb 2000, and was a research associate at GEG, University of Oxford, from Oct 2006 to Sept 2007. From September 2010 to February 2011 she was involved in the Global South Scholar in Residence Program and did research at the Graduate Institute of International and Development Studies in Geneva. She is currently research focuses on international monetary cooperation, macroeconomic policy coordination, regional economic integration and international development assistance. She is author, coauthor, editor, or coeditor of 15 books or textbooks on international economic issues, including *The Development of East Asia Bond Market* (2008), *Cross-Straits Economic Cooperation and Integration* (2007), *World Economy* (2006), *The Theory and Practice of International Monetary Cooperation*(2002). She has also published more than 90 papers in the above field.

Reform the International Monetary System: An East Asian Perspective

Meibo Huang

The U.S. financial crisis has called for an *urgent* need to reform the international reserve currency system. As the periphery of the International Monetary System (IMS), East Asia, which has been suffering a lot from the current IMS, should be an active reformer. But the reform demand has been constrained by many factors, such as the “dollar trap”. Therefore, to East Asian economies, the reform of the IMS must be gradual and prudent. In the short term, Asia should urge the relevant parties, especially the international financial institutions such as IMF to strength the surveillance and constraints on the U.S. dollar and to promote the diversification of its foreign exchange reserve assets. In the medium term, East Asia should endeavor to play a greater role in the IMS by internationalizing the Asian currencies. In the long term, the international reserve currency should be transferred from the national currency to the super-sovereign currency eventually.

PRADUMNA BICKRAM RANA



Dr. Pradumna B. Rana is Associate Professor of International Political Economy (IPE) at the S. Rajaratnam School of International Studies (RSIS) of the Nanyang Technological University (NTU). He is also the Coordinator of the Master of Science in IPE programme and the Coordinator of Economic Multilateralism and Regionalism Studies at RSIS's Centre for Multilateralism Studies. Previously, he was the Senior Director of the Asian Development Bank's (ADB's) Office of Regional Economic Integration which spearheaded the ADB's support for Asian economic integration. Prior to that, he held various senior positions at the ADB for many years. He has teaching and research experience at the NTU, NUS, and the Tribhuvan University (Nepal). He has published widely in the areas of Asian economic development and integration, financial crises, and economic policy reforms in transition economies. These include 15 authored or edited books, over 25 chapters in books, and over 50 articles in international scholarly journals including *Review of Economics and Statistics*, *Journal of International Economics*, *Journal of Development Economics*, *Journal of Asian Economics*, *World Development*, *Developing Economies*, and *Singapore Economic Review*. Recently, he co-authored books on *Asia and the Global Economic Crisis: Challenges in a Financially Integrated World* (Palgrave Macmillan) and *South Asia: Rising to the Challenge of Globalization* (World Scientific Publishers). Most recently, he edited a book entitled *The Renaissance of Asia: Evolving Economic Relations between South Asia and East Asia* (World Scientific Publishers). He was the Guest Editor of the *Singapore Economic Review* Special Issue on Asian Economic Integration (Volume 55, Number 1, March 2010).

The Evolving Multi-layered Global Financial Safety Net: Asia's and India's Role

Pradumna Bickram Rana

The centralized international monetary architecture of the Bretton Woods period (led by the G8) is evolving towards a more decentralized multi-layered global financial safety net (GFSN). This new architecture comprises the G20 at the apex as an overarching institution, multilateral financial safety nets (MFSNs) established under the auspices of the IMF and global bilateral financial safety nets among central banks (BFSNs) at the global level, regional financial safety nets (RFSNs) established in various regions of the world, and national financial safety nets (NFSNs) or reserve accumulation by individual countries. A number of factors account for this change. First, with financial globalization, a new type of financial crises known as capital account crisis – associated with large inflows and sudden reversals of capital flows and the bursting of asset bubbles – have hit emerging markets with increased frequency. Second, the governance system of the old G8-led architecture reflected the dominance of the US and this is changing fast as we head towards a multi-polar world. Third, the old architecture was inflexible and designed to maintain firm control in the hands of the founding members who have been reluctant to give greater voice to emerging markets (especially those in Asia) whose economic footprint in the global economy has increased considerably (Theory of clubs, Rana 2010). This paper will begin by highlighting the move from a centralized international monetary architecture of the Bretton Woods period towards a multi-layered GFSN and the reasons for the change. Will these arrangements eventually lead to the establishment of the Asian Monetary Fund (AMF) in East Asia? The paper will then suggest a number of ways through which Asia's voice could be further enhanced in the new architecture both in the G20 and at the IMF. In this context, India's role, as one of the fastest growing countries in the world and an important member of the G20, will be highlighted.

Conference Team

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SHEBONTI RAY DADWAL



Ms. Shebonti Ray Dadwal is a Research Fellow with the Institute for Defence Studies and Analyses, specialising on energy security and climate change-related issues. She has worked as Senior Editor in *The Financial Express* and she has also served as Deputy Secretary at the National Security Council Secretariat. She has presented several papers in national and international conferences and has written several peer-reviewed articles and papers on her area of work. Ms Dadwal was awarded the FCO Chevening Fellowship on The Economics of Energy in April 2009. In 2002, she published a book, *Rethinking Energy Security in India* and is now writing her second book on the politics of energy and climate change.

ANSHUMAN BEHERA



Dr. Anshuman Behera is a Research Assistant at IDSA. Dr. Behera earned his Ph. D. on Insurgency Movements in South Asia: A Case Study of Maoist Insurgency Movement in Nepal (1996-2005) from University of Hyderabad. Before joining IDSA, Dr. Behera worked as an Research Associate at Institute for Conflict Management, New Delhi. He has contributed a number of articles and opinion pieces for journals, newspapers and on the web. His areas of expertise include internal security problems in South Asian Countries. Presently he is focusing on growth of Religious Fundamentalism in India and its security implications.

SHRISTI PUKHREM



Shristi Pukhrem, a current researcher at the Institute for Defence Studies and Analysis (IDSA), New Delhi. She has worked on a project on human trafficking and its impact on the internal security of India in the cluster Terrorism and Internal Security of the institute. Also, she is pursuing her doctoral research (Ph.D.) in South Asian Studies at Jawaharlal Nehru University, and the title of her thesis is *“India's Connectivity with South-East Asia: The Economic and Security Implications of the Asian Highway”*. As for her earlier research work, she has completed her M.Phil from the same university and wrote a dissertation entitled *“Trans Asian Highway Projects in India's North-East: The Security Implications”*. She is also a Junior Research Fellowship (JRF) holder in Political Science, awarded by the University Grants Commission, India. Her areas of interest include South Asia Politics and Security Studies, internal security issues, armed conflicts and policy studies.

SAURABH MISHRA



Saurabh Mishra is a Research Assistant at the Institute for Defence Studies and Analyses, New Delhi. He is Currently Working in the Africa, Latin America, Caribbean & United Nations Cluster. He is a UGC Junior Research Fellow and a doctoral candidate working on “Globalisation and Transnational Conflict: In the Context of Expansion and Cultural Homogeneity” at Banaras Hindu University. The Areas of his interest are United Nations, Globalisation, Peace and Conflict Studies.

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