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Mely Caballero-Anthony
Youngho Chang
Nur Azha Putra *Editors*

Energy and Non-Traditional Security (NTS) in Asia

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SECURITY STUDIES

A Centre of the S. Rajaratnam School of International Studies
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Preface

This volume is a compilation of selected papers presented at a conference on *Energy and Non-Traditional Security*. The conference, held in August 2008 in Singapore, was organised by the Centre for Non-Traditional Security (NTS) Studies at the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore.

The volume was first conceptualised against the backdrop of the world oil crisis of 2007–2009 and the impacts of the steep price rises on human collectivities. Since the convening of the conference, many significant global events have occurred, reinforcing further the salience of understanding the implications of NTS. The Arab Spring revolutions and the Fukushima nuclear disaster of 2011, for instance, have only increased awareness among the security community and policymakers of the scale of NTS challenges, as well as the multiplicity and cross-cutting implications of the threats, and the pressing need to address them.

Mely Caballero-Anthony and Nur Azha Putra introduce the volume with “Energy and Non-Traditional Security (NTS)—Understanding Security from Below”. This chapter introduces the concept of NTS, and provides the conceptual framework which acts as the theoretical foundation for this volume and its companion, *Rethinking Energy Security: A Non-Traditional View of Human Security*. The NTS framework seeks to expand the notion of energy security, from one anchored to a traditional, state-centric approach, to one based on human security or the security of human collectivities. This chapter unpacks the basic principles of energy security and reconstructs it through the NTS framework. In doing so, the authors open up the space for analyses of energy policies that are informed by various NTS themes and perspectives.

Youngho Chang and Swee Lean Collin Koh in “Rethinking Market Governance and Energy Security” discuss how the market, reinforced with good governance, regulate and normalise the impact of rising global oil prices on the public. For instance, they argue that good market governance, which promotes transparency, accountability and respect for competitive policies, would attract potential investors to fund long-term solutions (such as alternative energy technologies) to energy security problems. Hence, in this chapter, Chang and Koh stretch the notion of energy security to include market governance issues.

In “Energy Security and Climate Change in ASEAN: Implications and Policies”, Youngho Chang and Lixia Yao present a quantifiable definition of energy security and illustrate how to measure energy security. The authors apply the quantifiable definition to Association of Southeast Asian Nations (ASEAN) countries, evaluating the policies and activities of these countries as they attempt to ensure energy security. Key policies and activities discussed are infrastructure building and hydropower exploitation in the region. They also discuss current efforts to enhance energy security and mitigate climate change, noting that the latter has profound impacts on the former. The authors also suggest how to address issues related to energy security and climate change in the region.

Maria Nimfa F. Mendoza in “The Socioeconomic Impact of Energy Security in Southeast Asia” examines the impact of rising energy prices in the global market on the various economies and communities in Southeast Asia. She also surveys the energy policies of Southeast Asian states and their attempts to mitigate rising fuel and energy prices, and how various communities have adapted to the higher costs of living. She concludes by arguing that the general tendency among states to aim for energy self-sufficiency and independence (in response to the spike in the global oil prices) may not, in the long run, actually lead to energy security for states in the region. Instead, she observes that energy security for Southeast Asian states may be best achieved through regional cooperation and interdependence.

In “An Environmental Perspective on Energy Development in Indonesia”, Fitriani Ardiansyah, Neil Gunningham and Peter Drahos discuss the impact of Indonesia’s energy security policy on its environment and economic activities, with particular reference to its shift towards coal and biofuels. For instance, they argue that the development of biofuels, particularly from palm oil, would lead to the rapid clearing of tropical forests, and this would affect forest-dependent people and wildlife. Therefore, they call for a more sustainable approach to the development of biofuels, suggesting, for instance, the harvesting of non-forested and abandoned lands, which can actually mitigate climate change and enhance economic development.

This volume on *Energy and Non-Traditional Security in Asia*, together with its accompanying volume, *Rethinking Energy Security: A Non-Traditional View of Human Security*, aims to widen the debate on energy security beyond the conventional views of what energy security means to the security and well-being of states and societies. We hope that the two volumes would encourage a more robust debate and lead to a more comprehensive approach to dealing with energy security challenges. We also hope that in advancing an NTS perspective to this complex security challenge, we can meaningfully contribute to the promotion of human security in Asia and beyond.

Mely Caballero-Anthony

NTS Non-traditional security
 ASEAN Association of Southeast Asian Nations

Editorial

Springer Briefs in Environment, Security, Development and Peace (ESDP)

Hans Günter Brauch¹

This book series was stimulated by a chapter in the *Hexagon Series on Human and Environmental Security and Peace* (HESP) on the “Conceptual Quartet: Security and its Linkages with Peace, Development and the Environment”.² This addressed the conceptual history and the context of four key concepts at the centre of four major research programmes in the social and political sciences and in international relations: (a) environmental studies or ecology; (b) international, national and human security studies; (c) development studies; and (d) peace studies or peace research. Six chapters analysed the dyadic conceptual relationship between: (i) peace and security; (ii) peace and environment; (iii) development and security; (iv) environment and development (sustainable development); (v) development and security; and (vi) environment and security.

These four key concepts and the six dyadic conceptual relationships address significant issues in international politics and in international relations but also in many other disciplines in the social and natural sciences. Both the HESP series of major multidisciplinary handbooks and these *SpringerBriefs in Environment, Security, Development and Peace* (ESDP) address the linkages across disciplines.

¹ Hans Günter Brauch (Dr. phil., Heidelberg University; Dr. habil., Free University of Berlin, Germany) has taught as a Privatdozent (Adj. Prof.) at the Otto-Suhr Institute for Political Science of the Free University of Berlin since 1999; since 1987 he has been Chairman of Peace Research European Security Studies (AFES-PRESS), an independent non-governmental and tax-exempt international scientific society in Mosbach in South Germany. He also occasionally teaches at SciencePo in Paris, at the European Peace University (EPU) in Schlaining (Austria), and the PhD Programme of the *Centro de Estudios Superiores Navales* (CESNAV) in Mexico. Since 2006 he has been a senior fellow with the *United Nations University's Institute on the Environment and Human Security* (UNU-EHS).

² Hans Günter Brauch, 2008: “Conceptual Quartet: Security and its Linkages with Peace, Development and Environment”, in: Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czesław; Grin, John; Dunay, Pal; Behera, Navnita Chadha; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P.H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the twenty-first Century*. Hexagon Series on Human and Environmental Security and Peace, vol. 3 (Berlin–Heidelberg–New York: Springer): 65–98.

In both the HESP and the ESDP series, the editor welcomes book proposals and completed manuscripts by natural and social scientists, as well as by multidisciplinary teams of authors. The material may address issues of global change and its impacts on humankind, on environmentally induced migration, on crises and conflicts, as well as proposing cooperative strategies to cope with these challenges either locally or in the framework of international organizations and regimes.

While the HESP series offers a platform for scientific communities dealing with global environmental and climate change, disaster reduction, human, environmental and gender security, and peace and conflict research, as well as for humanitarian aid and the policy community in national governments and international organizations, the focus of *SpringerBriefs in Environment, Security, Development and Peace* (ESDP) series is wider.

These *SpringerBriefs* present concise summaries of cutting-edge research and innovative policy perspectives. The series focuses on the interconnection of the new and non-traditional global environmental and development challenges that face humankind and that may pose dangers to peace and security in the Anthropocene era of the Earth's history. *SpringerBriefs in ESDP* publish short monographs and edited volumes of workshops that are peer reviewed by scholars from many disciplines and from all parts of the world. These *SpringerBriefs* will give more 'voice' and 'visibility' to scientists and innovative political thinkers in developing countries. *SpringerBriefs in ESDP* provide multi-, inter- and transdisciplinary knowledge relevant for coping with the numerous projected impacts of global environmental change, political, economic and cultural crises and conflicts. They offer

- Timely state-of-the art analyses (e.g. of earth systems science, geocology) and policy assessments of the global challenges facing humankind in the twenty-first century.
- Bridges between new research results with snapshots of hot and/or emerging topics, literature reviews and in-depth case studies.

As the *SpringerBriefs in ESDP* evolve, several subseries are planned on the four issue areas of environment, security, development and peace. The first will be the journal *Mediterranean Soil Ecosystems* that focuses on interdisciplinary research dealing with land issues of soil, water and environmental management. This journal is edited by Prof. Dr. Selim Kapur (University of Adana, Turkey) with the support of an editorial board that will manage the anonymous peer-review process.

The series editor welcomes brief concept outlines and original manuscripts as proposals. If they are considered of relevance, these proposals will be peer reviewed by experts from the natural and social sciences and from the humanities.

Mosbach, Germany, 21 April 2012

Hans Günter Brauch

Editor, *SpringerBriefs in Environment, Security, Development and Peace* (ESDP)

Editor, *SpringerBriefs on Pioneers in Science and Practice* (PSP)

Editor, *Hexagon Series on Human and Environmental Security and Peace* (HESP)

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Chapter 1

Introduction: Energy and Non-Traditional Security (NTS)—Understanding Security from Below

Mely Caballero-Anthony and Nur Azha Putra

Abstract The pursuit of energy security has long been associated with intense rivalry and competition among states for energy resources that are available in limited amounts outside their borders. More often than not, this competition has been perceived as a zero-sum game where one state's security can only be achieved at the expense of another's. Since the end of the Cold War and with it, the decline of inter-state wars, the idea that security primarily revolves around the sovereignty of the state has been challenged by the emergence of non-traditional security (NTS) scholars who argue that the debate should shift towards human collectivities instead.

Keywords Security • Non-traditional security • Energy security • Energy efficiency • Sustainable development • Renewables • Nuclear energy

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1.1 Introduction

Traditional notions of security are founded on the belief that national security concerns premised on military threats to state security supersede other security threats that could pose grave threats to the state and human security. The traditional security perspective puts the protection of a state's sovereignty from the threat of wars and violence as its sole concern. However, this perspective has been challenged by a number of scholars who have sought to broaden the security discourse by challenging the dominant belief that security revolves mainly around military threats.

Among the security analysts that have challenged the traditional security perspective are those that advanced the field of non-traditional security (NTS). NTS scholars argue that since the end of the Cold War and the collapse of the Soviet Union, threats to national security have been increasingly non-military in nature, with more incidents of internal and cross-border conflicts than inter-state wars occurring on the world stage. For instance, Caballero-Anthony et al. (2006) observe that security threats have in recent times evolved from military confrontations to non-military conflicts such as food security, water security, climate change, human trafficking, pandemics, cross-border conflicts and energy security. They add that most of these challenges are transnational in terms of their origins, conception and effects. Caballero-Anthony et al. (2006) argue that, more importantly, NTS has shifted the focus of security beyond the state to include human collectivities as the primary referent object of security.

Explaining the dynamics between traditional and non-traditional security, Hough (2008) points out that traditional realists regard non-military issues as "low politics". To these scholars, military, and not non-military, issues are what governments must prioritise and accord "national security" status. This perspective was eventually contested as being too narrow. Clearly responding to the observation that states are vulnerable also to non-military threats, an idea that resonates with the United Nations' notion of human security, several security scholars made the case that non-military issues should also be securitised and framed as a matter of national security (Buzan et al. 1998; Caballero-Anthony et al. 2006; Tow et al. 2000). According to Hough (2008), widening the concept of security is not simply a move to reconceptualise the meaning of national interests and reframe "high politics". Rather, it is an attempt to expand the security dimension to include non-military threats to human collectivities.

Therefore, "whose security are we referring to?" becomes the primary question. The answer can no longer be presumed to be the security of the state. Most recently, there is sufficient evidence, drawing on the cases of Tunisia's Jasmine Revolution and the Arab Spring revolutions in the Middle Eastern and North African (MENA) countries in 2011, to reasonably conclude that states can be brought down even in the absence of war and inter-state conflicts. A common thread running through the street protests and demonstrations is human security issues such as social and political freedom, poverty and economic development.

This volume is a valuable addition to the literature on energy security as it aims to examine the implications of energy security from a non-traditional perspective. The chapters and their analyses of energy security go beyond the traditional preoccupation with the security of supply, and concerns such as the security of infrastructure, maritime security, and geopolitical tensions between energy producing, consuming and transit countries. Instead, the volume emphasises the discussion of energy security through a human security lens in order to decipher their implications for the well-being of states and societies. Thus, the themes that are covered in this collection highlight issues such as governance and socioeconomic impacts. The chapters also draw the linkages between energy security, and climate change, health, environmental degradation and energy sustainability. Moreover, in analysing the implications of energy security for inter-state relations, this volume underscores the importance of promoting cooperation instead of competition, and of fostering regional cooperation.

The following sections provide a more detailed discussion of the salient elements of energy security from an NTS perspective.

1.2 NTS Perspectives on Energy Security

Essentially, energy security holds different significance for different nations, with the meanings largely dependent on whether the countries are exporters or importers of energy resources, and on the level of their economic development. Therefore, the notion of energy security varies by nation and region, and by their economic status.

According to the International Energy Agency (IEA), energy security refers to “uninterrupted physical availability at a price which is affordable, while respecting environment concerns”.¹ Yergin articulates a definition with an international relations nuance: energy security is “lodged in the larger relations among nations and how they interact with one another”.² Others such as Brown et al. (2003, p. 7) define energy security in terms of a resilient energy system which is able to withstand security threats.

Notwithstanding the different definitions and contexts, it could be suggested that, in general, energy security is about access to an adequate, affordable and sustainable supply of energy to meet the needs and aspirations of private and public consumption, and the provision of that supply in a way that is environment-friendly and takes into account the continued availability of energy resources for the consumption of future generations. NTS perspectives build upon this

¹ See IEA (International Energy Agency), 2011, “Energy Security”, at: http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4103 (1 December 2011).

² Yergin, Daniel, “Ensuring Energy Security”, in: *Foreign Affairs* (March/April 2006), at: <http://www.foreignaffairs.com/articles/61510/daniel-yergin/ensuring-energy-security> (1 December 2011).

conception and add that energy security should also enhance the security of human collectivities at all levels. To that end, NTS scholars call for collaboration rather than competition among states. The NTS approach therefore holds that the discussion of energy security must span three interdependent levels: international, national and individual. At the international level, energy security encompasses issues among nations. At the national level, it is about the ability of the state to supply energy affordably, reliably and sustainably. At the individual level, energy security is about the ability to maximise the economic utility of energy sources. Using an NTS framework, there are three elements to achieving energy security: security, stability and sustainability.

1.2.1 Security

From a geopolitics perspective, the energy security policies adopted by countries will have a direct bearing on the relations among nations. NTS scholars argue that the emphasis of such policies has to shift from competition to collaboration. Rather than competing for scarce resources such as oil and gas, they call for greater collaboration among nations within international and regional frameworks.

Nations are also encouraged to work together to manage the security of transnational energy infrastructures. Gas pipelines, and the transportation and storage of oil and gas, typically run across state borders and along international sea routes. The security of these transnational facilities and maritime routes requires collaboration among state security agencies. Inevitably, such frameworks would require greater dialogue, cooperation and information sharing among the stakeholders in the countries involved. Perhaps of greater significance is the potential for these frameworks to have a positive impact on regional stability and international security. It is thus important that a regional or international energy-security paradigm exists as a platform to facilitate greater cooperation and collaboration among the stakeholders.

1.2.2 Stability

Stability in the supply and demand of energy is particularly critical in ensuring that nations are protected from any supply shortages and rise in demand, and the concomitant price increases. Prolonged energy price hikes could lead to social unrest. For instance, in 2008, hundreds of villages in the Central Asian state of Tajikistan faced dire conditions when the price of electricity was raised by 20%, to a level barely affordable to the villagers.³ The situation worsened during winter

³ Najibullah, Farangis, "Tajikistan: Energy Shortages, Extreme Cold Create Crisis Situation", in: *Eurasianet.org* (12 January 2008), at: <http://www.eurasianet.org/departments/insight/articles/pp011308.shtml> (14 June 2009).